

MEDIA RICHNESS THEORY

RICHARD BERGIN
CENTER FOR HOMELAND DEFENSE AND SECURITY
DEPT. OF NATIONAL SECURITY AFFAIRS
NAVAL POSTGRADUATE SCHOOL

PART 1

Media Richness


Media richness can be described as the ability of information to change understanding within a time interval. Communication transactions that can overcome different frames of reference or clarify ambiguous issues to change understanding in a timely manner are considered rich. Communications that require a long time to enable understanding or that cannot overcome different perspectives are lower in richness. In a sense, richness pertains to the learning capacity of a communication. Face-to-face meetings and use of the telephone are considered to have higher levels of media richness than written media, such as an interoffice memo or email. Additionally, use of synchronous media such as telephone and live chat sessions are considered to have higher levels of media richness than asynchronous media, interoffice memo or email.

PART 2

Media Richness Theory

Media richness theory was introduced in 1984 by Richard L. Daft and Robert H. Lengel. It is used primarily to describe and evaluate communication mediums within organization in terms of their effectiveness. The goal of media richness theory is to provide managers a means of describing and later explaining communication challenges facing organizations, such as a lack of information required to perform a task at an expected level of performance (uncertainty), or mixed or conflicting interpretations about a particular task, objective, or goal (equivocality). Since it was first introduced, media richness theory has been a widely studied communication theory. Other communication scholars have tested the theory in order to improve it, and more recently media richness theory has been adapted to include new media communication mediums, such as improved video and online conferencing. Although media richness theory relates to media use, rather than media choice, the empirical studies of the theory have often studied what medium a manager would choose to communicate over, and not the effects of media use.

Daft and Lengel developed a four item scale measuring the level of media richness for various type of mediums that include face-to-face, telephone, written personal, written, formal, and numeric formal. Each medium is measured in terms of speed of feedback (immediacy), variety of channels (audio, visual), personalness of the source, and the richness and variety of language.

Information Richness	Medium	Feedback	Channel	Source	Language
High  Low	Face-to-Face	Immediate	Visual, Audio	Personal	Body, Natural
	Telephone	Fast	Audio	Personal	Natural
	Written, Personal	Slow	Limited Visual	Personal	Natural
	Written, Formal	Very Slow	Limited Visual	Impersonal	Natural
	Numeric, Formal	Very Slow	Limited Visual	Impersonal	Numeric

“Characteristics of media that determine richness of information processed” (Daft and Lengel 1984)

Daft and Lengel considered Media Richness Theory as a prescriptive model, their original research suggests that high and low levels of media richness both have their own distinct advantages in terms of reducing either equivocality or uncertainty. Written or text based media that are low in media richness were *preferred* in situations where unambiguous data information needs to be exchanged. While a face-to-face environment, that is high in media richness, was preferred for messages containing information that may be unclear and open to multiple interpretations or being high in equivocality. For example, a simple message intended to arrange a meeting time and place could be communicated in a short email or text message, but a more detailed message about a person's work performance and expectations would be better communicated through a face-to-face interaction.. Rice and Shook suggest that media low in richness, such as business letters, convey less of a social presence and are less effective when bargaining, negotiation, and conflict resolution are required but may be *preferable* to as an efficient way to communicate pure facts and information.

PART 3

Evolution of Media Richness Theory

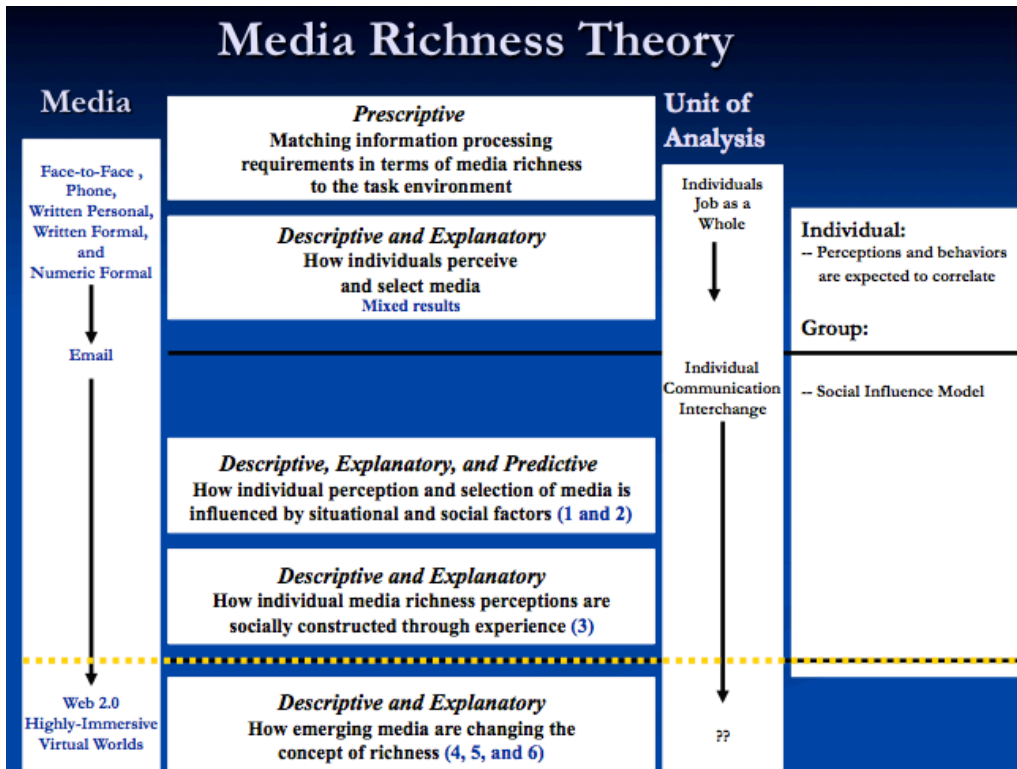
The initial studies of Media Richness Theory focused on exploring media use in individual jobs and matching information processing requirements to the task environment. These early studies focused on developing prescriptive theories, which were classified as best practices, but provided limited explanatory value or information about why individuals select particular media for a communication interchange.

The next generation of studies focused on the selection of media for individual communication interchange and the development of descriptive and explanatory theories to help us better understand how and why particular media are selected and used. During this period, research helped us understand the effects of media sensitive managers on media selection; the effects of routine versus non-routine tasks on media selection and use; and the influence of education, organizational tenure, sender / receiver orientation, or introversion / extroversion on media selection.

The research on individual communication interchange also produced mixed findings and lead to a shift in thinking about media selection and use from a rational actor perspective to one which is socially constructed (Social Influence Model). One example of this shift is the development of Structural Symbolic Interactionism Perspective that incorporates the idea that certain media can carry symbolic meaning that transcends the message or the richness of the media. One example is the formality of a type written letter versus an email or text message. Considering media selection and use as socially constructed, additional reasons for selecting a particular media include; situational factors; time and distance constraints; and symbolic considerations or the desire to convey authority (Trevino 1987).

The Social Influence Model considers social learning in terms of describing and explaining media selection and use within an organization. Social learning suggests that observing and modeling the behaviors, attitudes, and emotional reactions of others explains the selection and use of media. Schmitz and Fulk described the attitudes of agents as shaped by their work group, the ego network, and their supervisors' perceived usefulness of a particular media as influencing media selection and use. Fulk also suggests that social influences on technology-related attitudes and behavior were consistently stronger when individuals were highly attracted to their work groups.

This diagram provides a longitudinal perspective from top-to-bottom on the progression of research on media richness theory.



Initial research on media richness focused on individual job assignments and applied Rational Actor Theory to develop a set of prescriptive theories on how organizations should select media to reduce uncertainty and equivocality. During the second phase of research on media richness the analysis shifted toward individual communication interchanges and studies on media richness focused on describing and explaining the selection and use of lean and rich media within an organization. During this phase, the study of email as a communication media within organizations produced a set of mixed findings that led toward the third phase or exploring media selection and use as socially constructed. Both the Social Influence Model and social learning were used to further explain the selection and use of media within organizations.

PART 4

Uncharted Territories – Media Richness in Web 2.0 and Highly Immersive Virtual Worlds

The rapid diffusion of social media and highly immersive virtual worlds within and among groups, teams, and organizations provides an opportunity to explore alternative levels of analysis such as communities of practice, public / private partnerships, and/or emergent disaster response teams. This diffusion of virtual environments, also suggests that the idea of media richness has changed along with the explanation as to why particular media will be selected and used. Several competing theories such as; Media Synchronicity Theory; Social Presence Theory; and Media Naturalness Theory provide us with insights into how the idea of media richness will be defined in the next decade and how media will be selected and used in emerging virtual environments such as social media..

Based upon the original research of Daft and Lengel's work, Dennis and Valacich propose a new theory: the theory of media synchronicity, which looks beyond media richness theory. It considers more advanced electronic communication media that did not exist at the time of Daft and Lengel's 1984 theory.

Dennis and Valacich define media synchronicity as "... the extent to which a communication environment encourages individuals to work together on the same activity, with the same information, at the same time; i.e. to have a shared focus." In this way, it takes an outcome-centered approach often associated with emergent virtual teams and communities of practice, as opposed to the task-centered approach of media richness theory that was based on a well-defined and formalized set of organizational processes. To reach a group outcome, two primary processes: conveyance and convergence—of which every group communication process is composed—are necessary.

Conveyance refers to the exchange of information. In this process, participants do not all have to agree on the meaning of the information or even focus on the same information at the same time. Low media synchronicity is generally preferred for the conveyance process.

Convergence refers to the development of a shared meaning to information. In this process, all participants must work together to establish the same meaning for each bit of information. High media synchronicity is generally preferred for the convergence process.

In Social Presence Theory, William Short explained social presence as the salience of another person in a mediated environment. Others have extended this definition. Russo defines social presence as the degree to which a person is perceived to be *real* or co-present in a mediated environment. This theory asserts that the degree of social presence in a communications activity may have a number of different impacts on the participant's perception, appreciation, participation, or level of satisfaction when working in teams and groups. Social presence theory suggests that "an affective communication medium has the appropriate social presence required for the level of interpersonal involvement required for a task". Because of this, it is important to use richer communications media in situations where it is desirable to have the participants more strongly identify with each other. However, richer media sometimes bring with them certain constraints or problems that must be considered before they are used. These include increased time spent in the activity and sometimes a higher level of technology or support is required.

Media naturalness theory developed by Ned Kock builds on the human evolution literature and has been proposed as an alternative to media richness theory. Media naturalness theory argues that since our Stone Age hominid ancestors have communicated primarily face-to-face, evolutionary pressures have led to the development of a brain that is consequently designed for that form of communication. Other forms of communication are too recent and unlikely to have posed evolutionary pressures that could have shaped our brain in their direction. Using communication media that suppress key elements found in face-to-face communication, as many electronic communication media do, thus ends up posing cognitive obstacles to communication. This is particularly the case in the context of complex tasks (e.g., responding to emergent disasters such as Katrina and Hurricane Sandy, large systems integration efforts, and the transfer of complex tacit knowledge), because such tasks seem to require more intense communication over extended periods of time than simple tasks.

The face-to-face medium is presented as the medium enabling the highest possible level of communication naturalness, it is characterized by the following five key elements:

- (1) a high degree of co-location, which would allow the individuals engaged in a communication interaction to see and hear each other;
- (2) a high degree of synchronicity, (immediacy of feedback);
- (3) the ability to convey and observe facial expressions;
- (4) the ability to convey and observe body language; and
- (5) the ability to convey and listen to speech.

Media naturalness theory predicts that any electronic communication medium allowing for the exchange of significantly less or more communicative stimuli per unit of time than the face-to-face medium will pose cognitive obstacles to communication. In other words, media naturalness theory places the face-to-face medium at the center of a one-dimensional scale of naturalness, where deviations to the left or right are associated with decreases in naturalness.

Electronic media that enable the exchange of significantly more communicative stimuli per unit of time than the face-to-face medium are classified by media naturalness theory as having a lower degree of naturalness than the face-to-face medium. As such, those media are predicted to be associated with higher cognitive effort; in this case due primarily to a phenomenon known as information overload, which is characterized by individuals having more communicative stimuli to process than they are able to.

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