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ORGANIZATIONS AND COMMUNICATION TECHNOLOGY

"strategic information behaviors." These behaviors involve control or manipulation of information in order to influence other persons. Zmud begins by presenting a model of organizational information systems. Then, he draws on this model to pinpoint the critical points at which strategic information behaviors can occur. He concludes with a set of propositions articulating the specific strategic information behaviors that are most likely to occur with new information technologies.

Janet Fulk, Joseph Schmitz, and Charles Steinfield contrast rational models of media/task match with an alternative social influence model. The social influence model attends to the organizational context and to past behavior in explaining seemingly irrational media selection behavior. This approach postulates that statements and behaviors of coworkers, behavioral norms, and social definitions of rational behavior are key influences on communication technology usage. Furthermore, these social influences may counteract the pressures for rational choice of media. The net effect is that media use behavior is not consistently predictable, based on rational choice assumptions. Media-related behavior is more effectively predicted by attending to the influence of subjective rationality and social information.

Fulk, J. & Steinfield (1990). *Organization and Communication Technology*. Newbury Park, CA: Sage.

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4. Understanding Managers' Media Choices: A Symbolic Interactionist Perspective

Communication is the primary process through which managers do their work. Managers must communicate to motivate and lead employees, to learn about and manage the environment, and to make decisions. Communication is also integral to the roles managers play as figureheads, monitors, spokespersons, and disseminators of information. Communication is so central to the managerial role that managers spend approximately 80% of their time communicating.

In recent years organizational scientists have become interested in understanding a particular aspect of managerial communication—managers' choice of communication media. Mintzberg (1973) noted that most managerial time was spent in verbal communication—in meetings, on the telephone, and during tours. His research suggested that managers seemed to prefer verbal, face-to-face communication. However, until recently, the available research offered little understanding of these apparent preferences.

Today managers have more communication options than ever before. New communication technologies are increasingly available. Electronic mail allows managers to instantly send messages to their distant communication partners without the frustration of telephone tag. Teleconferencing offers the possibility of group meetings without the need for long-distance travel to meet face-to-face. However, all of these options can create confusion. How are managers to choose? Media choice is not the simple, intuitively obvious process it may appear to be at first glance. Appropriate media choice can make the difference between effective and ineffective communication. And, media choice mistakes can seriously impede successful communication—in some cases with disastrous consequences.

Harold Geneen was CEO of ITT from 1959 to 1977. He created ITT-Europe to serve as headquarters for his European operations. One of

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Geneen's most difficult problems was how to get French, German, Italian, and American managers to go along with central decisions. He discovered that he needed to rely upon face-to-face communication to handle difficult communications among managers from different countries. For 17 years Geneen and his senior staff traveled to Europe for one week each month to deal in person with the European managers' requests and needs.

One of the first things I learned in those early days was that when I responded to a question or request from Europe while sitting in New York, my decision was often different from what it would have been had I been in Europe. In New York, I might read a request and say no. But in Europe, I could see the man's face, hear his voice, understand the intensity of his conviction, and the answer to the same question might be yes. So, early on, I decided that if I and my headquarters' team intended to monitor and oversee the European operations, I owed it to the European managers to be there on the spot. . . . It became our policy to deal with problems on the spot, face-to-face. (Geneen, 1984)

Traveling to Europe once a month is an expensive way to communicate. However, in the case of Geneen and his European managers, it was probably necessary and appropriate. Face-to-face meetings allowed them to work out complex issues and understand each others' positions. In addition, Geneen's commitment of time and resources to these trips conveyed the importance of the topics discussed and the need for the managers to work as a team.

A single medium is not appropriate for all communications. In one example of a communication media choice mistake, a senior insurance company executive insisted that his managers use a new electronic mail system for nearly all communications. It proved to be a quick and efficient way to transmit many routine messages. However, after only a few weeks, managers began to complain that many issues were being left unresolved. They surreptitiously began making telephone calls and having meetings to solve problems.

Another example of a media choice mistake was the use of teleconferencing to make the decision to launch the Challenger space shuttle in January, 1986. Engineers had strong feelings that the Challenger should not be launched. It is possible that the teleconference medium was incapable of communicating the strength of the engineers' emotions and gut feelings to the managers who had to make the decision. The Challenger was launched and exploded with seven astronauts on board.

In order to be better able to make decisions about when to travel to Europe, when to pick up the telephone, when to send a memo or electronic

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mail message, or when to arrange a teleconference, managers need to understand media choice processes and their relation to communication effectiveness. Recent research has provided new ways of thinking about managers' media choices. This chapter will present a conceptual framework for understanding the managerial media choice process based upon symbolic interactionism. In addition, research linking appropriate media choice with managerial effectiveness will be presented.

A Symbolic Interactionist Perspective¹

Symbolic interactionism (Blumer, 1969; Mead, 1934) is a theoretical framework that can be used to explain sociological and social psychological phenomena. In the imagery of symbolic interactionism, we view society as a dynamic web of communication. Thus, society *is* interaction. And, interaction is symbolic because, through their interactions, people assign meaning to things.

This symbolic interactionism imagery can be applied to understanding managerial communication in organizations. Think of the organization as a dynamic web of interaction and communication. The basis for interaction among organization members is a shared system of meaning. People have developed many shared assumptions and understandings about the meaning of words, actions, and events. However, organization members look to each other for help in interpreting ill-defined situations. In ill-defined situations, they must create a common understanding (Weick, 1979; Daft & Weick, 1984) before they can make decisions that others will comprehend, agree upon, and accept. In this type of situation, organization members proactively shape reality together. Through negotiation and feedback they decrease ambiguity and create symbols that establish new organizational meanings. An example of this kind of symbol creation is the communication required to decide upon a new business strategy. Managers may disagree about the meaning of information obtained from the environment. Thus, multiple interpretations of the situation are likely. Negotiation and feedback are necessary for managers to agree about the meaning of the available information so that a common interpretation can be established and a strategy decision can be made.

Over time many symbols evolve within the organization and take on agreed upon meaning. Once that meaning is established, organization members can act from a basis of mutual understanding. Because consensus about meaning exists, negotiation is no longer necessary. Symbols that have already been created and agreed upon simply need to be transmitted. They are

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automatically understood. An example is a well-defined organizational occurrence such as a regularly scheduled meeting. Shared meaning regarding the meeting means that the individuals involved know what it means. A communication to announce the meeting is routine and can be transmitted in a straightforward manner without negotiation.

The symbolic interactionism framework can provide a basis for understanding managers' media choices. Based upon the symbolic interactionism framework, three types of variables can be expected to influence managerial media choices: (1) the equivocality of the message, (2) contextual determinants, and (3) the symbolic cues conveyed by the medium itself above and beyond the literal message. These three influences on managerial media choice are discussed below.

Message Equivocality and Media Choice

The symbolic interactionism framework proposes that the basis for interaction among organization members is a shared system of meaning. The equivocality of the message provides an important key to selecting the communication medium that is most appropriate for delivering a full and complete message.

Equivocality means the existence of multiple and conflicting interpretations about an organizational situation (Daft & Macintosh, 1981; Daft & Lengel, 1986; Weick, 1979). An equivocal message is like a Rorschach inkblot—multiple individuals may interpret it differently depending upon their unique needs, backgrounds, and perspectives. Therefore, for shared meaning to be created, negotiation and feedback are required. The communicating individuals must rely upon each other to create a shared definition through language and other social cues.

Equivocality may be high when the situation or message is ambiguous. Managers may not even be sure what questions to ask, and simple, objective answers are not available. Thus, confusion, lack of understanding, and differing interpretations are likely to arise. Most high level organizational decisions are made under conditions of ambiguity. Managers have to interpret the situation from vague cues and enact a solution (Mintzberg, Raisinghani, & Theoret, 1976).

Equivocality is also high when managers' frames of reference differ, a common organizational occurrence. A manufacturing manager may have difficulty understanding the perspective of an R&D engineer. Problems may be perceived differently by managers from different functional areas. In addition, emotional messages are subjective and open to multiple interpre-

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tations. In these cases, a common perspective does not exist, and shared meaning must be established for mutual understanding to occur.

Equivocality can be reduced by pooling opinions, discussing interpretations, and overcoming disagreement. Managers exchange subjective views to define the problem and resolve ambiguous issues. This leads to a shared understanding and social agreement about the definition of the problem and the correct response.

However, with unequivocal messages, consensus about meaning has already been established. These pre-existing meanings can guide behavior. Little negotiation or feedback is required. Established symbols can be simply communicated among organization members. Information whose meaning is clear can be transmitted without concern about misunderstandings or confusion.

The above ideas have implications for media choice and are related to the recent proposal (Daft & Lengel, 1984) that communication media have varying capacities for resolving ambiguity, bringing multiple interpretations together, and facilitating understanding. Communication media (e.g., memos, telephone, electronic mail, computer printout, face-to-face) can be characterized as "rich" or "lean" based upon their capacity to facilitate shared meaning. Rich media have the highest capacity to facilitate shared meaning. Lean media have the lowest capacity.

Media typically available to managers can be organized into a richness hierarchy (see Figure 4.1). The media richness hierarchy ranks media in terms of their capacity for processing equivocal information. The richness of each medium is based upon a blend of four criteria: (1) the availability of *instant feedback*, making it possible for communicators to converge quickly upon a common interpretation or understanding; (2) the capacity of the medium to transmit *multiple cues* such as body language, voice tone, and inflection, to convey interpretations; (3) the use of *natural language*, rather than numbers, to convey subtleties; and (4) the *personal focus* of the medium. A message will be conveyed more fully when personal feelings and emotions infuse the communication. Some media allow the message to be tailored to the frame of reference, needs, and current situation of the receiver.

According to the hierarchy, face-to-face is considered to be the richest communication medium, followed by the telephone, electronic mail (Steinfeld & Fulk, 1986; Trevino, Lengel, Bodensteiner, & Gerloff, 1988), personal written documents such as letters, notes and memos, and impersonal written documents such as fliers, bulletins, and reports. Face-to-face is the richest medium because it allows immediate feedback, has the capacity to provide multiple cues, communicates in natural language, and can be

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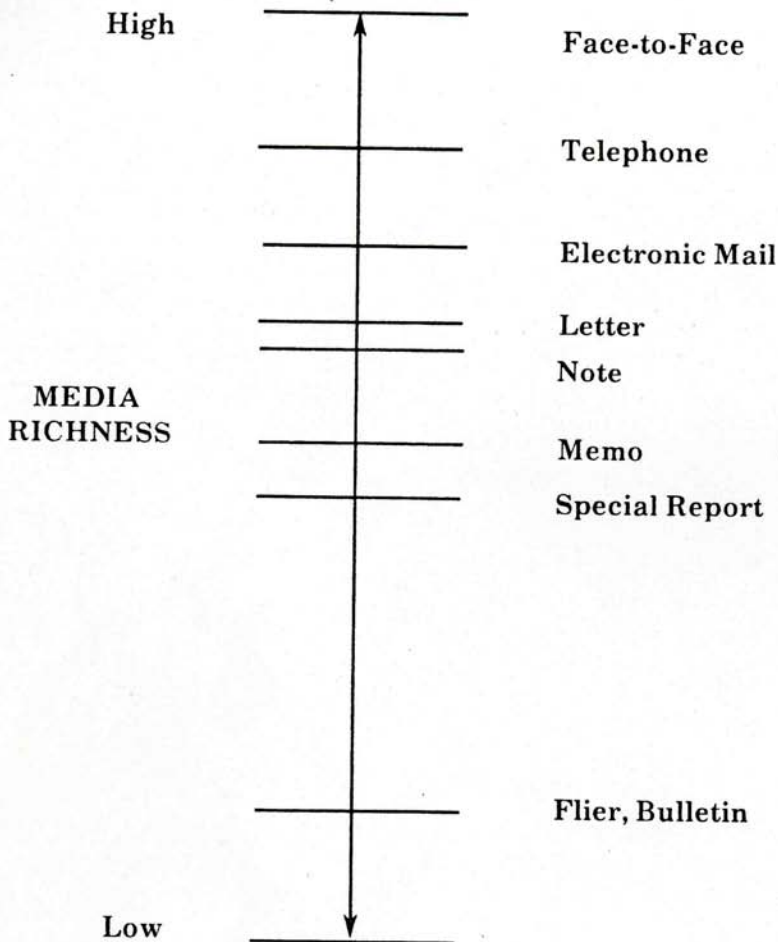


Figure 4.1 Hierarchy of Media Richness

highly personal. A message can be adjusted, clarified, and reinforced instantly.

Telephone conversations are less rich than face-to-face. They provide rapid feedback, are personal, and use natural language, but provide fewer cues than face-to-face. For example, eye contact and body language are missing from telephone communications.

Electronic mail systems vary somewhat in terms of media richness. Most electronic mail systems have the capacity to provide rapid, although not immediate feedback. One individual sends an electronic mail message. The message is read when the receiver decides to turn on the computer and ask

for his or her mail. Electronic mail uses natural language. However, it lacks cues such as voice inflection and tone. Some systems allow communicators to interact in real time producing an electronic conversation. Thus, feedback is immediate, but the voice cues are still missing. More recently, voice mail systems are being introduced. These provide voice cues but are not interactive.

Written media may use natural language, but provide limited cues and are particularly slow to generate feedback. Addressed written communications such as letters, notes, and memos convey only written communication. Voice and visual cues are limited to those on paper. A few cues can be conveyed by choice of stationery and the formality of the language. In addition, addressed documents can be tailored to the individual recipient and personalized. For example, a personal note can be added to the bottom of a formal letter.

Formal, unaddressed documents are the leanest communication media. Examples are fliers, bulletins, and standard quantitative reports. They often communicate via numbers that convey quantifiable information but do not have the information-carrying capacity of natural language. Fliers and bulletins fall into this category because they communicate simple, objective information to a wide audience. They are not personalized toward any individual. They provide few cues and feedback is slow.

Several studies have found that managers choose media based upon the equivocality of the communication incident. For example, in an exploratory study (Trevino, Lengel, & Daft, 1987), researchers interviewed 65 managers representing all hierarchical levels in 11 organizations. Managers were asked to describe a recent communication incident in which they used face-to-face, telephone, electronic mail, and written media. For each incident, the manager was asked to discuss reasons why the specific medium was selected. The reasons managers offered for media choice fell into three broad classifications. One of these classifications was *message content* and was related to the ideas outlined above. (The other two classifications will be discussed below.) Managers said that they were more likely to process ambiguous, equivocal communications through rich media such as face-to-face, while unambiguous communications were more likely to be sent via written or electronic media. The reasons managers offered for using face-to-face communication included nonroutine (ambiguous) messages, the need for auxiliary cues, the ability to discuss, and the desire to express emotions. These reasons were given for face-to-face far more often than for other media. In addition, reasons such as immediate feedback and the ability to persuade

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others were important for both face-to-face and telephone communications. The multiple cues, natural language, and rapid feedback associated with face-to-face (and to some extent, telephone) give these rich media a greater capacity for "symbol creation"—establishing a common grammar for the reduction of equivocality.

Lean media such as electronic mail and written documents were preferred for unambiguous, routine communications where little or no feedback was required. This is consistent with the notion that written and electronic media can be effectively used for simple "symbol transmission" when pre-established meaning already exists between managers. Face-to-face discussion is less necessary when shared meaning exists.

Another study (Daft, Lengel, & Trevino, 1987) also found that managers choose media based upon the equivocality of the communication incident. In this study, 95 managers in a petrochemical company were asked to select the medium of communication they would use for each of 60 communication incidents. The incidents had been developed from interviews with managers and were rated for equivocality. Recall that the concept of equivocality means differing interpretations that arise from ambiguous content or different frames of reference. Low equivocality messages have clear content that suggests a single interpretation. The communicators agree about the meaning.

For communications rated low in equivocality, only 13.5% of the managers in the study chose the face-to-face medium. This percentage increased to 84.1% for communications rated high in equivocality. Compare the following two situations. In the first situation, a senior manager is working out a personality conflict between two subordinates. In the second situation, a manager must remind her supervisors that attendance at their weekly meeting is required. In the first case, the content of the message is emotional and difficult to communicate. Each person has beliefs, values, and feelings that create a unique frame of reference. To communicate effectively, a major change in understanding must take place between the communicators. A rich communication medium allows this to occur. In the second instance, the topic is simple and clear-cut. The message is simply a reminder of a pre-established meeting. A lean communication medium suffices for this exchange.

The research described above supports the idea that a relationship exists between the equivocality of the message and the medium managers select. However, in addition to suggesting a pattern for managers' media choices, the equivocality/richness match idea is prescriptive. Because only rich media are capable of handling equivocal messages, an equivocality/richness match

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should mean more effective communication. For effective communication to occur, managers should choose media that have the capacity to handle the equivocality of the message. When the communication concerns well-defined issues, equivocality is low. Precise written and quantified data should be communicated through lean media. On the other hand, highly equivocal messages demand rich media to facilitate understanding and the emergence of a common perspective.

A mismatch may explain communication failures. Standard computer reports sent to resolve equivocal problems will not accommodate the subjective, ambiguous nature of these problems. The data oversimplify the problem, and crucial cues may be lost. Moreover, face-to-face media may be ill-suited to objective, well-understood problems. Face-to-face discussion may contain unnecessary, surplus meaning. Multiple cues can overcomplicate the communication and distract the receiver's attention from the routine message.

To find support for this prescriptive hypothesis, the researchers (Daft, Lengel, & Trevino, 1987) wanted to determine if managerial effectiveness was related to managers' ability to match media richness to message equivocality. Managers who selected the medium appropriate to the message (i.e., face-to-face for highly equivocal messages) were expected to also be higher performing managers. To investigate this idea, the media selection pattern for each manager in the study was analyzed. The 15 managers who displayed the strongest match between media richness and message equivocality were called "media sensitive." These managers correctly matched rich media to highly equivocal messages and chose lean media for messages rated low in equivocality. Alternatively, the 15 managers showing the weakest matching ability between media richness and message equivocality were assigned to a "media insensitive" group. These managers seemed to select media almost at random. They did not match the richness of the medium to the message content. Members of the media insensitive group often used media completely counter to the richness matching perspective. For a difficult, emotional issue such as telling a subordinate about a demotion, media insensitive managers often selected memos. For routine matters, they often selected face-to-face communication.

The researchers compared the two groups in terms of overall managerial performance. The results provided powerful support for a relationship between media sensitivity and managerial effectiveness. In the media sensitive group, 87% of the managers were rated as high performers on an internal corporate performance rating scale. In the media insensitive group, only 47%

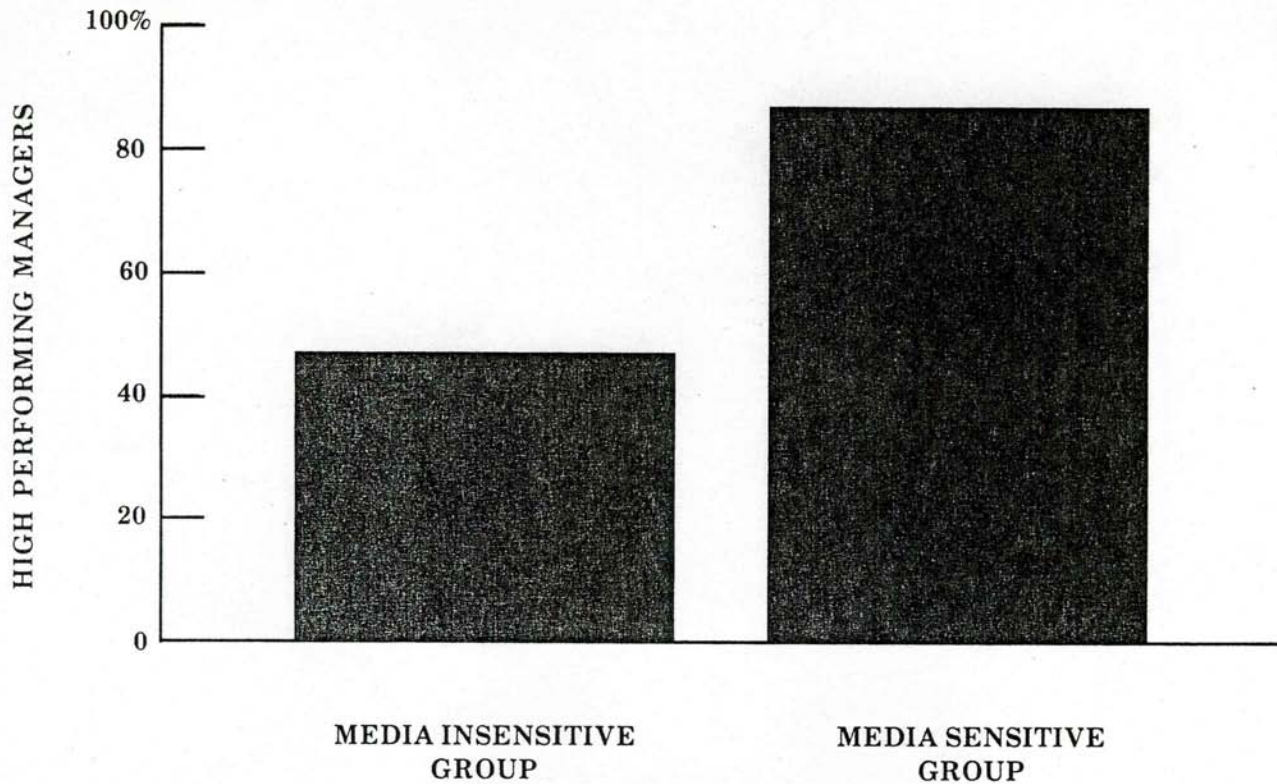


Figure 4.2 Media Sensitivity and Manager Performance

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		MESSAGE	
		Unequivocal	Equivocal
MEDIA RICHNESS	Rich	<p style="text-align: center;"><u>Communication Failure</u></p> <p style="text-align: center;">Rich media's excess cues cause confusion and surplus meaning.</p>	<p style="text-align: center;"><u>Effective Communication</u></p> <p style="text-align: center;">Rich media match equivocal message.</p>
	Lean	<p style="text-align: center;"><u>Effective Communication</u></p> <p style="text-align: center;">Media low in richness match unequivocal routine message.</p>	<p style="text-align: center;"><u>Communication Failure</u></p> <p style="text-align: center;">Lean media used for equivocal messages provide too few cues to capture message complexity.</p>

Figure 4.3 Message Equivocality/Media Richness Matching Framework for Communication Effectiveness

were considered high performers. Knowledge of managers' message/media matching patterns allowed the researchers to predict whether managers were high performers. These findings are illustrated in Figure 4.2.

Explaining differences in manager performance has been difficult in the past. However, these findings suggest that managers' media sensitivity may be an important component of effective managerial performance. It appears that high performing managers know how to communicate more effectively than low performing managers. They are able to match the equivocality of the message with the richness of the communication medium. Thus, communication effectiveness is not simply a matter of choosing the right words or developing good listening skills. Effective managerial communication also involves selecting the medium with the capacity to create mutual understanding of the message. Effective communicators use written or electronic memos for routine messages to save time and prevent information overkill. More equivocal issues are communicated personally through telephone or face-to-face discussion.

Figure 4.3 outlines a framework for deciding when communication will be effective and ineffective. For example, for equivocal messages, rich media are most appropriate. These media are capable of creating meaning through the

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use of immediate feedback, multiple cues, personal focus, and natural language. However, if lean media are used to communicate equivocal messages, communication problems result. The medium does not allow for the multiple cues and immediate feedback that are needed to capture the complexity of the message. A memo that attempts to explain an impending organizational merger cannot deal with employee fears and concerns about what the merger means for them.

For routine, unequivocal messages, lean media are effective. They can efficiently transmit the message. However, if rich media are used in these situations, they may provide excess cues that simply cause confusion and provide unnecessary surplus meaning. Consider the example of the manager who needs to remind subordinates of required meeting attendance. If the manager makes a special trip to deliver the message face-to-face, the subordinate may get anxious and wonder if there is more to the message.

Recall Mintzberg's (1973) finding that managers seemed to prefer verbal, face-to-face communication. Based upon the research reported above, this explanation of managers' media preferences appears to be incomplete. It is true that good managers prefer verbal, face-to-face media for equivocal communications. But, they will also readily use lean media for more routine, unequivocal messages. Perhaps Mintzberg found what seemed to be a general preference for verbal face-to-face media because he studied senior managers. Their communications are more likely to involve the resolution of equivocal issues. Executives spend much time dealing with difficult, ambiguous issues and putting out organizational fires. Large changes in understanding must be achieved quickly to deal with these issues. More routine matters are often delegated to subordinates. Therefore, senior managers can be expected to use rich media more frequently. They don't necessarily prefer it. But, the kind of equivocal communication they are most often involved in demands the use of rich media to be effective.

An understanding of media selection based upon message equivocality also provides some understanding of Harold Geneen's need to travel to Europe once a month with his senior staff to meet face-to-face with the European managers. The problems these managers were facing and the decisions they had to make were not routine or clear-cut. The ambiguity of the problems and the managers' different frames of reference required the richness that only face-to-face communication could provide. The group could wrestle with problems, providing each other with immediate feedback. They could see and feel each others' strength of emotion through eye contact, body language, voice tone, and inflection. In these meetings, Geneen, his senior staff, and the European managers were creating symbols, mutual under-

standing and meaning. It is likely that the decision to invest in face-to-face communication in this situation contributed to ITT's success.

Contextual Determinants and Media Choice

Message equivocality is not the only factor influencing managerial media choices. Although we might like to think that managers are totally free to make the prescribed choice based upon message equivocality, this is not realistic, especially for lower level managers who are often constrained by resource availability. For example, they may not have the funds to make a cross-country trip so that a face-to-face meeting can occur. In addition, past research has characterized managerial work as fast-paced, varied, and fragmented (Mintzberg, 1973). Managers often work under time pressure. Therefore, they may not always have the luxury of time to use the theoretically "best" medium.

Recently, Stryker and Statham (1985) proposed an integrative theoretical framework called *structural symbolic interactionism* (SSI). This framework accommodates the interpretive symbolic interactionism approach described above as well as a more traditional sociology in which behavior is thought to be determined by external forces. Therefore, within this framework, media choice behavior can be viewed as determined at times by contextual influences that either constrain or enable specific media choices. Individual behavior in organizations is often constrained by contextual factors. For example, media choice might be constrained by distance, expediency, time pressure, or simply the accessibility of a particular communication technology.

Distance and Time Pressure. A number of research studies have supported the idea that characteristics of the situation determine media choice. For example, one study (Steinfeld & Fulk, 1986) found that geographical distance and time pressure significantly influenced media choice. Managers who were acting under time pressure were more likely to use the telephone regardless of the relative ambiguity of the message. In addition, managers who were geographically distant from their communication partners showed an increased tendency to use electronic mail, again despite message ambiguity. Message content played a less important role when managers were faced with these constraints.

Accessibility and Critical Mass of Users. In addition to distance and time pressure, others have proposed that access to the technology and a critical mass of willing users (Thorn & Connolly, 1987) are important determinants of media choice especially with new communication technologies. This notion

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has been supported in several studies. One study (Steinfeld, 1986) found that access to an electronic mail system was an important determinant of media choice. Without system access, a manager's ability to choose electronic mail is out of the question.

In addition, the effective use of an interactive medium like electronic mail has been linked to the development of a critical mass of users (Markus, 1987). A user cannot achieve the efficiency benefits of new interactive media independently. One's communication partners must also have access to the system. You can imagine how much you would use the telephone if you were the only one to have one! Without a critical mass of users, use of a medium will not spread and may stop entirely (Hiltz, 1984; Uhlig, Farber, & Bair, 1979).

When interviewed managers described their reasons for media choice (Trevino, Lengel, & Daft, 1987), many of the reasons fell into a contextual determinant classification. Managers said that they chose face-to-face when the receiver was close by, such as in the next office. But, they chose the telephone to span long distances and to accomplish communications quickly and efficiently. Both electronic mail and written media were chosen for their ability to reach many receivers at once.

The reality of contextual determinants is evident in the research findings. Managers are busy people with limited resources who select communication media, especially the telephone, written media, and electronic mail for their convenience, efficiency, and accessibility.

Consider Harold Geneen's situation again. He had the resources to travel to Europe quite frequently. However, good managers are interested in the efficient use of resources. Therefore, he probably reserved those expensive and time-consuming European trips for the more equivocal issues that could not be handled successfully via leaner communication media.

Symbolic Meaning and Media Choice

In the past the medium of communication has been conceptualized as a simple pipeline, a carrier of messages. According to the above arguments, this pipeline is selected for convenience, availability, or for its capacity to transmit a certain kind of message (i.e., an equivocal message). However, it is also possible that the medium of communication may be selected for symbolic meaning that transcends the explicit message. In this way, the medium itself becomes a message (Trevino, Lengel, & Daft, 1987). Consider that putting a message in writing may suggest commitment to an idea. A

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savvy manager may choose to meet face-to-face to convey a willingness to be open to the ideas of others and to allow the option of altering the idea in light of what others say.

The idea that communication media are symbols themselves is consistent with the interpretive approach to organizational communication (Putnam & Pacanowsky, 1983) that emphasizes the importance of symbolic processes and subjective meaning. Communication behavior is largely based upon perceptions, the use of language and symbols to create shared meaning (Feldman & March, 1981; Pfeffer, 1981; Pondy & Mitroff, 1979).

According to symbolic interactionism, anything can be considered a symbol and a carrier of meaning. Therefore, it is possible that the media choice itself may carry symbolic cues beyond the literal message content. When we discuss media richness or leanness, we are making a relatively objective statement about the properties of the medium (Fulk, Steinfield, Schmitz, & Power, 1987). We are considering the capacity of the medium to handle a particular kind of message. But, symbolic cues have nothing to do with the objective characteristics or capabilities of the medium. They are interpretations based upon the subjective norms in the situation. Norms for media use and the meaning of media choice are developed over time. For example, a formal bureaucratic organizational culture may define written memos as appropriate for most communications. Managers may request that even a decision made in a brief informal hallway exchange be put in writing. On the other hand, an informal culture may find written memos to be justified only when a record of the exchange is absolutely necessary. In this organizational culture, a new organizational member who sends memos will be chided for being too formal and discouraged from future memo writing.

Feldman and March (1981) argued persuasively that managerial communication behavior represents ritualistic responses to the need to appear competent, intelligent, legitimate, and rational. For example, if it is necessary to legitimize a decision, decision makers may use a conspicuous consumption strategy. They may request more data than needed and send out professional looking written reports to symbolize the legitimacy and rationality of the decision. Similarly, the face-to-face medium may symbolize concern or caring. The manager who congratulates a subordinate on 25 years of service with an electronic mail message may be sending a symbolic message about lack of concern. A manager wishing to symbolize his or her authority over a particular matter may use a formal written communication to transmit that message. Computer use is facilitated by a network of supportive relationships. Therefore, choosing to send a message via com-

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puter may convey the message that one is a member of a particular group (Fulk et. al., 1987).

Trevino, Lengel, and Daft (1987) found support for the symbolic role of media in their research. When interviewed about reasons for their media choices, managers referred to many symbolic reasons. They said that they chose the face-to-face medium to signal a desire for teamwork, to build trust, goodwill, or to convey informality. Both face-to-face and telephone communications symbolized urgency, showed personal concern, and signaled deference to the receiver who preferred that medium. By contrast, written media were thought to show authority, make a strong impression, and be legitimate and official. Written media were also used to get attention and to comply with protocol.

This third factor, the symbolic meaning conveyed by the medium itself, can provide additional understanding of Harold Geneen's media choice situation. By investing in monthly travel and meeting face-to-face with his European managers, Geneen was not only able to effectively handle equivocal situations and solve nonroutine problems. He was also symbolically conveying to these managers his desire for teamwork and his personal caring about them and what they were able to accomplish as a group.

Thus, the research has suggested three factors that influence managers' media choices. These are illustrated in the model presented in Figure 4.4. The first factor is the *equivocality of the message*. For highly equivocal messages, richer media such as face-to-face are required to negotiate meaning and create solutions. For unequivocal or more routine communications, leaner media are capable of handling the message. Electronic media or written media are more likely to be selected and to be effective.

The second factor was called *contextual determinants*. Managers are busy people, working under time pressure. They communicate with other individuals in many geographical locations, from their own building to foreign countries. In addition, depending on the organization, they may or may not have access to all communication media, and there may or may not be a critical mass of users of a particular communication technology. Thus, these external factors influence their media choices. For example, managers who are under extreme time pressure or who are geographically distant from their communication partners are more likely to select the telephone, electronic mail, or written forms of communication. The research suggests that contextual determinants may influence media choice before the other factors (Steinfeld & Fulk, 1986). This means that managers are probably influenced first by the contextual factors that constrain and enable them to make media

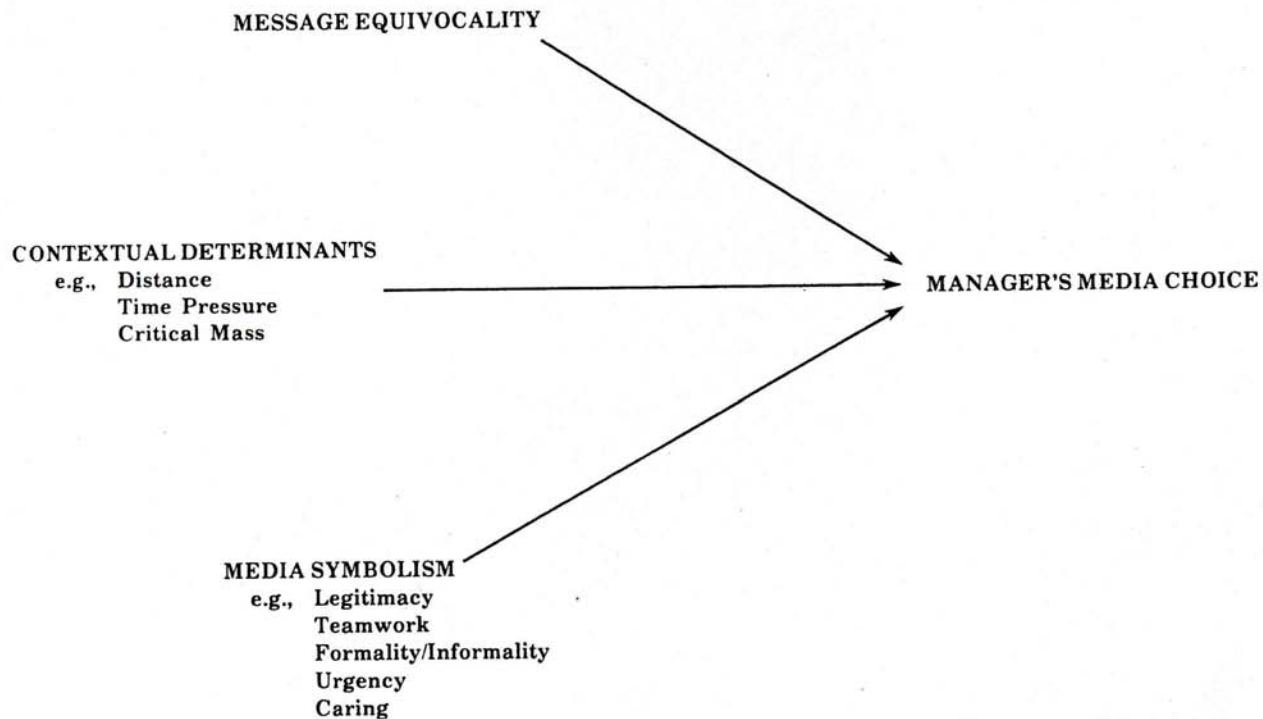


Figure 4.4 Influences on Managers' Media Choice Processes

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choices. For example, when confronted with the need to communicate with someone far away, the manager will try a medium that is efficient for that purpose such as the telephone or mail. However, if the message is highly equivocal, the communicators will eventually find that they need to schedule a face-to-face meeting to work out an understanding.

The third factor was the *symbolic meaning* conveyed by the choice of a particular medium. Media choice is not based solely on objective task and contextual characteristics. In organizations, the choice of a particular medium often carries with it symbolic meaning beyond the explicit message being transmitted. Organizational and subgroup norms for media usage create pressure to choose or not choose a particular medium. These norms can have a powerful influence on media choice behavior.

Practical Guidelines for Managers²

The research and conclusions described above have practical implications for managers. The following set of guidelines should be considered practical tools to hone the manager's media selection skills (Lengel & Daft, 1988).

1. *Send Equivocal Messages Through a Rich Medium*

A rich medium is perfect for equivocal communications. For example, face-to-face conveys emotion and strength of feeling through facial expressions, gestures, and eye contact. It is as important for a manager to know that participants are satisfied, angry, cooperative, or resistant, as it is to have accurate production data. Face-to-face also allows differing interpretations of the problem to be resolved through immediate exchange of ideas and opinions. If a leaner medium is used for equivocal communications, important issues and disagreements may remain hidden. Memos and other written directives convey a predefined, literal description that can hide important issues and convey a false sense that everyone understands and agrees. Behind this smoke screen, problems can simmer until they become major fires that are difficult to put out.

However, managers must also be aware of the barriers that can impede perfect matching of media to message. Distance and time pressure are probably the most important ones. They may dictate media choice in many situations. It is up to the manager to decide when these barriers must be overcome—when a face-to-face visit is essential to working out the problem at hand.

2. Send Unequivocal Messages Through a Lean Medium

Time management is important to managers. Therefore, it is essential for them to know when face-to-face discussions are unnecessary. Lean media are perfect for conveying unequivocal messages. They are efficient and precise. Unequivocal messages typically are impersonal and logical. Lean media can clearly convey hard data, obvious conclusions, statistical analyses, or official requests or directives. For example, managers may use a follow-up memo to document an agreement. A note or memo is quick and efficient. It does not require the extra time to contend with the surplus cues associated with a face-to-face meeting. Unless the manager needs to send a symbolic message about issues like caring, trust, or teamwork, a lean medium is perfectly matched to many routine issues.

Guidelines 1 and 2 suggest that by selecting the appropriate medium, the manager can help shape the receiver's reality. By choosing face-to-face, the manager may add emotion to the message, perhaps where it is not needed. By choosing a memo, the manager may mask emotion or disagreement that needs to be addressed. Choosing the medium appropriate to the equivocality of the message will more likely lead to communication effectiveness.

3. Be a Critical Receiver

Guidelines 1 and 2 address the sender. However, managers also receive many messages. They should realize that the messages they receive can color their understanding of the issues because of the medium that was selected. For example, lean media can filter out information about critical issues. Top managers are responsible for interpreting the internal and external corporate environment. However, if they rely solely on written and formal sources of information, the images of corporate reality they receive are oversimplified and insulated from the messy realities. The use of multiple media can help. In addition to formal reports, managers should seek rich face-to-face encounters with customers, suppliers, and subordinates. Their viewpoints will provide alternate views of corporate reality that can be combined with the more rational images generated on paper.

Senior managers rely on their subordinates for much of the information they use for decision making. Therefore, it is also appropriate for top managers to train those who work for them in the importance of using multiple sources of information. Managers should be encouraged to take the time to interact with customers, suppliers, and other organizational stakeholders so

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that when they write a report or represent a point of view, that report or viewpoint is enriched by the multiple sources that have been used to generate it.

4. Use the Medium for Its Symbolic Message

Organizations have distinctive cultures that guide behavior and create understanding among members. This understanding extends to how media are used and the meaning they convey in the particular organization. Managers who are sensitive to the organization's media culture will consciously choose a particular medium for the meaning it conveys above and beyond the explicit message. Modern managers should be aware of the importance of symbols in their work (Pfeffer, 1981). Media choice presents an opportunity to manage symbols creatively. For example, a manager who makes a special effort to meet with a subordinate is sending a message about personal caring and goodwill. On the other hand, a manager who creates a formal, professional looking report is sending a message about the importance and legitimacy of the topic. Once again, the manager is creating reality through a particular media choice.

Media choices may also create a particular kind of corporate culture. If senior managers promote the frequent use of face-to-face discussions throughout the organization, they may be contributing to the creation of an organizational culture that values informality, teamwork, participation, trust, goodwill, and caring. Alternatively, if senior managers promote the use of written communications, they may create a corporate culture that is efficiency-oriented, bureaucratic, formal, and concerned with status and authority. It is important that managers are consciously aware of the profound impact these symbols can have on their day-to-day communications as well as the creation of a specific kind of organizational culture.

5. Evaluate New Communication Technology Carefully

The astonishing advances in electronic communication technology appeal to the modern executive who wants to be up on the latest and most efficient ways to communicate and process information. Promises of greater efficiency and productivity motivate major corporate investments in computerized management information systems, electronic mail, and teleconferencing systems. The manager as media critic must decide whether these promises are reasonable and if the investment is a wise one.

The manager should evaluate these systems carefully, taking into account their capabilities and their limitations. For example, computer-based systems enable the accumulation and transmission of voluminous objective data about corporate performance, internal activities, and environmental events. However, they can not substitute for the power of the face-to-face medium for transferring multiple cues, enabling rapid feedback among several managers, and attaining social support for enacting solutions to equivocal problems. One solution may be to acknowledge managers' need for both types of information by combining media. Huber (1984) proposed that group decision support systems (GDSSs) offer a way to apply new media to highly equivocal situations. These systems provide face-to-face discussion and access to databases. Each participant in a group meeting has an individual CRT along with the public display screen visible to all members of the group. Each member can work individually with extant databases while exchanging ideas with others through verbal discussions and the public display screen. Feedback among members is fast, and social support can be obtained. This information exchange design is ideal for decision situations that are complex, require data formulations and reformulations, but also require equivocality reduction and social support.

Electronic mail has many characteristics similar to the telephone or written memos because it also has the capacity for rapid feedback and it can quickly reach a large, geographically dispersed audience (Steinfeld & Fulk, 1985). However, cues such as eye contact, voice and body language are filtered out. Electronic mail is considered most appropriate for the routine exchange of unequivocal information. It is considered inappropriate for exchanging confidential information, resolving disagreements, getting to know someone, or negotiating (Rice & Case, 1983; Steinfeld, 1985).

The early proponents of teleconferencing believed that it would replace much business travel and substitute for face-to-face meetings. However, teleconferencing now appears to be more like a conference telephone call than it is like a face-to-face meeting. Similar to the telephone, voice cues and immediate feedback are available. In addition, visual images such as graphs and charts can be displayed for all to see and discuss. However, the visual image of people on a television screen can not be compared to the exchange that occurs when individuals are physically present together in a room. Much of the body language and other subtle cues are lost as are the important regulating features of mutual gaze (Argyle & Cook, 1975). In addition, managers who think of themselves as being "on television" often become stiff and formal. The informality of the face-to-face medium is lost (Johansen,

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Vallee, & Spangler, 1979). Therefore, teleconferencing is appropriate for the presentation and discussion of relatively unequivocal issues among a number of people in several locations. It is an inappropriate medium for the resolution of highly emotional issues or for the discussion of issues about which there is much disagreement—such as the decision to launch the Challenger space shuttle.

Conclusion

Media choice involves more than simple common sense. It is a complex process that is influenced by the interplay of messages, symbols and contextual influences. This chapter has presented three important factors that influence managers' media choices: message equivocality, contextual determinants, and media symbolism. One of these factors, message equivocality, has been related to overall managerial effectiveness. Higher performing managers match the equivocality of the message with the richness of the communication medium. These factors provide a greater understanding of managers' media choice processes and suggest guidelines managers can follow if they wish to be more effective communicators.

Notes

1. This section was adapted from Trevino, Lengel, & Daft (1987).
2. This section was adapted from Lengel & Daft (1988).

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