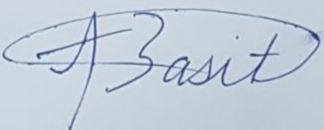Name: Abdul Basit Khan

ID: 14564

Subject: Technical Report Writing

Instructor: Madam Rizwana Iqbal

. Module: Final

Date : 29.6.2020.

Signature : Basit

Q:2

Research Problem

research problem is a statement about an area of concern, a condition to be improved, a difficulty to be eliminated, or a troubling question that exists in scholarly literature, in theory, or in practice that points to the need for meaningful understanding and deliberate investigation. In some social science disciplines the research problem is typically posed in the form of a question. A research problem **does not** state how to do something, offer a vague or broad proposition, or present a value question.

BASIC PARAMETERS OF A RESEARCH PROPOSAL

A proposal needs to show how your work fits into what is already known about the topic and what new paradigm will it add to the literature, while specifying the question that the research will answer, establishing its significance, and the implications of the answer.[2] The proposal must be capable of convincing the evaluation committee about the credibility, achievability, practicality and reproducibility (repeatability) of the research design.[3] Four categories of audience with different expectations may be present in the evaluation committees, namely academic colleagues, policy-makers, practitioners and lay audiences who evaluate the research proposal. Tips for preparation of a good research proposal include; 'be practical, be persuasive, make broader links, aim for crystal clarity and plan before you write'. A researcher must be balanced, with a realistic understanding of what can be achieved. Being persuasive implies that researcher must be able to convince other researchers, research funding agencies, educational institutions and supervisors that the research is worth getting approval. The aim of the researcher should be clearly stated in simple language that describes the research in a way that non-specialists can comprehend, without use of jargons. The proposal must not only demonstrate that it is based on an intelligent understanding of the existing literature but also show that the writer has thought about the time needed to conduct each stage of the research.[4,5]

CONTENTS OF A RESEARCH PROPOSAL

The contents or formats of a research proposal vary depending on the requirements of evaluation committee and are generally provided by the evaluation committee or the institution.

In general, a cover page should contain the (i) title of the proposal, (ii) name and affiliation of the researcher (principal investigator) and co-investigators, (iii) institutional affiliation (degree of the investigator and the name of institution where the study will be performed), details of contact such as phone numbers, E-mail id's and lines for signatures of investigators.

The main contents of the proposal may be presented under the following headings: (i) introduction, (ii) review of literature, (iii) aims and objectives, (iv) research design and methods, (v) ethical considerations, (vi) budget, (vii) appendices and (viii) citations.[4]

Introduction

It is also sometimes termed as 'need for study' or 'abstract'. Introduction is an initial pitch of an idea; it sets the scene and puts the research in context.[6] The introduction should be designed to create interest in the reader about the topic and proposal. It should convey to the reader, what you want to do, what necessitates the study and your passion for the topic.[7] Some questions that can be used to assess the significance of the study are: (i) Who has an interest in the domain of inquiry? (ii) What do we already know about the topic? (iii) What has not been answered adequately in previous research and practice? (iv) How will this research add to knowledge, practice and policy in this area? Some of the evaluation committees, expect the last two questions, elaborated under a separate heading of 'background and significance'.[8] Introduction should also contain the hypothesis behind the research design. If hypothesis cannot be constructed, the line of inquiry to be used in the research must be indicated.

Q:4

REPORT

A **report** is a document that presents information in an organized format for a specific audience and purpose. Although summaries of reports may be delivered orally, complete reports are almost always in the form of written documents.

Introduction

All your facts and information presented in the report not only have to be bias-free, but they also have to be 100% correct. Proof-reading and fact-checking is always what you do as a thumb rule before submitting a report.

Reports are written with much analysis. The purpose of report writing is essential to inform the reader about a topic, minus one's opinion on the topic. It's simply a portrayal of facts, as it is. Even if one gives inferences, solid analysis, charts, tables and data is provided. Mostly it is specified by the person who's asked for the report whether they would like your take or not if that is the case.

In many cases, what's required is your suggestions for a specific case after a factual report. That depends on why are you writing the report and who you are writing it for in the first place. Knowing your audience's motive for asking for that report is very important as it sets the course of the facts focused on your report.

Types

Long Report and Short Reports:

These kinds of reports are quite clear, as the name suggests. A two-page report or sometimes referred to as a memorandum is short, and a thirty-page report is absolutely long. But what makes a clear division of short reports or long reports? Well, usually, notice that longer reports are generally written in a formal manner.

Internal and External Reports:

As the name suggests, an internal report stays within a certain organization or group of people. In the case of office settings, internal reports are for within the organizations.

We prepare external reports, such as a news report in the newspaper about an incident or the annual reports of companies for distribution outside the organization. We call these as public reports.

Vertical and Lateral Reports:

This is about the hierarchy of the reports' ultimate target. If the report is for your management or for your mentees, it's a vertical report. Wherever a direction of upwards or downwards comes into motion, we call it a vertical report.

Lateral reports, on the other hand, assist in coordination in the organization. A report traveling between units of the same organization level (for example, a report among the administration and finance departments) is lateral.

Periodic Reports:

Periodic reports are sent out on regularly pre-scheduled dates. In most cases, their direction is upward and serves as management control. Some, like annual reports, is not vertical but is a Government mandate to be periodic in nature.

That is why we have annual or quarterly or half-yearly reports. If they are this frequent, it only makes sense to pre-set the structure of these reports and just fill in the data every period. That's exactly what happens in most cases too.

Furthermore,

Formal and Informal Reports:

Formal reports are meticulously structured. They focus on objectivity and organization, contain deeper detail, and the writer must write them in a style that eliminates factors like personal pronouns.

Informal reports are usually short messages with free-flowing, casual use of language. We generally describe the internal report/memorandum as an informal report. For example, a report among your peers, or a report for your small group or team, etc.

Informational and Analytical Reports:

Informational reports (attendance reports, annual budget reports, monthly financial reports, and such) carry objective information from one area of an organization to maybe a larger system.

Analytical reports (scientific research, feasibility reports, and employee appraisals) show attempts to solve actual problems. These analytical reports usually require suggestions at the end.

Proposal Reports:

These kinds of reports are like an extension to the analytical/problem-solving reports. A proposal is a document one prepares to describe how one organization can provide a solution to a problem they are facing.

There's usually always a need to prepare a report in a business set-up. The end goal is usually very solution-oriented. We call such kinds of reports as proposal reports.

Functional Reports:

These kinds of reports include marketing reports, financial reports, accounting reports, and a spectrum of other reports that provide a function specifically. By and large, we can include almost all reports in most of these categories. Furthermore, we can include a single report in several kinds of reports.

Now, as we have progressed from knowing what report writing is and then the kinds of reports. So, let's see step-by-step how one actually writes a report

Formal Report

A **formal report** is an official report that contains detailed information, research, and data necessary to make business decisions. This report is generally written for the purpose of solving a problem.

Some examples of formal reports include:

- Inspection Report
- Safety Report
- Compliance Report
- Audit
- Incident Report
- Annual Report
- Situational Report

There are two categories of formal reports: informational and analytical reports. The **informational report** gathers data and facts used to draw conclusions. The **analytical report** contains the same information as the informational report, but it also offers recommendations to solve a problem.

Now let's take a look at the format and parts of a formal report. Think of the formal report as divided into three sections: front section, main section, and back section.

Front Section of a Formal Report

The front section contains the title page, transmittal letter, and the table of contents. The title page should contain:

1. Company name
2. Name and title of the party for whom the report was prepared

3. Name and title of the preparer
4. Date

The **transmittal letter** is a letter informing the recipient that a report has been included in the packet. It may also state the purpose of the report. The letter also identifies any other documents that may be included.

The last part of the front section is the table of contents so that the reader can locate information by page number.

Main Section of a Formal Report

The main section contains an executive summary, introduction to the problem, analysis of findings, and conclusions and/or recommendations:

The **executive summary** is a summary of the formal report. It should contain the basic facts without being too wordy. Think of it as a condensed version of the entire report.

The **introduction statement** states the purpose of the report, identifies the problem, its scope, and the method the writer plans to employ to solve the problem. The method may be to provide conclusions only as with an informational report, or it may be to provide conclusions and recommendations as with an analytical report.

An **analysis of findings** is probably the longest section. This section will reveal what facts you discovered and the details of the investigation. When drafting this section, remember to present information in the easiest and clearest way that points your reader to your conclusions or recommendations.

At the end of the main section, you will include a conclusions section in an informational report or a conclusions and recommendations section in an analytical report.

Conclusions are findings based on your research data, such as emerging trends or patterns.

 Recommendations are directives or advice based on the research and conclusions. Remember, only an analytical report contains this section.

Reference

The list of reference is a accurate list in strict alphabetical order ,of all the source referred to.

Appendix

Appendix contain important data , explanatory and illustrative information that is not in the text

.

Table and Figures

Tables ,graphics , photos should be sequentially numbered

The source of table or figure should also be included. The source is usually in smaller font and aligned to the left hand margin under the title of the figure.

Q:5

Ans:It is illegal to reproduce someone else expression of ideas or information without permission is term as plagiarism.

Plagiarism

- turning in someone else's work as your own
- copying words or ideas from someone else without giving credit
- failing to put a quotation in quotation marks
- giving incorrect information about the source of a quotation
- changing words but copying the sentence structure of a source without giving credit
- copying so many words or ideas from a source that it makes up the majority of your work, whether you give credit or not .

Prevention of Plagiarism

To have something that you worked on lifted and reused under someone else's name and without attribution can feel like a robbery and like a form of identity theft.

However, protecting your work from plagiarism is a major challenge. Computers and the internet were basically made for copying and that means anyone who has access to your work can copy it and, if they wish, plagiarize it.

That's why, when it comes to preventing plagiarism, the first step is often restricting access to it.

Don't post a work online unless you have a reason to do so and don't share your work outside of those you trust. This includes not running your writing through an untrusted plagiarism detection service as some of those actually funnel scanned essays into essay mill websites for the express purpose of letting others plagiarize them.

However, restricting access to your writing is not always practical. Sometimes you want or need to reach a larger audience and that means posting the work publicly. To that end, the best thing you can do is make your writing as personal to you as possible. Tell

stories and include information that only you or those close to you would know. Make it difficult or even impossible for a stranger to claim the work as theirs.

This may or may not deter the plagiarism, but certainly provides verification that the work is yours and will likely raise eyebrows if anyone does try to claim it as theirs.

It's also wise to include a copy right notice. Though such a notice is not legally required, it prevents any confusion about who owns the work and whether or not it is protected. Another possibility is to provide guidance to others at the end of your work on how they can cite it properly.

Beyond that, you can and should attempt to track how your work is used online. This can be done easily using a search engine by taking a passage from your writing and searching for it in quotes. If you choose a sufficiently unique passage, any hits returned should be copies of your paper.

If you wish to automate this, you can use google alert to send you an email when new instances of the phrase appear online.

If and when you detect plagiarism, it's important to keep a cool head and remember that, as the author, you are the copyright holder and you have rights in the work.

How you respond will depend heavily on how the work was used. If it was used in a classroom or a professional publication, you'll likely want to reach out to either the instructor or the editor and let them know about your findings.

If the work appears elsewhere online, the stopping internet plagiarism can help you either contact the plagiarist directly or reach out to their host to get the offending work removed.

Beyond that, any further action would require consultation with a lawyer to see what additional legal remedies might be available.

In the end, it is very possible to protect your work and both minimize and respond to any plagiarism that you find. The key is to think about the issues before publishing your work and have a plan in place from the outset rather than dealing with it after something has already happened.
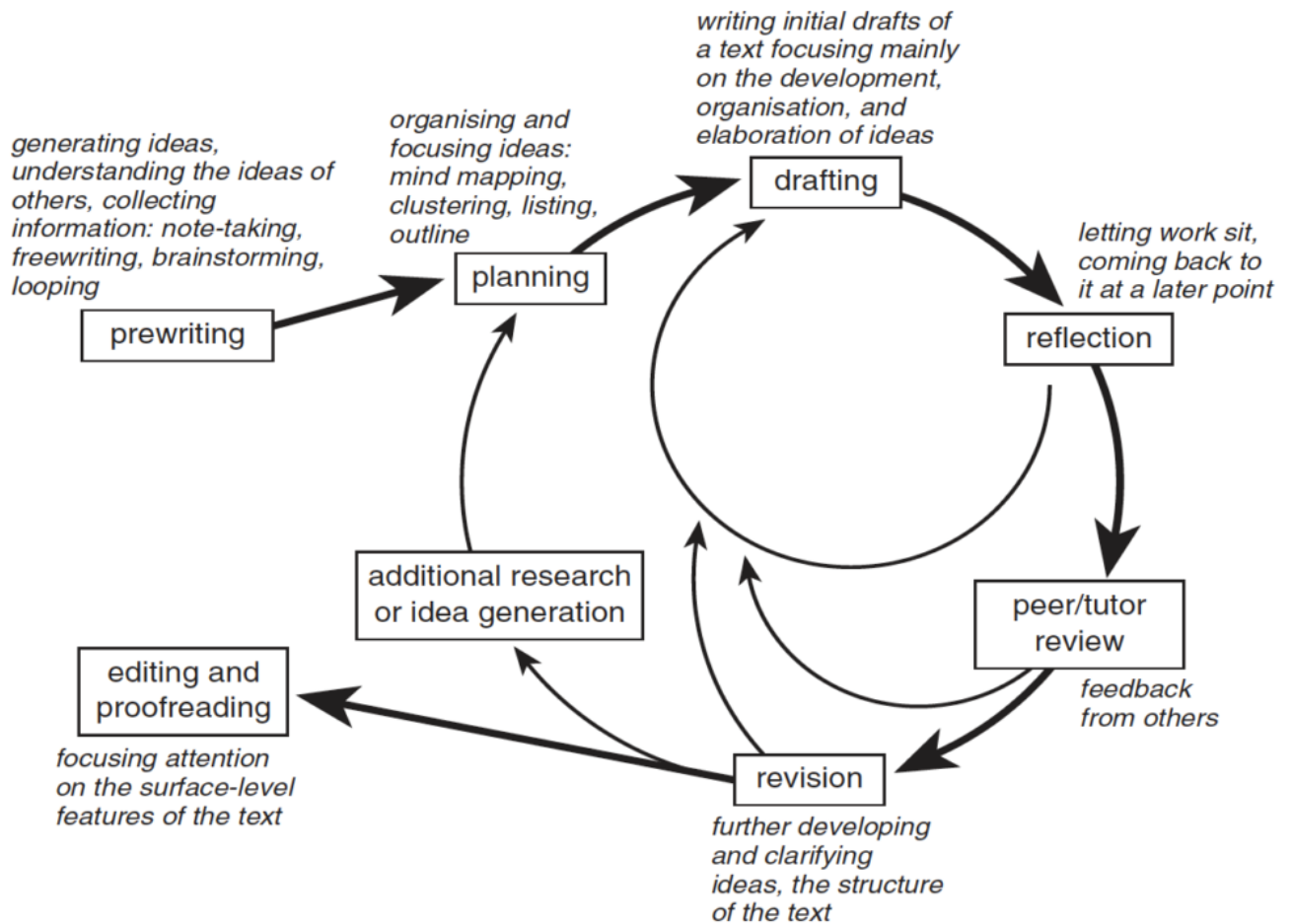
Q:1

writing processes to create complex documents. In both cases, there are steps or stages, but we don't always proceed directly from one step to next in a chronological manner. These processes are often iterative, meaning we might return to previous stages in the process from time to time. The more complex the task, the more iteration might be needed. Examine the Design Process)

and Writing Process diagrams below. What similarities and differences can you see in these two processes?

Define the Problem
needs assessment
problem statement
design criteria & goals
background research

Generate Possible Solutions
brainstorming - idea trigger method
thumbnail sketching
creative thinking

Evaluate Possible Solutions
do ideas meet design criteria?
list advantages / disadvantages
select best design alternatives
use decision matrix to evaluate

Make and Test a Model
detailed technical drawings
prototype or scale model
mathematical and computer models
performance and user tests

Modify and Improve Design
fix problems
improve design
do more testing if needed
worst case - scrap design

Communicate Final Design
final technical drawings
technical manuals for assembly,
operation, and maintenance

1 Design Process. [1] [Image description]

generating ideas, understanding the ideas of others, collecting information: note-taking, freewriting, brainstorming, looping

prewriting

organising and focusing ideas: mind mapping, clustering, listing, outline

planning

writing initial drafts of a text focusing mainly on the development, organisation, and elaboration of ideas

drafting

letting work sit, coming back to it at a later point

reflection

peer/tutor review

feedback from others

additional research or idea generation

editing and proofreading

focusing attention on the surface-level features of the text

revision

further developing and clarifying ideas, the structure of the text

Writing Process Diagram. [2] [Image description]

You may have come across a "writing process" before, and it may or may not have worked well for you. There is no single process that works for everyone in every situation. The key is to recognize the various steps in a typical writing process and figure out how to use or adapt them most effectively for your situation.

For example, you may have come across the 40-20-40 writing process, which suggests that you should break up the amount of time you spend on the writing task into three distinct stages of planning, drafting and revising, and give each one a specific percentage of the time you have available.

40-20-40 Writing Process

Stage 1 – Planning: spend 40% of your time planning your document (task analysis, thinking, discussing, free-writing, researching, brainstorming, concept mapping, focusing ideas, outlining, *etc.*)

Stage 2 – Drafting: spend 20% of your time writing a rough draft (quickly getting all your ideas down in print, in more or less complete sentences and paragraphs, in more or less the right order, without agonizing over style or grammar choices)

Stage 3 – Revising: spend 40% of your time revising, editing, and proofreading (polishing your draft, making sure the content is complete and well supported, ideas flow logically, formatting meets expectations, expression is grammatically correct and has the appropriate tone and vocabulary).

These percentages are a helpful guideline, as they emphasize the need to allot significant time for revision, but don't always work for all people in all situations (think of a final exam situation!). It also does not clearly account for the need to iterate; sometimes while revising your draft (stage 3), you may have to go back to the planning stage (stage 1) to do additional research, adjust your focus, or reorganize ideas to create a more logical flow. Writing, like any kind of design work, demands an organic and dynamic process.

As with the design process, the writing process must begin with an understanding of the problem you are trying to solve. In an educational context, this means understanding the assignment you've been given, the specifications of that assignment, the objectives you are meant to achieve, and the constraints you must work within (due dates, word limits, research requirements, *etc*.). This is often referred to as "Task Analysis." In professional contexts, you must also consider who your intended reader(s) will be, why they will be reading this document, and what their needs are, as well as deadlines and documentation requirements.

Writing Instructions

One of the most common and important uses of technical writing is to provide instructions, those step-by-step explanations of how to assemble, operate, repair, or do routine maintenance on something. Although they may seems intuitive and simple to write, instructions are some of the worst-written documents you can find. Most of us have probably had many infuriating experiences with badly written instructions. This chapter will show you what professionals consider the best techniques in providing instructions.

An effective set of instruction requires the following:

- Clear, precise, and simple writing
- A thorough understanding of the procedure in all its technical detail
- The ability to put yourself in the place of the reader, the person trying to use your instructions
- The ability to visualize the procedure in detail and to capture that awareness on paper
- Willingness to test your instructions on the kind of person you wrote them for.

Preliminary Steps

At the beginning of a project to write a set of instructions, it is important to determine the structure or characteristics of the particular procedure you are going to write about. Here are some steps to follow:

1. Do a careful audience and task analysis

Early in the process, define the audience and situation of your instructions. Remember that defining an audience means defining the level of familiarity your readers have with the topic.

2. Determine the number of tasks

How many tasks are there in the procedure you are writing about? Let's use the term *procedure* to refer to the whole set of activities your instructions are intended to discuss. A *task* is a semi-independent group of actions within the procedure: for example, setting the clock on a microwave oven is one task in the big overall procedure of operating a microwave oven.

A simple procedure like changing the oil in a car contains only one task; there are no semi-independent groupings of activities. A more complex procedure like using a microwave oven contains several semi-independent tasks: setting the clock; setting the power level; using the timer; cleaning and maintaining the microwave, among others.

Some instructions have only a single task, but have many steps within that single task. For example, imagine a set of instructions for assembling a kids' swing set. In my own experience, there were more than a 130 steps! That can be a bit daunting. A good approach is to group similar and related steps into phases, and start renumbering the steps at each new phase. A *phase* then is a group of similar steps within a single-task procedure. In the swing-set example, setting up the frame would be a phase; anchoring the thing in the ground would be another; assembling the box swing would be still another.

3. Determine the best approach to the step-by-step discussion

For most instructions, you can focus on tasks, or you can focus on tools (or features of tools). In a *task approach* (also known as task orientation) to instructions on using a phone-answering service, you'd have these sections:

- Recording your greeting
- Playing back your messages
- Saving your messages
- Forwarding your messages

- Deleting your messages, and so on

These are tasks—the typical things we'd want to do with the machine.

On the other hand, in a *tools approach* to instructions on using a photocopier, there likely would be sections on how to use specific features:

- Copy button
- Cancel button
- Enlarge/reduce button
- Collate/staple button
- Copy-size button, and so on

If you designed a set of instructions on this plan, you'd write steps for using each button or feature of the photocopier. Instructions using this tools approach are hard to make work. Sometimes, the name of the button doesn't quite match the task it is associated with; sometimes you have to use more than just the one button to accomplish the task. Still, there can be times when the tools/feature approach may be preferable.

4. Design groupings of tasks

Listing tasks may not be all that you need to do. There may be so many tasks that you must group them so that readers can find individual ones more easily. For example, the following are common task groupings in instructions:

1. Unpacking and setup tasks
2. Installing and customizing tasks
3. Basic operating tasks
4. Routine maintenance tasks
5. Troubleshooting tasks.

Writing Style

Placing the key user steps in **bold** can a very helpful way to signal clearly what the reader needs to do. Often the command verb is bolded; sometimes bold font highlights the key component being discussed.

Use of the **passive voice** in instructions can be problematic. For some strange reason, some instructions sound like this: "The **Pause** button should be depressed in order to stop the display temporarily." Not only are we worried about the pause button's mental health, but we wonder who's supposed to depress the thing (*ninjas*?). It would be more helpful to indicate when the

reader must "**press** the Pause button."   Consider this example: "The Timer button is then set to 3:00." Again, one might ask, "is set by whom? *Ninjas*?" The person following these instructions might think it is simply a reference to some existing state, or she might wonder, "Are they talking to me?" Using the third person can also lead to awkwardness: "The user should then press the Pause button." Instructions should typically be written using command verb forms and using "you" to make it perfectly clear what the reader should do.

Question :3

Executive Summary

The purpose of the Executive Summary is to provide a very brief overview of the most essential and decision-relevant information concerning the project.

Suggested Content

- Clearly state the problem/opportunity being assessed
- Identify any special issues or impacts that may need to be brought to the attention of the approving authority or stakeholders
- List the options that are recommended for further analysis during the analysis phase

2. Problem Statement

Briefly identify the main problem, opportunity, or key issue that the proposed project is seeking to address. The problem or opportunity statement should be taken from the Statement of Requirement document.

3. Project Business Requirement

This section provides pertinent details regarding the context for undertaking the proposed project. This information should be based on the Problem Definition Section of the Statement of Requirement document.

This is the section where information relevant to the initial analysis can be noted, such as the findings of an environmental scan (whether pertaining to technology or to what other organizations have done to support a similar business problem or opportunity), key parameters/constraints from relevant policy and legislation, key references to the conceptual version of the Architecture Solution document, and key points arising from the initial Concept of Operations document.

4. Assessment of Options

The purpose of this section is to list the possible options for satisfying the client requirements and to document the results of the feasibility assessment of each of the options. This may be done in a table format. Documentation will include the rationale to support viable options and to reject non-viable options. Project constraints and limitations of expenditure are among the various factors that will determine viability.

In table format, such as the **sample** table below, assess each option against common high-level criteria. There should be one table for each option.

Feasibility Report for a Youtube

Summary

This report is all about how a web-page is better than a youtube or a facebook page and why are we preferring a pre-paid project over a free project(youtube and facebook doesn't cost you to build your personal page or channel instead they charge their advertisers and even pay you if you've sufficient subscribers)

The possibilities:

The above project is very simple and easy to made.

1. we'll hire a freelancer who will make us a tweb-page in no time and easily.
2. Also there are a whole lot of websites through which we can build our web-page with their guidance.

We can contact a software company and they'll do it for us.

3. It can be perfectly done under our project budget.
4. This project will be completed in the allocated time.
5. It is totally legal to create a web-page through the above mentioned sources.

Financial Viability:

1. The above project should be done because it'll fulfill all our needs.
2. it'll have long terms benefits that'll outweigh the costs because it is a life time project.
3. This project is very affordable and it'll provide us the expected result.
4. This is the need of our company and we must do it.