CHAPTER

12

The Art of Condensation

OBJECTIVES

You should study this chapter to know

- the importance of being concise and relevant while preparing technical documents
- the various steps involved in condensing a text
- how to prepare an effective précis of the given text

INTRODUCTION

In today's fast-changing, technology-driven world, acquiring the art of summarizing and essential writing skill is crucial, as it saves time and promotes effective communication. This skill is helpful in preparing synopses, abstracts, and executive summaries, which are essential elements of various technical documents.

The art of summarizing is also known as précis writing. A précis can be defined as an abridged form of the text or a piece of writing: Précis writing involves summarizing a document to extract the maximum amount of information and conveying this information to a reader in the minimum number of words.

Précis writing does not merely involve paraphrasing (or writing in one's own words) from the original document. The summary produced must be capable of 'standing alone' and making sense—the précis must be complete, informative, and easy to read.

There is no fixed length defined for a précis, but normally it is written in one-third of the number of the words in the original passage. The following qualities are essential to a précis:

Completeness The précis must have the essential contents of the original passage without omitting any important fact or idea.

Compactness All the ideas reproduced from the original document should form a compact whole. The words and sentences should convey a sense of unity with each other.

Conciseness Conciseness is achieved by the process of sifting essential from unessential information, by avoiding repetition, and by omitting ornamental phrases. However, conciseness should not

'Clarity precedes success.' -Robin Sharma be achieved at the cost of clarity. All the original essential ideas should be presented clearly but in brief.

This can be achieved by getting rid of circumlocutions and unclear statements. It should be intelligible to even those readers who have not gone through the original document.

Coherence All sentences and ideas in a précis should follow a reasonable and natural order of development. Thus, the précis should not look like a collection of disjointed sentences, but a well-connected whole.

STEPS TO EFFECTIVE PRÉCIS WRITING

Given below are the step-by-step instructions for summarizing any given piece of writing.

Identify the reader and purpose of the précis

This step determines how much detail should be included and how formal the précis needs to be. For instance, the précis from a textbook chapter for study purposes need not be as carefully refined as the executive summary of a formal report for an important client.

Read the original document

Skim-read the document to get an overview, then read it again slowly to identify the main themes and to distinguish the key ideas and concepts from the unimportant ones.

Underline the key ideas and concepts

Each paragraph should have one key topic, which the rest of the paragraph clarifies, supports, and develops.

Write down a title that sums up the theme of the passage.

The title or heading is the précis of a précis and indicates what is to follow. Hence, it should reflect the central idea of the passage. It can be a word, a phrase, or even a short sentence. A suitable title must be provided even if it is not asked for.

Write a note-form summary of each paragraph

The passage should be summed up in the form of points. This should always be done in one's own words as far as possible. All irrelevant material should be omitted.

Write the précis

The original text should be paraphrased to express the summarized points more concisely and to develop them into coherent sentences, expressing all important points in a generalized form. Any repetitions or irrelevant details should be eliminated. Only the third person and indirect speech should be used. No personal comments should be added.

Review and edit

'There is great power in words if you don't hitch too many of them together.' -Josh Billings Compare the précis with the original document and make sure that it emphasizes the same points. Ensure that the précis is readable, concise, and coherent.

Although we have discussed these tips or techniques in the earlier chapters, some examples are given in Table 12.1 as a ready reckoner.

GUIDELINES

The following are guidelines for effective précis writing:

• The theme of the passage must be determined very carefully.

TABLE 12.1 Guidelines for effective précis writing

Type of ineffectiveness	Original version	Revised version
Redundancy	(a) The analysis was thoroughly and wholly complete. (7)	(a) The analysis was complete. (4)
	(b) The Chairman wants to meet those employees who are working in the production department, so that he can discuss the difficult crisis immediately. (23)	(b) The Chairman wants to meet the employees of the production department to discuss the crisis immediately. (16)
Circumlocution	(a) Objects, on our first acquaintance with them, have that singleness and integrity of impression that it seems as if nothing could destroy or obliterate them, so firmly are they stamped and riveted on the brain. (35)	(a) Our first impressions of objects are the most lasting. (9)
	(b) The reason why the technicians were so upset was because their boss seemed so angry with them. (17)	(b) The technicians were upset because the boss seemed so angry with them. (12)
Passive voice	(a) If no satisfactory results are obtained, another study is carried out, but this time the data obtained from the first trial is included. (23)	(a) If you do not get satisfactory results carry out another study including the data of the first trial. (18)
	(b) After the robot was installed, a series of problems were faced by the company. (14)	(b) After installation the company faced a series of problems with the robot. (12)
Wordiness	(a) The secretary's proposal was adopted with the full agreement of all the members. (13)	(a) The members unanimously adopted the secretary's proposal. (7)
	(b) It is not fair or just in the interest of the consuming public that any commercial concern should acquire the sole power of trading in some particular article to the exclusion of its rivals. (34)	(b) Monopolizing a particular trade by any commercial concern is unfair to the consuming public. (14)

- A précis is not the reproduction of important sentences.
- Conciseness is good but not at the cost of clarity.
- The précis should be intelligible even to a person who has not read the original passage.
- The original passage must be condensed in the précis-writer's own language.
- A précis is always written in the third person.
- Statistical information should be treated according to one's own discretion.
- All the main ideas in the passage should be given almost equal treatment in the précis.
- Personal ideas should not be introduced.
- The original source must not be criticized or changed.
- The précis should be limited to no more than one-third the length of the original passage; the number of words must be indicated.

Tips for Condensing Longer Sentences



- Try to replace clauses by phrases and phrases by words.
- Make use of one-word substitutions.
- Avoid all unnecessary repetitions.

- Link various sentences.
- Omit examples, comparisons, contrasts, digressions, and minor details.

SAMPLES

In this section, we give three examples to demonstrate précis writing. The number of words in each original text is indicated. The original text is followed by a vocabulary list, which gives the meanings of the more difficult words. This list is followed by a listing of the main points of the original passage. Thereafter, the précis has been written, constructed using the main points, indicating the final number of words after condensation.

Original Text 1

A vital factor in the success of any business is the right selection of its administrative staff. In this matter, the management has the inescapable function not only of making the right selection, but after having made it, also of providing the fullest scope for legitimate ambition and individual advancement. A management which is so petty as to be jealous of the powers and authority of the officers will naturally select staff of the submissive type, docile men who are accustomed to obey without question. It would not take the risk of engaging able and aggressive/self-motivated employees for the fear that it may one day be supplanted by them. A really go-ahead management which understands the mood of the present times will do the direct opposite. It will seek out men capable of evolving policies within their own sphere and will train them to rise to the highest position.

In connection with most administrative bodies, management is self-perpetuating and is responsible for its own succession. Even the ablest management cannot foresee the future with certainty; its decisions, for the future, are at best intelligent guesses. What, however, it can and must do is to make available the enterprise to the men who will be capable of taking the decisions of the future and who are qualified, trained, and tested during the present to do so.

'Never be so brief as to become obscure.'

-Tryon Edwards

No management can rely upon a constant supply of geniuses. It must so train its staff that, during normal times, the enterprise is capable of being run effectively by men of not much more than average ability and with a robust sense of purpose. (270 words)

Vocabulary vital—important; legitimate—proper; docile—submissive like a slave; supplanted—removed, replaced; evolving—finding out; self-perpetuating—continuing itself; foresee—guess; rely—depend; geniuses—very intelligent and able persons; robust—strong and healthy.

Points

- 1. Success in business depends upon right selection of staff.
- 2. The management must foster the staff's proper ambitions and individual advancement.
- 3. A petty, jealous management selects submissive people for fear of being replaced by them.

- 4. A progressive management tries to find decision-making, creative geniuses, and trains them for the present.
- 5. Good management prepares its own succession for the future; it can only guess intelligently.
- 6. As the supply of geniuses cannot be assured, the staff must be trained to run the enterprise with normal ability and a strong sense of purpose in normal times.

Précis of the original text 1 is as follows:

Efficient Management

Success in business depends upon the right selection of staff members and fostering their proper ambition and individual advancement. A petty, jealous management will select docile people for fear of being replaced by them, while a progressive management appoints decisive, creative, intelligent persons and trains them in

anticipation of its own replacement. Even the ablest management can merely guess the future intelligently. As the supply of geniuses cannot be assured, the staff must be trained to run the enterprise with normal ability and a strong sense of purpose in normal times. (91 words)

Original Text 2

For all industrial development we need power, and the ultimate restriction on power is the fuel from which it is extracted. Is there enough fuel to satisfy our ever-growing hunger for power? For conventional fuels, such as wood, coal, and oil, the answer is quite clearly 'No'. The world's known stock of oil is only sufficient to last sixty years at the present rate of consumption and the rate of consumption keeps going up and up. We are burning too much wood already, and the earth's known fuel-wood forests will be consumed soon. Coal is still in fair supply, but in some areas notably England—it is becoming increasingly difficult to mine, and it is therefore uneconomical.

Besides fuel as a source of power, there is the device for harnessing energy from rapidly flowing water. Few sources of water power remain untapped, and the power they yield meets only a fraction of our total need. Moreover, it is not very dependable, because storing water in reservoirs depends on rains, which are sometimes freakish.

Conventional fuels release energy by combustion, but fission makes use of another kind of fuel, remarkable for its concentration of power. All fissionable material is extracted or manufactured from two elements, uranium and thorium, and the world has plentiful stock of them. But even so they will not last forever. There is probably enough to last for several centuries. Fission in the techniques known up till now converts only one-tenth of one per cent of its fuel into energy. Complete conversion of fissionable fuels into energy is known at present at laboratory level only. If it can be harnessed into a practical power device, one pound of fissionable fuel would be equivalent to three billion pounds of coal. Now the scientists' quest is to find out some more efficient process for using these fuels outside the laboratory on industrial scale. But after even fissionable material is gone, what then? There is no reason to despair. The sun is continually pouring solar energy on earth—we have only to gather and harness it. Those who think that humans will one day be left without any source of power are not far-sighted enough. (364 words)

Vocabulary ultimate—final; untapped—not tried; freakish—whimsical; fission—division of cells; quest—search.

Points

- 1. Power, which is dependent upon fuel, is needed for all industrial development.
- 2. The conventional type of fuel is not going to last for a very long time.
- 3. There is enough stock of uranium and thorium in the world, and fissionable material, which can serve as fuel for a very long time, is extracted from it.
- 4. Scientists are trying to find some efficient process for the use of fissionable material as fuel for industrial purposes.
- 5. Besides this, the energy that we get from the sun can also be gathered and harnessed for our purposes.
- 6. It is only short-sighted people who think that there will be no source of power left for humans in the future.

Précis of the original text 2 is as follows:

Inexhaustible Sources of Power

Power, which is extracted from fuel, is essential for all industrial development. The fear is that conventional types of fuel are not going to last for a very long time. Fortunately, we have enough stocks of uranium and thorium, and all fissionable material, which is a great source of energy, is extracted from these elements.

Scientists are busy researching an efficient process for the use of fissionable material for industrial purposes. The solar energy that we receive can also be gathered, harnessed, and used for our purposes. So people who imagine that in the foreseeable future humans would be left without any source of power, only display their short-sightedness. (109 words)

Original Text 3

There is no doubt that people are growing more and more interested in the seas, and that there is a great need for that interest. Humans have long tried to probe the secrets of the oceans to gain knowledge for its own sake, but there are other practical reasons for doing so. The sea can provide us with many things that we need in everyday life. Future generations will probably depend more on the seas for their food, and not only food in the form of fish. Minerals necessary for modern industries are also there, when we can find out how to extract them.

We have explored and mapped most of the land, and we are quickly exploring the air. The seas present a greater difficulty because we cannot yet, and probably never shall be able to, set foot on the deep ocean floor.

The aim of the extensive ocean-going expeditions, of the marine biological stations around the coasts, and even of those who simply study the shore uncovered by the tide, is to build up our knowledge of this vast and unfamiliar world beneath the waves. In some cases the knowledge gained can be put to practical use, but much of it is for interest only.

For the very early mariners, interest lay in the currents, and especially those at the surface that carried their ships along. They were also interested in the weather over the sea. Yet, even these hardbitten seamen were not immune from a curiosity about the animals and plants that lived below the waves. Their first impulse may have been to seek trade overseas, or to fish for food, but over and above this, anything strange or beautiful, whether caught up in their nets or cast ashore by the tides, caused them to wonder. So, from the earliest time, the pursuit of practical everyday things

went on side by side with the inquiry that springs from a desire to know more. Bit by bit grew the knowledge of the physical features of the seas, of such things as currents, waves, and winds, as well as of the biology, the knowledge of animals and plants. (359 words)

Vocabulary probe—delve deep, find out, explore; extract—derive them, set them; expedition journey; beneath—below; immune—to have no effect; impulse—feeling, emotion.

Points

- 1. Humans' interest in the seas is increasing and it is a healthy and useful sign.
- 2. Future generations are likely to draw more of their food from seas.
- 3. Exploration of seas is a difficult job.
- 4. The aim of all marine exploration is to know the world beneath the waves.
- 5. Even the earliest mariners had interest in exploring the seas for the sake of knowledge.

Précis of the original text 3 is as follows:

Human Interest in Exploring Seas

Humans' interest in exploring the seas has increased and it is a healthy sign. Probably, future generations are to depend far more on the seas for their food. Though people have been able to map the entire land seas offer difficult prospects. The aim of all adventure has always been to know about the world. Some knowledge thus gained

may have practical utility, but most of it is for the sake of interest. Even the earliest mariners, though their primary interest was to seek out trade routes, had the curiosity to study the animals and plants that lived below the waves. This curiosity, of course, helped them in gaining knowledge. (110 words)



For more solved samples of précis writing, please refer to the CD.

SUMMARY

Writing abstracts, summaries, and synopses is a necessary part of academic and professional work. Preparing such professional/technical documents requires concise, clear, and relevant writing. Learning to write the précis of the given text is a significant step in achieving the essential qualities of effective writing. By understanding the various steps involved in précis writing given in this chapter and practising them meticulously, we will be able to condense any given text with effectiveness and efficiency.

EXERCISES

Summarize each of the following passages in about one-third of the total number of words. At the end, write the number of words in your précis.

(a) Experiments have shown that in selecting personnel for a job, interviewing is at best a hindrance, and may even cause harm. These studies have disclosed that the judgements of interviewers differ markedly and bear little or no relationship to the adequacy of the job. Of the many reasons why this should be the case, three in particular stand out.

The first reason is related to an error of judgements known as the halo effect. If a person has one noticeable good trait, their other characteristics will be judged as better than they really are. Thus, an individual who dresses smartly and shows selfconfidence is likely to be judged capable of doing a job well regardless of his or her ability.

Interviewers are also prejudiced by an effect called the primacy effect. This error occurs when interpretation of later information is distorted

by earlier connected information. Hence, in an interview situation, the interviewer spends most of the interview trying to confirm the impression given by the candidate in the first few moments. Studies have repeatedly demonstrated that such an impression is unrelated to the aptitude of the applicant.

The phenomenon known as the contrast effect also skews the judgement of interviewers. A suitable candidate may be underestimated because he or she contrasts with a previous one who appears exceptionally intelligent. Likewise, an average candidate who is preceded by one who gives a weak showing may be judged as more suitable than he or she really is.

Since interviews as a form of personnel selection have been shown to be inadequate, other selection procedures have been devised which more accurately predict candidate suitability. Of the various tests devised, the predictor which appears to do this most successfully is cognitive ability as measured by a variety of verbal and spatial tests. (300 words)

(b) A recent phenomenon in present-day science and technology is the increasing trend towards 'directed' or 'programmed' research, i.e., research whose scope and objectives are predetermined by private or government organizations rather than researchers themselves. Any scientist working for such organizations and investigating in a given field therefore tends to do so in accordance with a plan or programme designed beforehand.

At the beginning of the century, however, the situation was quite different. At that time there were no industrial research organizations in the modern sense—the laboratory unit consisted of a few scientists at the most, assisted by one or two technicians, often working with inadequate equipment in unsuitable rooms. Nevertheless, the scientist was free to choose any subject for investigation he/she liked, since there was no predetermined programme to which he/she had to confirm.

As the century developed, the increasing magnitude and complexity of the problems to be solved and the growing interconnection of different disciplines made it impossible, in many cases, for the individual scientist to deal with the huge mass of new data, techniques, and equipment that were required for carrying out research accurately and efficiently. The increasing scale and scope of the experiments needed to test new hypotheses and develop new techniques and industrial processes led to the setting up of research groups or teams using highly complicated equipment in elaborately designed laboratories. Owing to the large sums of money involved, it was then felt essential to direct these human and material resources into specific channels with clearly defined objectives. In this way it was considered that the quickest and most practical results could be obtained. This, then, was programmed research.

One of the effects of this organized and standardized investigation is to cause the scientist to become increasingly involved in applied research, especially in the branches of science which are likely to have industrial applications. Since private industry and even government departments tend to concentrate on immediate results and show comparatively little interest in long-range investigations, there is a steady shift of scientists from the pure to the applied field, where there are more jobs available, frequently more highly paid and with better technical facilities than jobs connected with pure research in a university.

Owing to the interdependence between pure and applied science, it is easy to see that this system, if extended too far, carries considerable dangers for the future of science—and not only pure science, but applied science as well. (419 words)

(c) Beyond all the hoopla involving fancy terms like 'embryonic stem cell research' and 'gutted egg reprogramming lay the nasty little fact that technology can xerox you. That is the nub of the whole hassle. Because who in his or her right mind is going to object to a sure-fire drug for diabetes? Come to think of it; nobody has any problem with a safe and permanent cure for cancer either. Also notwithstanding all the cacophony of national and international ethics committees around the world, mortality thumping and accusations of playing God, everybody in their heart of hearts knows that 50 or 75 years from now, cloning will be as common as warts.

The discord and friction is not whether the benefits of cloning outweigh the possible social consequences, or that its abuse can unleash powerful forces which can be exploited to produce horrendous results. It is not whether it will help to produce discoveries that would hugely affect the study of human genetics, development, and growth or it is an affront to religious sensibilities by interfering with the natural process. It is not the subconscious fear that men would no longer be needed for reproduction. What it is about is not being able to come to terms with an impending social upheaval, the likes of which human society has not seen in its entire ten-thousand-year-old history. In other words, 'What does your cloned child call you?'

By circa 2045 you could walk into the local clinic and get yourself cloned as easily as eating a pie. Nine something months later you get delivery of what? Your child, your brother/sister/yourself?

Strictly speaking though, one reason the child is your sibling is because it has the exact mix of your parent's genes as you have. That is because the process of cloning is fundamentally the same as what happens when a fertilized egg splits into two at a very early stage of development to produce identical twins sharing the same genetic blueprint. Usually there is always an age difference between twins that is measured in minutes: the only difference is, in your case it would be measured in decades.

Protests of losing diversity of genes and interfering with the course of Darwinian evolution are objections that will turn out to be peanuts compared to the magnitude of this interpersonal problem we will soon have to deal with. Of course we will resolve it, but the resolution will probably demand a jettisoning of a whole lot of received wisdom and will completely metamorphosize the way we live with ourselves and others. (440 words) (d) Sweet and cold, with a wonderful mouth feel,

ice cream is an American favourite, but far from the soft, icy product produced by hand-cranked freezers, today's commercial ice cream is a complex product designed and engineered for the best attributes.

'There are a variety of formulas which are used to derive recipes, says Dr Robert Robers, associate professor of food science and director of the Penn State Ice cream Short Course, the nation's oldest and best-known educational program on ice cream manufacturing.

Legally, ice cream must contain no less than 10 per cent milk fat, and no less than 20 per cent milk solids. In general, most ice creams contain 10 to 16 per cent fat and 9 to 12 per cent nonfat milk solids with 11 to 15 per cent sucrose or equivalent for sweetness. Then, of course, there are the flavourings and the emulsifiers and the most important and often a forgotten component, air. Choices within these ranges produce economy, premium, and super-premium ice cream.

'Many people think that the higher the quality of the ice cream, the higher the fat content since fat makes the ice cream feel unctuous and creamy, Roberts told attendees at the annual meeting of the American Association for the Advancement of Science in Boston, 'Fat is also a cold insulator and is involved in trapping air and perhaps most importantly, it tastes good, he notes. In essence, ice cream is frozen foam. During the freezing and shipping process, proteins in the ice cream mix encircle the air bubbles incorporated in the liquid and then the fat stabilizes the bubbles. 'Protein traps the air, but cannot hold it, much like skim milk foams', says Roberts. 'The fat in ice cream partially destabilizes and traps the air. In ice cream, in contrast to other products, emulsifiers are added to destabilize the fat, allowing partial agglomeration and air cell stabilization.' During ice cream mix manufacture, the ingredients are measured by weight, and then mixed, pasteurized, and homogenized.

'The pasteurization process is required by law to destroy any potential pathogens and make the product safe for consumption,' says Roberts. 'Homogenization, a high pressure process designed to reduce the size of the fat globules and increase whispability is very important. Without homogenization, the mix might over-destabilize during the freezing process leading to a defect known as buttery, which is definitely not what people want in ice cream.' The pasteurized, homogenized mix is cooled and allowed to age for at least four hours to create some fat crystals. Allowing time for the fat to assume the appropriate form is a critical step. 'The surface area of the fat in a quart of mix is equal to about 1,200 square yards', says the Penn State scientist.

After aging, the mix is ready to be frozen by commercial ice cream freezers, though much larger, operate on the same principle as handcrank machines. The outside wall of the freezer gets cold and a series of blades remove the ice crystals from the wall and move them towards the centre, also incorporating air. Roberts and others have looked at the speed at which the dasher moves to determine if an optimum setting exists.

Contrary to conventional understanding, about 50 per cent of the energy removed by the refrigeration process is due to the frictional heat created by the dasher scraping the freezer wall. While freezing under agitation, only about half of the water in the ice cream mix freezes, leaving the other half liguid. The proteins, salts, and sugars in the mix lower the freezing point enough to require further freezing. The hardening stage, when the rest of the mix solidifies, must be done rapidly to avoid the formation of large ice crystals. (620 words)