Communications for Designers

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Learning Objectives:

- Understand the essential elements of communication
- Become aware of the various ways people understand the nature of communication
- Understand the several barriers to communication
- Define communications
- Describe the communication process.
- List typical barriers to effective communication.
- Contrast the differences between the grapevine and rumors.
- Discuss other considerations for effective communication.
- Describe future prospect of communication

Overview

Communication is a process whereby information is encoded and imparted by a sender to a receiver via a channel/medium. The receiver then decodes the message and gives the sender a feedback. Communication requires that all parties have an area of communicative commonality. There are auditory means, such as speaking, singing and sometimes tone of voice, and nonverbal, physical means, such as body language, sign language, paralanguage, touch, eye contact, by using writing.

Communication is thus a process by which we assign and convey meaning in an attempt to create shared understanding. This process requires a vast repertoire of skills in intrapersonal and interpersonal processing, listening, observing, speaking, questioning, analyzing, and evaluating. if you use these processes it is developmental and transfers to all areas of life: home, school, community, work, and beyond. It is through communication that collaboration and cooperation occur.[3]

Communication is the articulation of sending a message through different media,[4] whether it be verbal or nonverbal, so long as a being transmits a thought provoking idea, gesture, action, etc. Communication is a learned skill. Most babies are born with the physical ability to make sounds, but must learn to speak and communicate effectively. Speaking, listening, and our ability to understand verbal and nonverbal meanings are skills we develop in various ways. We learn basic communication skills by observing other people and modeling our behaviors based on what we see. We also are taught some communication skills directly through education, and by practicing those skills and having them evaluated.

There are also many common barriers to successful communication, two of which are message overload (when a person receives too many messages at the same time), and message complexity.[5]

What is Communication?

What is communication? It seems ironic that we do not fully appreciate the potential power of communication in shaping our lives when, in fact, we are busy engaging ourselves in various day-to-day forms, means, and problems of communication. By reflecting on the nature of communication itself – (1) what it is, (2) how it works, and (3) why it happens -- we can empower ourselves with the necessary analytical and pragmatic skills in dealing with the many dimensions of communication which are crucial in everybody's success in life.

Even communication experts themselves disagree which among human behaviors count as acts of communication. Although communication may either be verbal (use of language) or non-verbal (use of gestures, facial expressions, etc.), two important issues emerge from the debate. First, is the act intentional? And second, is the act received? Three major positions are possible with these questions (Littlejohn 2002).

However, communication is commonly defined as

- the transfer and exchange of information from one person to another through meaningful symbols.
- The interpersonal transfer of information and understanding from one person to another.
- A linked social process of sender, encoding, medium, decoding, receiver, and feedback.
- It is an interaction where meaning is created & exchanged
- The process of people sending and receiving information (Hunt, 1987).
- The sending of stimuli through a channel by a sender so that a receiver translates the stimuli into a message and then feeds back additional stimuli as a message monitor to the sender (Casagrande & Casagrande, 1986).
- the imparting or interchange of thoughts, opinions, or information by speech, writing, or signs"...
- an act or instance of transmitting and a process by which information is exchanged between individuals through a common system of symbols, signs, or behavior ...

Communication can be also perceived as a two-way process in which there is an exchange and progression of thoughts, feelings or ideas towards a mutually accepted goal or direction. In other words these definitions may indicate that communication means ...

- Sharing an idea
- Getting information
- Thinking or wondering
- Giving your point of view
- Learning something new
- Observing someone or something

Communication as an academic discipline relates to all the ways we communicate, so it embraces a large body of study and knowledge.

Goals of Communication

The aim of communication is the transference and understanding of information between two or more people. However, goals of communications would include a wide number of elements depending on the context and the purpose of communication however the following are the main goals that can be attributed to communications:

- Change behavior
- Persuade
- Get action
- give information
- Get information
- Ensure understanding
- influence
- express feelings

Forms of Communication

There are numerous forms of communications. Though they usually lie within the the following three Forms of Communication

- Output-based communication: all forms of speaking and writing
- Input-based communication: listening and reading
- Nonverbal communication: physical behaviors such as gestures and body language

The Importance of Communication

Communication is one of the most frequent things we do in any sort of organization. The word organization here may imply the wrong meaning to different people. But we mean here is any number of integrated systems or even just elements that provides an output of any type. The organization in this context means, a house, a factory, ...etc. Effective communications help individuals understand and pursue organizational objectives. This may be caused by the fact that organizational communications cover every management function and that Organizational culture depends on communications. Therefore the employment of good communications improves both organizational and individual performance.

Scientists have found that after 16 years of school, a child receives the following training:

- Writing: 16 years
- Speaking: Some
- Reading: 6 years
- Listening: None

Also it was found out that we spend 70% of our time communicating ...

		-	
•	Writing		12%
•	Reading		13%

- Speaking 30%
- Listening 45%

This results in the lack of communication training versus today's ever increasing requirement for "soft" skills!.

Efficient communication is ESSENTIAL to being successful in life for any of us. That is why the biggest source of interpersonal problems is poor communications.

The key to the communication process is to be UNDERSTOOD. What we should remember always is that we have been given 2 ears and but 1 mouth so that we may listen more and talk less.

Levels' of communication

- Intrapersonal communication: Communication with oneself eg. if you want to remind yourself to do something,
- Interpersonal communication: Communication between two individuals, or between a number of individuals on a personal level.
 - a. *individual to individual*.
 - b. Individual to group address the group as a whole.
 - c. Group to individual transmit message on behalf of an organization/ group etc.
- The medium of interpersonal communication may be written, oral, visual, nonverbal or may mix of them, through channels such as face-to-face discussion, telephone or postal systems, notice boards and so on.

• Impersonal communication: 'mass' communication, in which the message is directed to large, diffuse audience, with no direct contact between source and receiver. Like interpersonal communication, it can be oral, visual or non-verbal, using written, pictorial, or simulated interpersonal messages.eg. someone 'talking to' the audience in a TV or radio advertisement.

Types of communication

There are three major parts in human face to face communication which are body language, voice tonality, and words. According to the research:[6]

- 55% of impact is determined by body language--postures, gestures, and eye contact,
- 38% by the tone of voice, and
- 7% by the content or the words used in the communication process.

Although the exact percentage of influence may differ from variables such as the listener and the speaker, communication as a whole strives for the same goal and thus, in some cases, can be universal. System of signals, such as voice sounds, intonations or pitch, gestures or written symbols which communicate thoughts or feelings. If a language is about communicating with signals, voice, sounds, gestures, or written symbols, can animal communications be considered as a language? Animals do not have a written form of a language, but use a language to communicate with each another. In that sense, an animal communication can be considered as a separate language.

Human spoken and written languages can be described as a system of symbols (sometimes known as lexemes) and the grammars (rules) by which the symbols are manipulated. The word "language" is also used to refer to common properties of languages. Language learning is normal in human childhood. Most human languages use patterns of sound or gesture for symbols which enable communication with others around them. There are thousands of human languages, and these seem to share certain properties, even though many shared properties have exceptions.

There is no defined line between a language and a dialect, but the linguist Max Weinreich is credited as saying that "a language is a dialect with an army and a navy". Constructed languages such as Esperanto, programming languages, and various mathematical formalisms are not necessarily restricted to the properties shared by human languages.

NON-VERBAL COMMUNICATION

Nonverbal communication

Nonverbal communication is the process of communicating through sending and receiving wordless messages. Such messages can be communicated through gesture, body language or posture; facial expression and eye contact, object communication such as clothing, hairstyles or even architecture, or symbols and infographics, as well as through an aggregate of the above, such as behavioral communication.

Speech may also contain nonverbal elements known as paralanguage, including voice quality, emotion and speaking style, as well as prosodic features such as rhythm, intonation and stress. Likewise, written texts have nonverbal elements such as handwriting style, spatial arrangement of words, or the use of emotions. A portmanteau of the English words emotion (or emote) and icon, an emoticon is a symbol or combination of symbols used to convey emotional content in written or message form.

Other communication channels such as telegraphy fit into this category, whereby signals travel from person to person by an alternative means. These signals can in themselves be representative of words, objects or merely be state projections. Trials have shown that humans can communicate directly in this way[7] without body language, voice tonality or words.

- Non-verbal communication is basically anything that conveys a message without using words or symbols. It may be linked to words (eg. a tone of voice), or it may be independent of any verbal message.
- Movement is highly communicative. Think what you can convey through, for example, frowning or smiling, nodding, scratching your head, putting your head in your hands or slamming a door.
- There are two broad categories of non-verbal communications: First, Non-verbal communication linked to verbal communication, which adds meaning over and above what the speaker is saying in the words themselves 'between the lines' of a message.

Words	Other factors	Meaning
Really, I'm fine	Quivering lips, pale face,	I'm upset, or ill, and either
Correct me if I'm wrong	Sarcastic smile, patronising tone	You and I both know I'm right

• Second, Non-verbal communication independent of any verbal message, so that meaning is conveyed by non-verbal cues. If you forget a friend's birthday, for example, this in itself may be enough to communicate that you don't care about them any more, or that you are angry with them for some reason.

Channels/Types of Non-verbal Communication

Because so much of human interaction is non-verbal, this system includes many kinds of communication. There are 9 forms of non-verbal behaviour and each is used to establish personal identity, relational messages and express personal identity and cultural values.

i. Kinesics

Kinesics refer to body position and body motions including facial expressions. Our bodies communicate a great deal about how we see ourselves. For instance, someone who walks briskly conveys determination; someone who moves without purpose (or 'can never sit still') signals nervousness, impatience or distractions. Our faces also communicate messages; we can indicate happiness (smiles), doubt (raised eyebrows) or anger (stares). How we position ourselves relative to others also expresses our feelings toward them friends often sit together while competitors typically maintain distance.

ii. Haptics

Haptics refer to physical touch. Touching or contact communicates closeness as well as power and status. People with high status touch others and invade others' spaces more than those with low status. Between the two genders, women tend to engage in touch while men more typically rely on touch to assert power and control.

iii. Physical Appearance

High value is often placed on physical appearance. People form initial evaluations based on individual's appearance. We first notice physical qualities such as gender, skin colour and features. Then we form judgements of how attractive others are and make inferences about their personalities. For example, plump, rounded bodies are often associated with laziness and weakness while thin, angular physiques are thought to reflect youthful, stubborn personalities. Though these associations have no factual basis, they can affect decisions about hiring, placement and promotion.

iv. Artifacts

Artifacts are personal objects we use to announce our identities and personalize our environments. We craft our image by how we dress and what objects we carry and use. For instance, doctors wear white and drape stethoscopes around their necks while the military requires uniforms with stripes and medals to signify rank and accomplishments. Artifacts communicate important relational meaning – we use them to perform our identities and express how we perceive and feel about others.

v. Proxemics

Proxemics refer to space and how we use it. Space reflects intimacy – e.g. when we are angry with someone, we tend to move away from him and resent it if he approaches us. Space also announces status with greater space being assumed by those with higher status. How people arrange space reflects how close they are and whether they want interaction. E.g. Those who enjoy interaction arrange furniture to invite conversation and eye contact. For less interaction, chairs may be far apart and face the television instead of each other.

vi. Environmental factors

Environmental factors are elements of settings that affect how we feel and act. We respond to architecture, colours, temperature, sounds, smells and lighting. e.g. dimlylit room can enhance romantic feelings while dark rooms can be depressing. Rooms with comfortable chairs invite relaxation while stiff chairs prompt formality. Thus, environmental factors influence not only patterns of interaction but also feelings and moods.

vii. Chronemics

Chronemics refer to how we perceive and use time to define identities and interaction. E.g. cultural rule stipulates important people with high status can keep others waiting. It's standard practice to wait to see a doctor even if you have an appointment. Chronemics also express cultural attitudes toward time. In western societies, for example, time is valuable so, speed is highly valued but Malaysian have more relaxed attitudes toward time and punctuality.

viii. Paralanguage

Paralanguage refers to vocal sounds such as murmurs and gasps and vocal qualities such as volume, rhythm, pitch and intonation. These vocal cues act as signals for

others to interpret what we say as a joke, threat, statement, question etc. Voices can also be used to communicate feelings eg whispering indicates secrecy and intimacy while shouting conveys anger.

ix. Silence

Silence can communicate powerful messages. It can communicate different meanings. Eg. It can signal awkwardness or disconfirm others – we deliberately ignore others when we're angry with them.

WRITTEN COMMUNICATION

Advantages

The advantages of written messages include the following.

- They provide a permanent record of transaction or agreement for confirmation and recollection of details. Evidence may also be necessary for legal purposes.
- They provide supporting confirmation and clarification of verbal messages, again in case evidence should be needed, but also an aid of memory.
- They are easily duplicated and sent out to numerous recipients: this ensures that everyone receives the same message. It also enables office personnel to write one message (to adapt or copy) instead of making numerous phone calls.
- They are capable of relaying complex ideas, aided by suitable layout and the permanence of the record, which allows the recipient to pore over it at length if necessary.
- They can be stored and later retrieved for reference and analysis as required.
- They are perceived as impersonal, and can be used in situations where unusual formality or 'distance' need to be established within an otherwise personal relationship (for example, formal disciplinary proceedings).

Disadvantages

- Time. A written message can be take time to produce, and to send, especially if it has to go by post and if expensive technology is beyond the user's reach. Because of the time factor, swift 'interactive' exchanges of opinion, attitude and so on are impossible.
- Inflexibility. Once sent, the message cannot immediately be altered or amended, even if circumstances change or errors are discovered.
- Impersonality. Written communication also tends to more across as formal and impersonal, so in situations requiring greater sensitivity or persuasion, the personal presence or voice of the sender may be more effective.
- Accessibility. People's ability to read and interpret written messages will vary according to background, education, knowledge of the topic and so on.

Dialogue or verbal communication

A dialogue is a reciprocal conversation between two or more entities. The etymological origins of the word (in Greek $\delta\iota\dot{\alpha}$ (diá,through) + $\lambda\dot{\alpha}\gamma\sigma\zeta$ (logos, word,speech) concepts like flowing-through meaning) do not necessarily convey the way in which people have come to use the word, with some confusion between the

prefix $\delta \iota \dot{\alpha}$ -(diá-,through) and the prefix $\delta \iota$ - (di-, two) leading to the assumption that a dialogue is necessarily between only two parties.

Visual communication

Visual communication as the name suggests is communication through visual aid. It is the conveyance of ideas and information in forms that can be read or looked upon. Primarily associated with two dimensional images, it includes: signs, typography, drawing, graphic design, illustration, colour and electronic resources. It solely relies on vision. It is form of communication with visual effect. It explores the idea that a visual message with text has a greater power to inform, educate or persuade a person. It is communication by presenting information through Visual form.

The evaluation of a good visual design is based on measuring comprehension by the audience, not on aesthetic or artistic preference. There are no universally agreed-upon principles of beauty and ugliness. There exists a variety of ways to present information visually, like gestures, body languages, video and TV. Here, focus is on the presentation of text, pictures, diagrams, photos, et cetera, integrated on a computer display. The term visual presentation is used to refer to the actual presentation of information. Recent research in the field has focused on web design and graphically oriented usability. Graphic designers use methods of visual communication in their professional practice.

Other types of communication

Other more specific types of communication are for example:

- Facilitated communication
- Graphic communication
- Nonviolent Communication
- Science communication
- Strategic Communication
- Superluminal communication
- Technical communication

Problems in Communication

Two technical terms used to describe problems or breakdowns, which occur in communication, are:

- i. Distortion;
- ii. Noise

Distortion

Distortion refers to the way in which the meaning of a communication is lost in 'handling' i.e during the encoding and decoding stages of communication.

Noise

Noise refers to distractions and interference in the environment in which communication takes place, obstructing the process of communication by affecting the accuracy, clarity or even the arrival of the message.

- a. Physical noise, eg. other people talking, passing traffic.
- b. Technical noise, eg. bad handwriting, crackle on a telephone line.
- c. *Social noise*, eg. interference created by differences in personality/culture or outlook of the sender and recipient.
- d. *Psychological noise*, eg. excessive emotion (anger, fear), prejudice or nervousness can also interfere with effective transmission of a message.

The problem of noise can be reduced by redundancy: using more than one channel of communication so that if a message fails to get through one channel, it may succeed by another.

Barriers To Effective Communication

Communication is a process by which you convey your message to someone or a group of people. And if the message is conveyed clearly and unambiguously, then it is known as effective communication. In effective communication, the message you had send would reach the receiver with very little distortion. However, a communication becomes successful only if the receiver understands what the sender is trying to convey. When your message is not clearly understood you should understand that you are facing a barrier to communication. Barriers to effective communication could cause roadblocks in your professional and personal life and it could be one of the major hurdles in achieving your professional goals.

An effective communication barrier is one of the problems faced by many organizations. Many social psychologists opine that there is 50% to 70% loss of meaning while conveying the messages from a sender to a receiver. They estimate there are four basic places where communication could be interpreted wrongly. A few barriers of effective communication in an organization are given below.



Let us list some examples of why human communication fails:

Physical distraction

One of the major barriers of communication in a workplace is the physical barrier. Physical barriers in an organization includes large working areas that are physically separated from others. Other distractions that could cause a physical barrier in an organization are the environment, background noise Of course, everything around may be cause for some distraction: noise coming from vehicles, faulty phone connection, unclear photocopy, loud music, poor lighting, health problems, and so on. They may result in loss of concentration and failure to understand what is being communicated by the other party.

Cultural differences

Nationality, age, education, social status, economic position, and religion are just some of the sources of cultural differences. If you share very little life experience with your co-communicator, successful communication may be difficult to achieve. The same difficulty may be experienced in the workplace: even the sight of your boss might create a certain distance that will make communication an agonizing experience. Much worse is when you do not know how to deal with the boss; this is because different cultures deal with power relations differently.

Whatever you assume about the recipients of your message, the wider the audience, the more of them will fail to meet your assumptions. On the Internet, this virtually guarantees you will be misunderstood. What you intend to say as a neutral matter of fact will be interpreted (by different people) as a detestable political opinion, a horrendous blasphemy, and a lovely piece of poetry.

Personal differences.

Any assumption about the prior knowledge on the subject matter fails for any reasonably large audience. Whatever you try to explain about the genetics of colors will be incomprehensible to most people, since they have a very vague idea of what "genes" are (in written communication you might just manage to distinguish them from Jeans), and "dominance" is just Greek or sex to them.

There are many factors in an individual's personality, mentality, experience and environment which can cause distortion or noise in the communication process. For example,

- Racial, ethnic or regional origins:
- Religious beliefs and traditions.
- Social class and socio-economic.
- Education and training.
- Age.
- Sex.
- Occupation
- Personality traits and types- a wide range of characteristics which shape attitudes and behaviour: introvert/ extrovert, stable/neurotic, active/passive etc.
- Intelligence- in terms of mental ability and understanding, linguistic or numerical ability.

Data Loss:

Just having some data lost. The listener does not pay attention at a critical moment, and he misses something indispensable. In the worst, and usual, case he does not know he missed it.

Language differences –

Inability to converse in a language that is known by both the sender and receiver is the greatest barrier to effective communication. When a person uses inappropriate words while conversing or writing, it could lead to misunderstanding between the sender and a receiver. On the Internet, for example, the lingua franca is badly written and poorly understood English. Some people use it as their native language; other learned some of it from various sources. In any case, whatever you say will be interpreted in a myriad of ways, whether you use idiomatic English or not.

Emotional interference

Are you mad, happy, excited, agitated, nervous, or fearful? Emotions affect the shape of communication. It is hard to be objective when you are very emotional. You may not be able to think more realistically and truthfully about the content of the message being sent or received.

Your emotions could be a barrier to communication if you are engrossed in your emotions for some reason. In such cases, you tend to have trouble listening to others or understanding the message conveyed to you. A few of the emotional interferences include hostility, anger, resentfulness and fear.

Lack of Subject Knowledge

If a person who sends a message lacks subject knowledge then he may not be able to convey his message clearly. The receiver could misunderstand his message, and this could lead to a barrier to effective communication.



Differences in perception :

Simply put, all of us have different mental images of the world or reality. Even if we experience the same thing, we may still think of it in different ways. We remember details of an experience based on what we think are worth remembering. So a speaker and a listener may not be able to understand what one is talking about because both have different things in mind. Language, too, is arbitrary. The words that we use may mean differently to different people

Perceptual -

The problem with communicating with others is that we all see the world differently. If we didn't, we would have no need to communicate: something like extrasensory perception would take its place. The following anecdote is a reminder of how our thoughts, assumptions and perceptions shape our own realities:

A traveler was walking down a road when he met a man from the next town. "Excuse me," he said. "I am hoping to stay in the next town tonight. Can you tell me what the townspeople are like?"

"Well," said the townsman, "how did you find the people in the last town you visited?"

"Oh, they were an irascible bunch. Kept to themselves. Took me for a fool. Over-charged me for what I got. Gave me very poor service."

"Well, then," said the townsman, "you'll find them pretty much the same here."

Selective perception

The sub-conscious mind 'decides' which stimuli/information are (subjectively) relevant and which are irrelevant and can be safely ignored. When we focus on selected stimuli, we say we give them our attention. This is important for the communicator:

- 1. as *listener and reader*, because of the need to minimize potential distractions and to be aware that some parts of a message may be ignored thus, distorting the overall meaning.
- 2. as creator and sender, because the need to attract and hold the recipient's attention to the key points and meaning of the message.

Poor listening

Having ears of our own does not necessarily mean we are good listeners. Listening is a skill that needs harnessing. Sometimes, it is a matter of attitude; we are not just interested in what people say because we may be more concerned with the way everyone looks. Focus on the message and the sincerity to understand what another person is saying are crucial elements in good listening.

Stress:

One of the major communication barriers faced by employees in most of the organization is stress. When a person is under immense stress, he may find it difficult to understand the message, leading to communication distortion. At the time of stress, our psychological frame of mind depends on our beliefs, experiences, goals and values. Thus, we fail to realize the essence of communication.

The above-mentioned barriers to effective communication are considered as filters of communications. You can overcome the barriers to communication through effective and active listening.



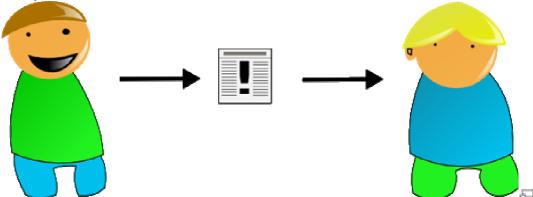


The Communication Process

Communication theory

There is much discussion in the academic world of communication as to what actually constitutes communication. Currently, many definitions of communication are used in order to conceptualize the processes by which people navigate and assign meaning. Communication is also understood as the exchanging of understanding. Additionally the biocommunication theory investigates communicative processes within and among non-humans such as bacteria, animals, fungi and plants.

We might say that communication consists of transmitting information from one person to another. In fact, many scholars of communication take this as a working definition, and use Lasswell's maxim, "who says what to whom in what channel with what effect," as a means of circumscribing the field of communication theory.



A simple communication model with a sender transferring a message containing information to a receiver.

Other commentators suggest that a ritual process of communication exists, one not artificially divorceable from a particular historical and social context.

Communication stands so deeply rooted in human behaviors and the structures of society that scholars have difficulty thinking of it while excluding social or behavioral events. Because communication theory remains a relatively young field of inquiry and integrates itself with other disciplines such as philosophy, psychology, and sociology, one probably cannot yet expect a consensus conceptualization of communication across disciplines.

Currently, there is no paradigm from which communication scholars may work. One of the issues facing scholars is the possibility that establishing a communication metatheory will negate their research and stifle the broad body of knowledge in which communication functions.



History of Communication Theory

Aristotle

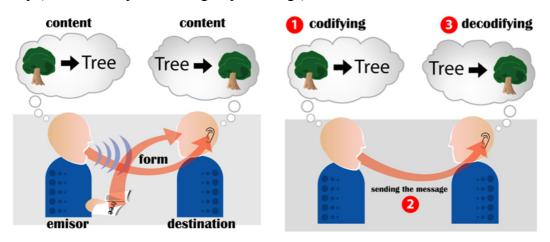
The nature of communication has been argued about since the beginning of Western culture. Socrates and Plato reflect on language and communication in the Socratic dialogues, particularly in the Cratylus. Aristotle attempted to work out a theory of communication and language; in The Rhetoric he primarily focused on the art of persuasion, and in De Interpretatione he discusses the elements of language and the relation of language and logic.

Theological, humanistic and rhetorical viewpoints and theories dominated the discipline prior to the twentieth century, when more scientific methodologies and insights from information theory, psychology, sociology, linguistics and advertising began to influence communication thought and practice.

Communication modelling

Communication is usually described along a few major dimensions: Content (what type of things are communicated), source, emisor, sender or encoder (by whom), form

(in which form), channel (through which medium), destination, receiver, target or decoder (to whom), and the purpose or pragmatic aspect. Between parties, communication includes acts that confer knowledge and experiences, give advice and commands, and ask questions. These acts may take many forms, in one of the various manners of communication. The form depends on the abilities of the group communicating. Together, communication content and form make messages that are sent towards a destination. The target can be oneself, another person or being, another entity (such as a corporation or group of beings).



Communication can be seen as processes of information transmission governed by three levels of semiotic rules:

- 1. Syntactic (formal properties of signs and symbols),
- 2. pragmatic (concerned with the relations between signs/expressions and their users) and
- 3. semantic (study of relationships between signs and symbols and what they represent).

Therefore, communication is social interaction where at least two interacting agents share a common set of signs and a common set of semiotic rules. This commonly held rules in some sense ignores autocommunication, including intrapersonal communication via diaries or self-talk, both secondary phenomena that followed the primary acquisition of communicative competences within social interactions.

In a simple model, information or content (e.g. a message in natural language) is sent in some form (as spoken language) from an emisor/ sender/ encoder to a destination/ receiver/ decoder. In a slightly more complex form a sender and a receiver are linked reciprocally. A particular instance of communication is called a speech act. The sender's personal filters and the receiver's personal filters may vary depending upon different regional traditions, cultures, or gender; which may alter the intended meaning of message contents. In the presence of "communication noise" on the transmission channel (air, in this case), reception and decoding of content may be faulty, and thus the speech act may not achieve the desired effect. One problem with this encode-transmit-receive-decode model is that the processes of encoding and decoding imply that the sender and receiver each possess something that functions as a code book, and that these two code books are, at the very least, similar if not identical. Although something like code books is implied by the model, they are nowhere represented in the model, which creates many conceptual difficulties.

Theories of coregulation describe communication as a creative and dynamic continuous process, rather than a discrete exchange of information. Canadian media

scholar Harold Innis had the theory that people use different types of media to communicate and which one they choose to use will offer different possibilities for the shape and durability of society (Wark, McKenzie 1997). His famous example of this is using ancient Egypt and looking at the ways they built themselves out of media with very different properties stone and papyrus. Papyrus is what he called 'Space Binding'. it made possible the transmission of written orders across space, empires and enables the waging of distant military campaigns and colonial administration. The other is stone and 'Time Binding', through the construction of temples and the pyramids can sustain their authority generation to generation, through this media they can change and shape communication in their society (Wark, McKenzie 1997).

Communication can best be summarized as the transmission of a message from a sender to a receiver in an understandable manner. The importance of effective communication is immeasurable in the world of business and in personal life. From a business perspective, effective communication is an absolute must, because it commonly accounts for the difference between success and failure or profit and loss. It has become clear that effective business communication is critical to the successful operation of modern enterprise. Every business person needs to understand the fundamentals of effective communication.

Currently, companies in the United States and abroad are working toward the realization of total quality management. Effective communication is the most critical component of total quality management. The manner in which individuals perceive and talk to each other at work about different issues is a major determinant of the business success. It has proven been proven that poor communication reduces quality, weakens productivity, and eventually leads to anger and a lack of trust among individuals within the organization.

The communication process is the guide toward realizing effective communication. It is through the communication process that the sharing of a common meaning between the sender and the receiver takes place. Individuals that follow the communication process will have the opportunity to become more productive in every aspect of their profession. Effective communication leads to understanding.

The communication process is made up of four key components. Those components include encoding, medium of transmission, decoding, and feedback. There are also two other factors in the process, and those two factors are present in the form of the sender and the receiver. The communication process begins with the sender and ends with the receiver.

The sender is an individual, group, or organization who initiates the communication. This source is initially responsible for the success of the message. The sender's experiences, attitudes, knowledge, skill, perceptions, and culture influence the message. "The written words, spoken words, and nonverbal language selected are paramount in ensuring the receiver interprets the message as intended by the sender" (Burnett & Dollar, 1989). All communication begins with the sender.

The first step the sender is faced with involves the encoding process. In order to convey meaning, the sender must begin encoding, which means translating information into a message in the form of symbols that represent ideas or concepts.

This process translates the ideas or concepts into the coded message that will be communicated. The symbols can take on numerous forms such as, languages, words, or gestures. These symbols are used to encode ideas into messages that others can understand.

When encoding a message, the sender has to begin by deciding what he/she wants to transmit. This decision by the sender is based on what he/she believes about the receivers knowledge and assumptions, along with what additional information he/she wants the receiver to have. It is important for the sender to use symbols that are familiar to the intended receiver. A good way for the sender to improve encoding their message, is to mentally visualize the communication from the receiver's point of view.

To begin transmitting the message, the sender uses some kind of channel (also called a medium). The channel is the means used to convey the message. Most channels are either oral or written, but currently visual channels are becoming more common as technology expands. Common channels include the telephone and a variety of written forms such as memos, letters, and reports. The effectiveness of the various channels fluctuates depending on the characteristics of the communication. For example, when immediate feedback is necessary, oral communication channels are more effective because any uncertainties can be cleared up on the spot. In a situation where the message must be delivered to more than a small group of people, written channels are often more effective. Although in many cases, both oral and written channels should be used because one supplements the other.

If a sender relays a message through an inappropriate channel, its message may not reach the right receivers. That is why senders need to keep in mind that selecting the appropriate channel will greatly assist in the effectiveness of the receiver's understanding. The sender's decision to utilize either an oral or a written channel for communicating a message is influenced by several factors. The sender should ask him or herself different questions, so that they can select the appropriate channel. Is the message urgent? Is immediate feedback needed? Is documentation or a permanent record required? Is the content complicated, controversial, or private? Is the message going to someone inside or outside the organization? What oral and written communication skills does the receiver possess? Once the sender has answered all of these questions, they will be able to choose an effective channel.

After the appropriate channel or channels are selected, the message enters the decoding stage of the communication process. Decoding is conducted by the receiver. Once the message is received and examined, the stimulus is sent to the brain for interpreting, in order to assign some type of meaning to it. It is this processing stage that constitutes decoding. The receiver begins to interpret the symbols sent by the sender, translating the message to their own set of experiences in order to make the symbols meaningful. Successful communication takes place when the receiver correctly interprets the sender's message.

The receiver is the individual or individuals to whom the message is directed. The extent to which this person comprehends the message will depend on a number of factors, which include the following: how much the individual or individuals know about the topic, their receptivity to the message, and the relationship and trust that exists between sender and receiver. All interpretations by the receiver are influenced

by their experiences, attitudes, knowledge, skills, perceptions, and culture. It is similar to the sender's relationship with encoding.

Feedback is the final link in the chain of the communication process. After receiving a message, the receiver responds in some way and signals that response to the sender. The signal may take the form of a spoken comment, a long sigh, a written message, a smile, or some other action. "Even a lack of response, is in a sense, a form of response" (Bovee & Thill, 1992). Without feedback, the sender cannot confirm that the receiver has interpreted the message correctly.

Feedback is a key component in the communication process because it allows the sender to evaluate the effectiveness of the message. Feedback ultimately provides an opportunity for the sender to take corrective action to clarify a misunderstood message. "Feedback plays an important role by indicating significant communication barriers: differences in background, different interpretations of words, and differing emotional reactions" (Bovee & Thill, 1992).

The communication process is the perfect guide toward achieving effective communication. When followed properly, the process can usually assure that the sender's message will be understood by the receiver. Although the communication process seems simple, it in essence is not. Certain barriers present themselves throughout the process. Those barriers are factors that have a negative impact on the communication process. Some common barriers include the use of an inappropriate medium (channel), incorrect grammar, inflammatory words, words that conflict with body language, and technical jargon. Noise is also another common barrier. Noise can occur during any stage of the process. Noise essentially is anything that distorts a message by interfering with the communication process. Noise can take many forms, including a radio playing in the background, another person trying to enter your conversation, and any other distractions that prevent the receiver from paying attention.

Successful and effective communication within an organization stems from the implementation of the communication process. All members within an organization will improve their communication skills if they follow the communication process, and stay away from the different barriers. It has been proven that individuals that understand the communication process will blossom into more effective communicators, and effective communicators have a greater opportunity for becoming a success.

Communication is both verbal and nonverbal. Communication is a vital part of leadership. We use our communication skills on a daily basis. There are three types of communication: output-based, input-based and nonverbal, as well as barriers such as language, interpersonal, situational-timing and organizational structure and procedural.

The communication cycle

Effective communication is a two-way process, perhaps best expressed as a cycle. Signals or 'messages' are 'sent' by the communicator and 'received' by the other party. He 'sends' back some form of confirmation that the 'message' has been received and understood: this is called 'feedback'.

The following elements are usually the main attributes of a communication process:

Situation:

when and where communication takes place

Message:

whatever is intended to be communicated by one person to another

Sender:

the person who wishes to send the message to someone else

Channel:

the means by which the sender chooses to communicate the message

Receiver:

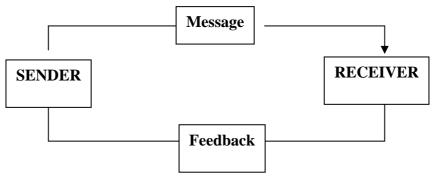
the one for whom the message is intended

Feedback:

the way the receiver responds to the message

Interference:

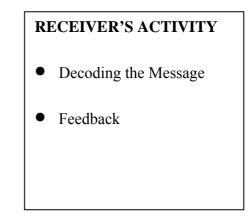
anything that hinders the sender from making the message understood



The Stages of Communication Process

SENDER'S ACTIVITY

- Impulse to communicate
- Encoding the Message
- Relay of Message



Impulse to communicate

• Deciding to communicate and deciding what to communicate is the first stage of the process.

• Messages should ideally be reviewed and put into some working order in the brain before mouth, body or machinery are used to articulate and present the idea for someone else's benefit.

Encoding the message

- At this stage, the sender puts his message into words, gestures and expressions in the form that both sender and receiver understand.
- We have to bear in mind however, that a symbol that we use and understand may be ambiguous (have more than one possible meaning) or mean something different to a person of different age, nationality, experience or beliefs. Just because we understand what we mean, it does not necessarily mean that someone else will.

Relaying the message

- Once the idea has been encoded as a message, the sender needs to choose how to 'transmit', or get it across to the receiver. The particular route or path, via which the message is sent, connecting the sender and receiver, is called the channel of communication. (eg. a notice board, newspaper column, online bulletin board).
- The tool which is used to communicate is called the *medium* which often takes the form of;
 - i. *Visual* communication eg. gesture, chart, picture or screen display;
 - ii. Written communication eg. a letter, memorandum, note, report or list; or
- iii. *Oral* communication which includes both face-to-face and remote communication eg. by telephone or television.

Choice of medium

The choice of medium will depend on such factors as:

- the Time, depending on its urgency.
- the Complexity, which medium will enable it to be most easily understood.
- the Distance, the message is required to travel and in what condition it must arrive.
- the need for a written record, eg. for legal documents.
- the need for interaction, immediate exchange or instant feedback.
- the need for confidentiality or conversely, the spreading of information widely and quickly.
- Sensitivity to the effect of the message on the recipient: the need for personal involvement, persuasive power or impersonality.
- Cost, for the best possible result at the least possible expense.

Decoding the message

The first step in communication from the receiver's point of view is the 'decoding' of the message i.e understanding what it says. The receiver must

- grasp the meaning of the words or symbols used by the sender.
- interpret the message as a whole. What it says is not necessarily what it means. Reading between the lines or inferring may be necessary to establish the underlying meaning of the message.

Giving feedback

- Feedback is the reaction of the receiver which indicates to the sender that the message has (or has not) been successfully received, understood and interpreted.
- There are 2 types of feedback negative & positive.

Positive feedback

- i. Action taken as requested
- ii. A letter/memo/note sent confirming receipt of message, or replying to question/invitation etc.
- iii. Smile, nod, thumbs up.

Negative feedback

- i. No action, or wrong action taken
- ii. No written response at all or written request for more information, repetition etc.
- iii. Silence, gesture, blank look, shrug.
 - Feedback is vital to success in communication because there are so many potential barriers and breakdowns to guard against.

Communication: Models, process and problems

1.1 The sender-receiver model

There are those who think that communication only involves messages which have been intentionally given to recipients who also received them. In other words, only when the intended message has also been received correctly will communication take place.

1.2 The receiver model

There are also those who believe that communication involves messages which are meaningful to receivers. It does not matter whether they are intended messages or not. For as long as receivers think the messages are meaningful in any way, then communication has taken place.

1.3 The communication behavior model

Another group of people believe that, while communication ideally should only involve messages intentionally sent and successfully received, this is not the case in 'real' communication situations. How can we determine the true intentions of speakers and writers, anyway? This model therefore proposes that all kinds of intentional sending and intentional receiving should be considered as acts of communication.

2. How does communication work?

It is not enough to be aware of what counts as communication or what does not. A true test in understanding communication is to know how it works. How does communication work? With this question, we can also have many answers (models adapted from DeVito 2001; Littlejohn 2002: 207-232; Rosenblatt et al. 1992; Stanton 1982).

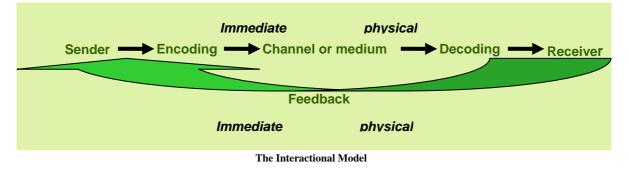
2.1 Linear model

This is perhaps the most basic model of communication. Communication involves two people – the sender and the receiver of the message. The communication process is relatively unproblematic: one person sends a message, and then another person receives it. In this way, the flow of information is linear:



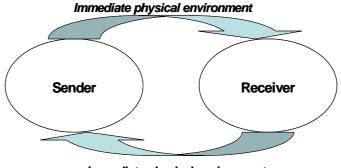
2.2 Interactional model

An interactional view of communication assumes that the sender who encodes a message also receives feedback from the receiver who decodes the message. This view also includes channel or medium of communication, as well as the physical environment (noise, seating arrangement, etc.):



2.3 Transactional model

This model suggests that both the receiver and sender of the message change roles most of the time. The receiver is also a sender of the message, while the sender is also a receiver of the message.



Immediate physical environment

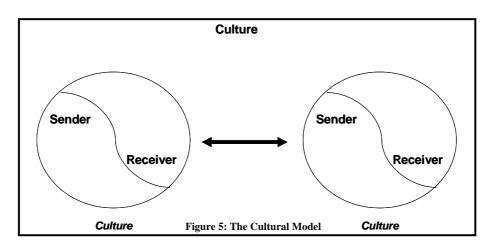
The Transactional Model

2.4. Power-in-communication model

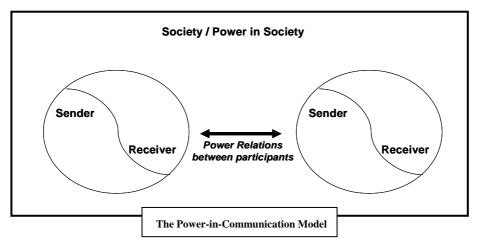
Simply put, this model of communication stresses the importance of power relations in any form of communication. Not only does power influence communication; it is part of any communication situation. This is, in fact, especially so in business communication where a variety of dominant/subordinate roles are prevalent.

2.5 Cultural model

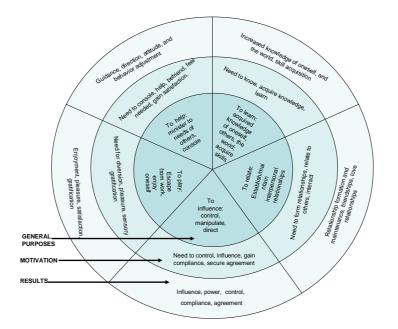
Clearly, this model puts culture at the centre of the communication process. Communication happens because of culture, so there is no adequate understanding of the nature and process of communication without recognizing the central role of culture in it. Communication involves language and other non-verbal modes of interaction; all these are culturally-shaped. Communication also involves the transmission and negotiation of meaning; these are also cultural practices.



These models, of course, are all incomplete. They are presented to you in such a manner so you will understand the various "sides" of communication clearly. Put together, however, these models give us the following general elements of communication: Participants, Modes of communication, Immediate physical environment, Relations of power, Cultures



What these tell us is this: whether you are writing an email to your boss, your female colleague is engaging in a debate with a male colleague, or your project group is discussing a seemingly unresolved problem, these communication contexts will always have participants, take on various modes of communication (is it oral? Written? Simultaneously oral/written like in an online chat?), immediate environments, as well as be shaped by relations of power and cultures. If you know that all these elements work together in every communication context, you may be able to understand more adequately how and why people behave in a particular way.



Purposes, Motivations and Desired Results of Communication

References

- 1. Bovée, Courtland L. & Thill, John V. (2005). *Business Communication Today* (8th ed.). USA: Prentice Hall International, Inc.
- Chaney, Lillian H. and Martin, Jeanette S. (2002). *Intercultural Business Communication* (2nd ed.). New Jersey: Prentice Hall.
- 3. Dance, Frank E. X. and Larson, Carl E. (1976). *The Functions of Human Communication A Theoretical Approach*. USA: Holt, Rinehart and Winston.
- 4. DeVito, Joseph A. (2001). The Interpersonal Communication Book (9th ed.). New York: Longman.
- 5. Littlejohn, Stephen W. (2002). Theories of Human Communication. USA: Wadsworth Group.
- 6. Mortensen, C. David (1994). *Problematic Communication The Construction of Invisible Walls*. Connecticut and London: Praeger.
- Rosenblatt, S. Bernard, Cheatham, T. Richard, and Watt, James T. (1992). Communication in Business (2nd ed). New York: Prentice Hall.
- 8. Sigband, Norman B. and Bateman, David N. (1981). *Communicating in Business*. USA: Scott, Foresman and Company.
- 9. Stanton, Nicki (1982). What Do You Mean, 'Communication'? An introduction to communication in business. London and Sydney: Pan Books. .
- 10. Bovee, Courtland L. & Thill, John V. (2005): Business Communication Today. 8th Edition. Prentice-Hall International Inc. -- Pages 2 31
- 11. Locker, Kitty O. (2006): Business and Administrative Communication. 7th Edition. Irwin/McGraw-Hill. -- Pages 2- 33.

For further reading

- <u>"communication Defination from the Mirriam-Webster online dictionary"</u>. Mirriam-Webster. <u>http://www.merriam-webster.com/dictionary/communication</u>. Retrieved on 2009-03-08.
- "communication". written at Washington. office of superintendent of Public instruction. <u>http://www.k12.wa.us/CurriculumInstruct/Communications/default.aspx</u>. Retrieved on March 14, 2008.
- 3. <u>"media"</u>. *online Etymology dictionary*. <u>http://dictionary.reference.com/browse/media</u>. Retrieved on March 14 2008.

- 4. Montana, Patrick J. & Charnov, Bruce H. 2008. Management. 4th ed. New York. Barron's Educational Series, Inc. Pg 333.
- Mehrabian and Ferris (1967). "Inference of Attitude from Nonverbal Communication in Two Channels". In: *The Journal of Counselling Psychology* Vol.31, 1967, pp.248-52.
- 6. <u>Warwick, K</u>, <u>Gasson, M</u>, Hutt, B, Goodhew, I, <u>Kyberd, P</u>, Schulzrinne, H and Wu, X: "Thought Communication and Control: A First Step using Radiotelegraphy", *IEE Proceedings on Communications*, 151(3), pp.185-189, 2004
- 7. Witzany, G. (2006). Plant Communication from Biosemiotic Perspective. Plant Signaling and Behavior 1(4): 169-178.
- 8. Witzany, G. (2007). Applied Biosemiotics: Fungal Communication. In: Witzany, G. (Ed). Biosemiotics in Transdisciplinary Contexts. Helsinki, Umweb, pp. 295-301.
- Baumeister, R. F., & Leary, M. R. (1995). *The need to belong: Desire for interpersonal attachments as a fundamental human motivation*. Psychological Bulletin 117, 497-529.
- Ferraro, G.(2002). *Global Brains- Knowledge and Competencies for the 21st Century*. Charlotte: Intercultural Associates, Inc.
- Severin, Werner J., Tankard, James W., Jr., (1979). *Communication Theories: Origins, Methods, Uses*. New York: Hastings House, <u>ISBN 0801317037</u>
- Wark, McKenzie 1997 The Virtual Republic Allen and Unwin St Leonards pp 22-9
- Witzany, G. (2006) Plant Communication from Biosemiotic Perspective. Plant Signaling & Behavior 1(4): 169-178.
- Witzany, G. (2007). Applied Biosemiotics: Fungal Communication. In: Witzany, G. (Ed.) Biosemiotics in Transdisciplinary Contexts. *Helsinki. Umweb, pp 295-301.
- Montana, Patrick J. & Charnov, Bruce H. 2008. Management. 4th ed. New York. Barron's Educational Series, Inc. Pg 326-327.