

# E-Mail and Communication

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## INTRODUCTION

Electronic mail is the most frequently used application of the Internet. IDC research in 2002 suggested that the daily output of e-mails will reach 35 billion by 2005.

Sands (2003) stated that in the past 5 years, e-mail has matured until almost everyone in the developed world is expected to be able to be contacted via e-mail. He also stated that it is now as taken for granted as the telephone within a few short years of its introduction. E-mail has become a vital aspect of the communication process.

E-mail is being increasingly adopted as a major communication tool in U.K. higher education establishments (colleges of higher and further education and universities).

As the use of e-mail grows, the effect on communication patterns needs to be established. This article looks at communication theories, identifying when e-mail is an appropriate medium, and current patterns of e-mail usage within a higher education institution in the United Kingdom (the author's own).

## COMMUNICATION AND E-MAIL

Communication takes place on an ongoing basis between individuals and groups using a variety of media. However,

not all communication is clear to all parties—misunderstandings arise. To prevent these problems, people develop communication strategies. Te'eni (2001) suggested that communication complexity is a major aspect of strategy selection, because it reflects difficulties in communication, while the selected strategy is the means by which complexity is reduced. Te'eni introduced the terms "cognitive," "dynamic," and "affective" as being the components of communication complexity. Cognitive complexity is defined as a function of the intensity of information exchanged and the multiplicity of views held. Dynamic complexity refers to how far the communication process depends on time constraints and unclear processes that may increase the likelihood of misunderstanding. Affective complexity refers to how sensitive communication is to attitudes or changes in disposition toward the communication partner or subject matter.

He suggested a model depicting the relationship between communication goals and strategies (Figure 1).

Te'eni (2001) also suggested that certain medium attributes are more effective for certain strategies and produce a model of the relationship (see Figure 2). Te'eni takes on board the variety of communication technologies available today, including e-mail, which leads to a greater choice in terms of communication medium.

E-mail, like a letter, has low channel capacity, but like face-to-face communication, it enables instant response,

*Figure 1. Adapted from: The complexity of communication goals affects strategy selection, Te'eni (2001), p. 269.*

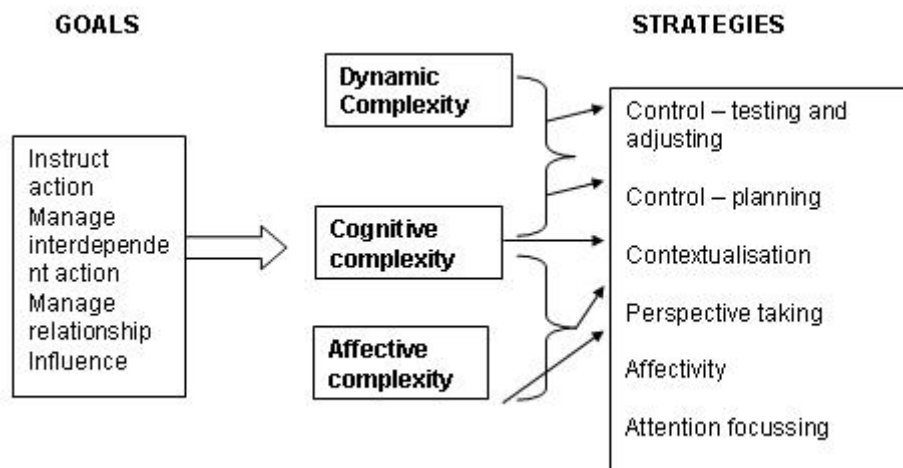
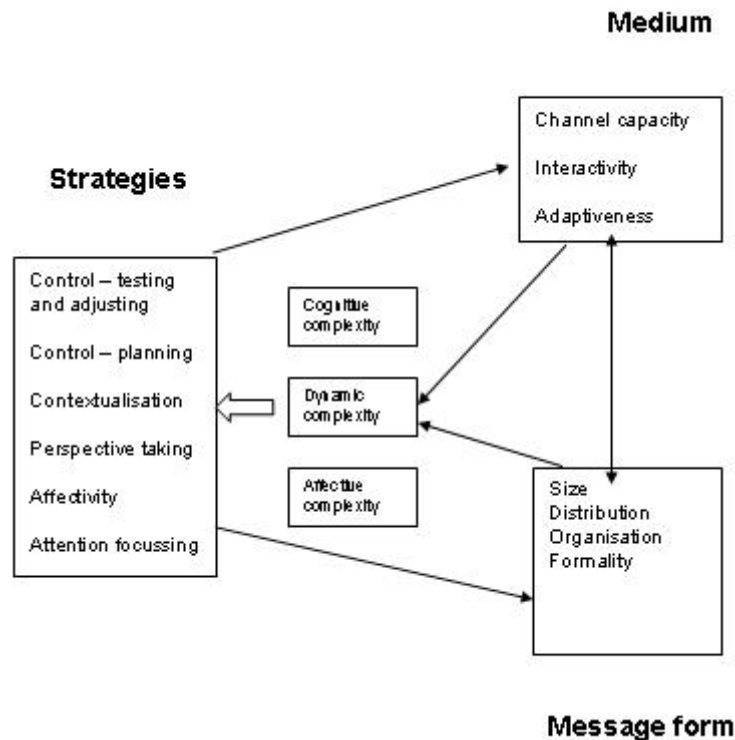


Figure 2. Adapted from: *Strategies affect and are affected by medium and message*, Te'eni (2001), p. 271.



though without the nonverbal feedback used for control through testing and adjusting. Markus (1994) and Romm and Pliskin (1998) suggested that e-mail is uncontrolled and disturbs relationships, even when it does not reduce the level of social interaction. Sproull and Kiesler (1992) posited that e-mail increases the ability to distribute messages en masse, and at the same time, reduces the costs involved, making it a very attractive proposition for organisations, even if the desired richness of the communication is not met.

There is also a general belief that synchronous media are richer than asynchronous media, because the lack of delay can assist in the interpretation of the message. E-mail is ranked by some writers as somewhere between the telephone and nonelectronic written communications (Trevino et al., 1987). This would lead to the selection of other media in preference to e-mail. Consideration of the modern working environment would suggest that this is not the case, and some discussion of possible underlying reasons would be useful.

E-mail does have some specialist characteristics that might lead to it being chosen where theory would dictate the choice of another medium. Multiple addressability, the capacity to keep a permanent record, and the ability to field and search for information contained within e-mails adds much to the concept of richness. Markus (1994) and Panteli (2002) both suggested that this may be sufficient to make it a richer medium than the telephone. A commu-

nicator will generally have a choice in how to communicate. What may be more useful to study is the complexity of the communication to explain the choices of strategies, messages, and media. Communication complexity arises from trying to ensure the message is received when conditions are not ideal, i.e., when there is some form of interference in transmission of the message. Wood (1986) identified the intensity of communication as an important issue in the communication process, whereas Te'eni (2001) concentrated on interdependency.

Rice and Shook (1990) produced a model of the communication process, illustrated in Figure 3, that identifies appropriate media for communication in terms of media richness:

E-mail ranks toward the low end of the richness scale, supposedly limiting its communication possibilities.

E-mail can be viewed primarily as a sociotechnical system. A working definition of a sociotechnical system states that changes in one part of the system, be it technical or social, will affect the other parts and, thus, the system as a whole. A sociotechnical system is concerned with the interactions between the psychological and social factors and the needs and demands of the human part of the organization (its structural and technological requirements) (Mullins, 2002). E-mail satisfies the criteria for a sociotechnical system in that it consists of technology and the software needed to run the system as well as operate within the social norms adopted by the

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