

Technical communication

IMPORTANCE OF TECHNICAL COMMUNICATION

Technical communication plays a pivotal role in any set-up, whether it is a business enterprise, an industry as a whole, or an academic institution. All managerial or administrative activities involve communication, be it planning, organizing, recruiting, coordinating, or decision-making.

When you write reports, give instructions, or read brochures and manuals, you are involved in the process of communication.

Communication serves as an instrument to measure the success or growth of an organization. For example, papers published by R&D organizations bring to light their progress.

When the chief executive officer (CEO) of an organization presents his/ her company's achievements in a meeting, each of the participants comes to know of these milestones. The higher one's position is, the greater is their need to communicate.

A labourer, for example, may not be as involved in formal communication as a top-level executive.

The various types of communication not only help an organization to grow, but also enable the communicators to develop the required skills.

However, though most professionals are well aware of the importance of communication, they do not develop their skills to good effect in their sphere of work.

The more people participate in the communication process, the better they develop their skills in collecting and organizing information, analysing and evaluating facts, appreciating the difference between facts and inferences, and communicating effectively.

To become an effective communicator, one needs to communicate, communicate, and communicate. There is no other way out.

GENERAL AND TECHNICAL COMMUNICATION

Communication is important not only in an organization but also in one's daily life. It is an integral part of daily activity. When an alarm clock goes off, it is communication through sound, urging one to get out of bed. When one feels loyal towards a particular brand of toothpaste, it is possible that the television (TV) commercials for that brand have been successful in communicating the message. Watching news on TV, saying goodbye to one's family, or calling a cab and giving directions are all different types of communication. At the workplace, all activities revolve around oral or written communication. Interacting with one's boss, reading the newspaper at home, or even dreaming in one's sleep are all examples of communication.

Differences between general and technical communication

General: Contains a general message, Informal in style & approach, mostly oral, not always for a specific audience

Technical: Contain technical message, mostly formal & follows a set of pattern. Both in oral and written

Messages that are non-technical or informal in nature are categorized as general-purpose communication, whereas messages pertaining to technical, industrial, or business matters belong to the category of technical or business communication.

OBJECTIVES AND CHARACTERISTICS OF TECHNICAL COMMUNICATION

Technical communication takes place when professionals discuss a topic with a specific purpose with a well-defined audience. Technical communication usually has the following objectives:

- To provide organized information that aids in quick decision-making
- To invite corporate joint ventures
- To disseminate knowledge in oral or written form

Let us take an example of a customer who has bought a washing machine and does not know how to use it. The customer reads the instructions in the user manual and gradually learns to operate the washing machine without any assistance.

This is an example of successful technical communication. When you are confused about which camera to buy, the salesperson explains all the technical features of each model to you. If that helps in your buying decision, it is successful technical communication again.

Technical communication has to be correct, accurate, clear, appropriate, and to the point. Correct information is objective information. The language should be clear and easy to understand. If the communication is through a user manual for a phone, remember that people will usually never use it unless they are stuck. And if they are stuck, they will look for instant information to solve their problem. The information must be brief and arranged sequentially so that it is easy for a user to find relevant information. It is also vital that the technical information provided in the manual be accurate.

LEVELS OF COMMUNICATION

Having understood the communication process, let us now study the various levels at which human communication takes place:

- Extrapersonal • Intrapersonal • Mass
- Interpersonal • Organizational

Extrapersonal Communication

Communication between human beings and non-human entities is extrapersonal. For example, when your pet dog comes to you wagging its tail as soon as you return home from work, it is an example of extrapersonal communication. A parrot responding to your greeting is another example. More than any other form, this form of communication requires perfect coordination and understanding between the sender and the receiver because at least one of them transmits information or responds in sign language only.

Intrapersonal Communication

Intrapersonal communication takes place within an individual. We know that the brain is linked to all parts of the body by an electrochemical system. For example, when you begin to ‘feel hot’, this information is sent to the brain and you may decide to ‘turn on the cooler’, responding to instructions sent from the brain to the hand. In this case, the relevant organ is the sender, the electrochemical impulse is the message, and the brain is the receiver. Next, the brain assumes the role of sender and sends the feedback that you should switch on the cooler. This completes the communication process. This kind of communication pertains to thinking, which is the basis of information processing. Without such internal dialogue, one cannot proceed to the further levels of communication—interpersonal and organizational. In fact, while we are communicating with another party, our internal dialogue with ourselves continues concurrently—planning, weighing, considering, and processing information. You might have noticed that at times you motivate yourself or consciously resolve to complete a certain task. Self-motivation, self-determination, and the like take place at the intrapersonal level.

Interpersonal Communication

Communication at this level refers to the sharing of information among people. To compare it with other forms of communication, such as intrapersonal, organizational, etc., we need to examine how many people are involved, how close they are to one another physically, how many sensory channels are used, and the feedback provided.

Interpersonal communication differs from other forms of communication in that there are few participants involved, they are in close physical proximity to each other, many sensory channels are used, and feedback is immediate. Also, the roles of the sender and receiver keep alternating. This form of communication is advantageous because direct and immediate feedback is possible. If a doubt occurs, it can be instantly clarified. Note that non-verbal communication plays a major role in the interpretation of a message in this form of communication due to the proximity of the people involved.

Interpersonal communication can be formal or informal. For example, your interaction with a sales clerk in a store is different from that with your friends and family members; the interaction between the panel members and the candidate appearing at an interview is different from the conversation between two candidates waiting outside. Hence, depending upon the formality of the situation, interpersonal communication takes on different styles. Moreover, most interpersonal communication situations depend on a variety of factors, such as the psychology of the two parties involved, the relationship between them, the circumstance in which the communication takes place, the surrounding environment, and finally the cultural context.

Organizational Communication

Communication in an organization takes place at different hierarchical levels. As we have learnt, it is extremely necessary for the sustenance of any organization. Since a large number

of employees are involved in several different activities, the need to communicate effectively becomes greater in an organization. With a proper networking system, communication in an organization is possible even without direct contact between employees. Organizational communication can be further divided into the following.

Internal-operational All communication that occurs in the process of operations within an organization is classified as internal-operational.

External-operational The work-related communication that an organization has with people outside the organization is called external-operational communication.

Personal All communication in an organization other than that for business or official purposes is called personal communication.

We will learn more about communication in organizations later in this chapter.

Mass Communication

Mass communication is meant for large audiences and requires a medium to transmit information. There are several mass media such as journals, books, television, and newspapers. The audience is heterogeneous and anonymous, and thus the approach is impersonal. Press interviews given by the chairman of a large firm, advertisements for a particular product or service, and the like take place through mass media. This type of communication is more persuasive in nature than any other form, and requires utmost care on the part of the sender while encoding the message. Oral communication through mass media requires equipment such as microphones, amplifiers, etc., and the written form needs print or visual media. The characteristics of mass communication are as follows:

Large reach Mass communication has the capacity to reach audience scattered over a wide geographical area.

Impersonality Mass communication is largely impersonal, as the participants are unknown to each other.

Best Practices for Technical Writers

Keep it Neutral

Although there is a tendency, especially among big companies who are working on their company image and character, to use a friendlier manner of communication with readers, and we are going to advise against this. A sense of humour is a highly subjective notion. Besides, some people just don't have it!

As technical documentation plays an important role in case deflection, most people do not open a user manual for entertainment. And, as they are, most probably, facing some issue with your product, they are not in the mood to laugh. Some researches even show that people can consider humor in user manuals mocking. Just to be on the safe side - keep it formal.

Stop Reassuring

You might be surprised, but reassurance can create anxiety. Let's take this sentence as an example: don't worry, we will never give your personal data to anyone. Respondents say that they weren't worried until they saw this 'don't worry' part. Our brain just reads the word 'worry' and acts on it creating anxiety.

Simplify



This point depends a lot on your target audience, of course. Be especially careful if your manuals can be potentially read by non-native speakers. In a general sense, the wider your reader audience is the more simple the language should be. Let's talk about [software documentation](#). We should be mindful of the fact that people of different generations might read these manuals. Our parents/grandparents are using smartphones, too, so, if you are creating documentation for Apple/Android application, for example, you need to pay a lot of attention to the vocabulary you use. Take a look at the table below to see several examples of the preferred word choice.

Avoid	Use Instead
malware	harmful software
hover	place your mouse cursor over
URL	a link address
erroneous	wrong

sign-in credentials	username and password
subsequently	after or later
enable/disable	turn on/turn off

Analyze Feedback

There are multiple ways of getting feedback on your technical documentation from readers to make some improvements later. Note: we are now talking about *online* user manuals.

So, the first thing you can do is analyze statistics. Our help authoring tool, [ClickHelp](#), for example, offers both built-in statistics and Google Analytics integration. This way, you can track which help topics are getting more views and work harder on the most popular ones.

The second option is using a rating system for your help topics. This functionality is also available in ClickHelp. Review the ratings once in a while to figure out which topics should be restructured or rewritten.

The third way to get user feedback is enabling comments for help topics. You can integrate such services like Disqus into your documentation created in your [help authoring tool](#). User comments can help you enhance your technical documentation, too.

Keep it Short and Precise

Longer sentences overcomplicate things. Always look for ways to make sentences more concise. Try avoiding constructions, like *in the event that*, just use *if* instead. *To be able to* is often used to denote the future form of the modal verb *can* - just use *can* for other tenses. Pay attention to any unreasonably long and heavy constructions and eliminate them. Another way to make any text more readable - try sticking to simple sentences. Make a couple of simple sentences out of the complex one.

Use Readability Score



Readability score services allow evaluating your texts to figure out how easy it will be for an average reader to comprehend them. Readability scores include different parameters for analysis. For examples, the service will count the percentage of terms in the text (the more terms you have, the less readable it is considered), sentence length, heading levels, etc. These and many other factors influence the final score the text gets. This might be extremely helpful for technical writers who are creating content in not their native tongue which hinders self evaluation. Check out this article on [pros and cons of using readability scores in technical writing](#).