



The Technical Writing Process

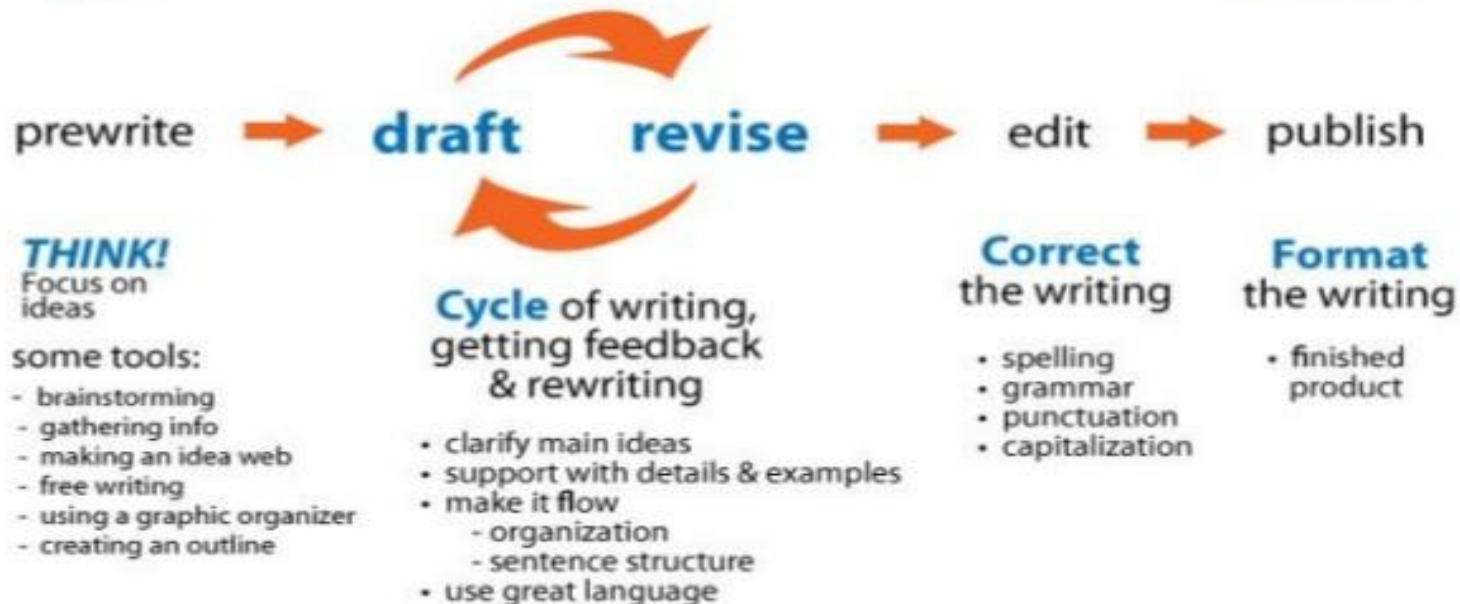
RECALL!

the writing process



Overarching Questions:

Why am I writing this? (What's your **purpose**?)
For whom am I writing this? (Who is your **audience**?)



Technical Writing Process



“It’s a reconstruction of an investigation.”

The Technical Writing Process



TWP- Pre-Writing

1. Get to know the purpose

2. Get to know the audience

3. Get to know the context/situation of communication

4. Get to know the required document type
(**FORMAT**, sections, layout)

Analyzing the purpose



Analyzing Audience

1. Executives

(Decision makers,
directors, field
experts)

2. Technologists, engineers and scientists

3. Technicians

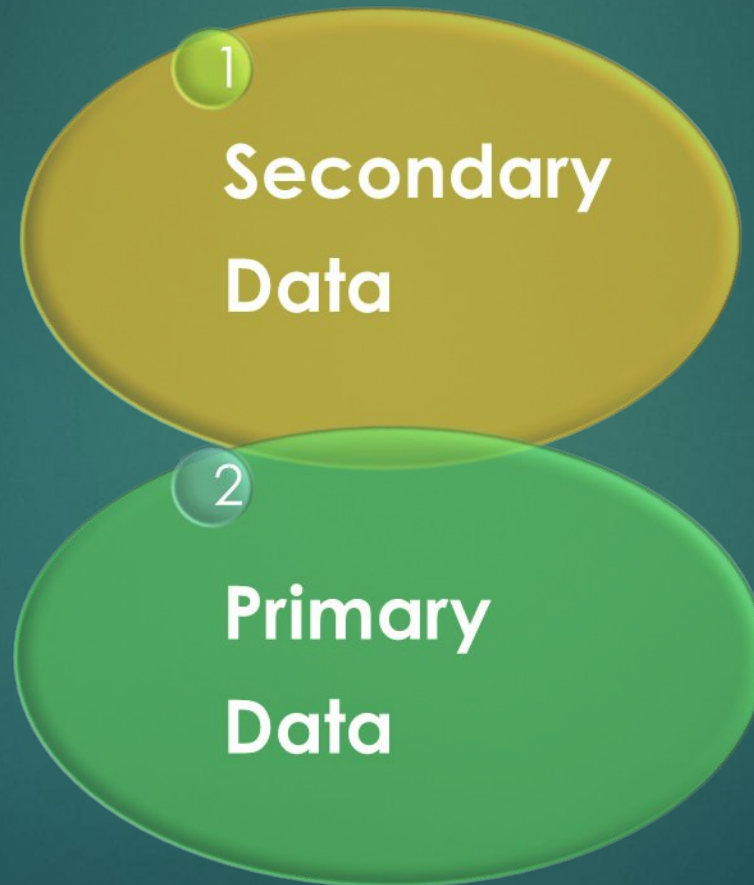
4. Operators

5. Non-technical persons

TWP- Investigation



TWP- Investigation-Determine the type of data you need



TWP- Investigation-Secondary Sources

- ▶ Technical reports
(industrial/corporate/available in
company records)
- ▶ Research papers/articles (academic)
- ▶ Governmental reports and documents
- ▶ Newspaper
- ▶ Leading business/tech magazines
- ▶ Recognized business/tech
blogs/podcasts/wikis

TWP-

Investigation-Secondary Sources

- ▶ Technical books
- ▶ Almanacs and statistical resources
- ▶ Interviews on TV, radio, etc
- ▶ Electronic databases
- ▶ Online databases
- ▶ Company websites

TWP- Investigation-Recognized Research Journal Publishers



- ▶ IEEE
- ▶ ACM
- ▶ Sage
- ▶ Emerald
- ▶ Taylor and Francis
- ▶ Wiley
- ▶ Elsevier
- ▶ Routledge
- ▶ Springer

TWP- Investigation-NOTE

- ▶ **Document your sources.**

TWP- Investigation-Primary Data collection methods

Questionnaire

Interviews

Observations

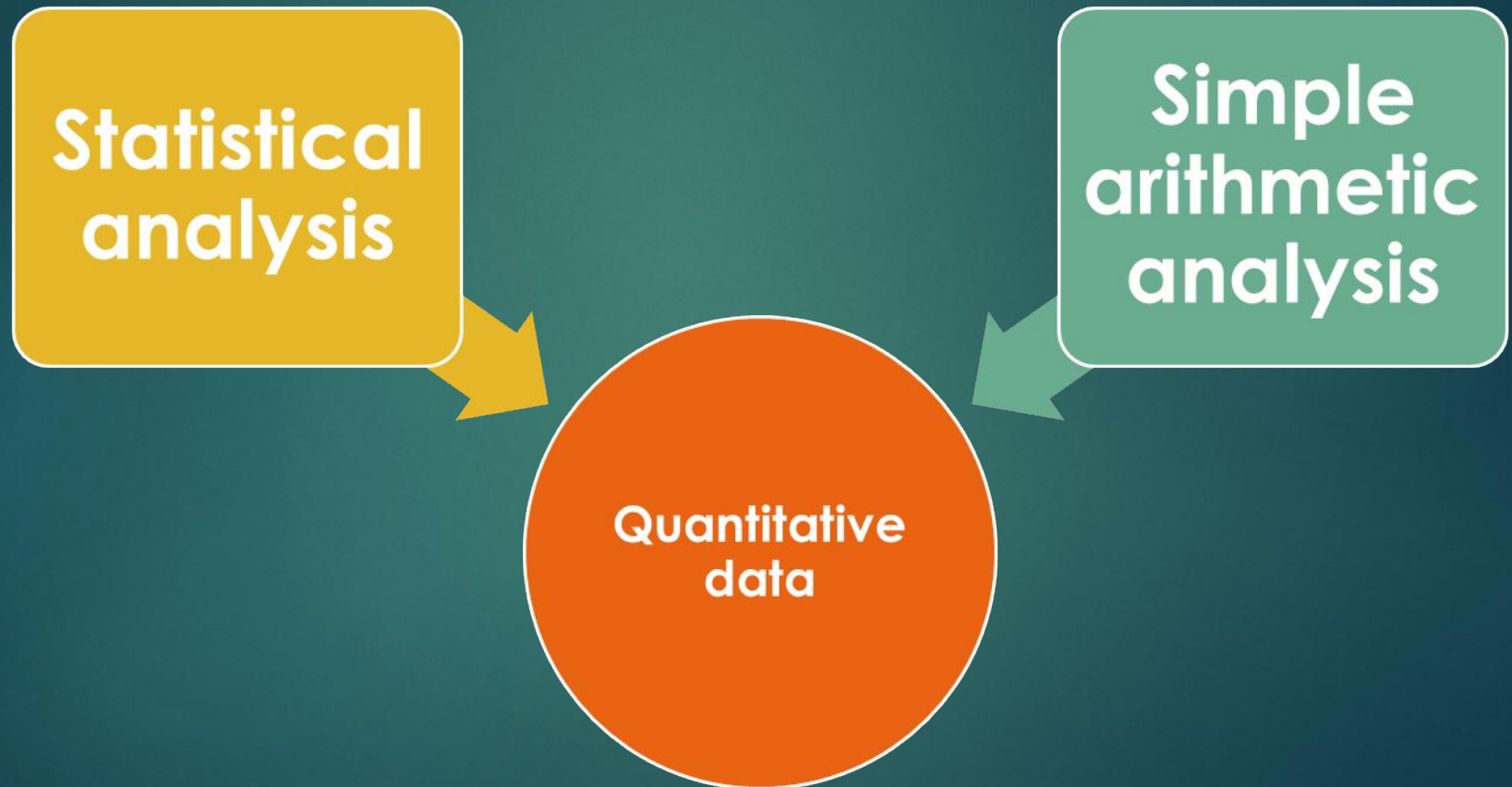
Experiments

TWP-

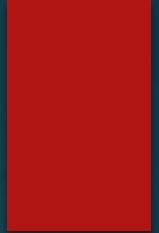
Investigation-Sampling

- ▶ For primary data, choose research participants carefully.
- ▶ Your questionnaire must measure what it is intended to measure.
- ▶ Define your target population.
- ▶ Draw a representative sample out of it if it is too large.
- ▶ There can be two sampling methods

TWP- Investigation-Data analysis



TWP- Investigation-Data Analysis



- ▶ Data have to be processed.
- ▶ Analyze data and extract relevant information and find answers to the research questions.
- ▶ Separate main ideas from supporting evidences and details.
- ▶ Assign headings to related information.
- ▶ Be objective and unbiased.

TWP- Investigation-Data Analysis-Secondary data

You can use information from secondary sources in three ways:

1. Quote a source (use quotation marks/indented paragraphs for longer passages)
2. Paraphrase the material and mention the source
3. Summarize-present the gist of the material in your own words (give main ideas leaving out supporting information)

TWP-

Investigation-Statistical analysis

- ▶ Use statistical software
- ▶ Simple arithmetic analysis can also be done, like, mean, median, mode, percentages, frequency
- ▶ Analyze the data to spot trends-any repeatable patterns taking place over time, including growth, decline, and cyclic trends
- ▶ Analyze causation (cause and effect relationship between 2 factors/variables)
- ▶ Correlation (simultaneous change in 2 variables that you are measuring such as customer satisfaction drops when product reliability drops)

TWP- The Road Map



- ▶ Arrange key facts and citations from the literature into a crude road map/outline BEFORE writing the first draft.
- ▶ Think in paragraphs and sections.

TWP- The Road Map



Write on the go!

- ▶ Work with take-home messages
- ▶ Organize your paper
- ▶ Visual aids for the collected data is suggested.

TWP- The Road Map-Compositional Organization

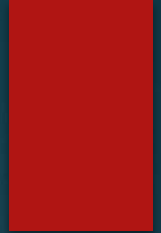
- ▶ Similar ideas and paragraph should be grouped.

TWP-Drafting



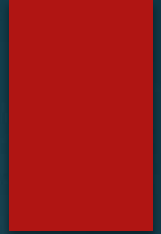
- ▶ Don't be a perfectionist!
- ▶ The goal of the first draft is to get the ideas in complete sentences in an/a order/sequence.
- ▶ Writing the first draft is the hardest step for most people. Minimize the pain by writing the first draft quickly and efficiently!

TWP-Revision & Editing



- ▶ Read your writing out loud
 - ▶ The brain processes the spoken word differently than the written word!
- ▶ Edit for Style (SCOPE)
- ▶ Do an organizational review
 1. In the margins of your paper, tag each paragraph with a phrase or sentence that sums up the main point.
 2. Then move paragraphs around to improve logical flow and bring similar ideas together.

TWP-Revision & Editing



- ▶ Get outside feedback
 - ▶ Ask someone outside your department to read your manuscript.
 - ▶ Without any technical background, they should easily grasp:
 - ▶ the main findings
 - ▶ take-home messages
 - ▶ significance of your work
 - ▶ Ask them to point out particularly hard-to-read sentences and paragraphs!