

Guidelines on writing thesis

for the BSc Business Analytics Thesis

This document contains information regarding the academic writing of the BSc Business Analytics thesis (which is one of the three deliverables for the BSc Business Analytics thesis course).

If there are any further questions, remarks or suggestions feel free to contact dr. Inez Zwetsloot (data challenge/thesis coordinator) at i.m.zwetsloot@uva.nl.

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General background thesis

One of the characteristics of doing business analytics projects and thesis is that you take responsibility for the project yourselves. You need to be able to work independently as a group and as an individual.

Deliverables

The students are expected to **execute a business analytics project from start to finish**. Projects are typically executed by groups of students. Each student is expected to individually take up a subgoal in the project. Generally the students are expected to deliver:

- A **prototype product**/solution/system (eg dashboard, code, app) plus documentation
- The results of the project will be recorded in an **individually written thesis**
- **Final presentations slides** showcasing results of the project

Formatting guidelines

- Usually between 6,000 - 8,000 words (excluding references and appendices)
- APA style referencing (unless your supervisor prefers otherwise).
- An possible outline for a thesis is given in the section “outline thesis” below.
- You may use Latex or Word or any other text editor (unless your supervisor has a preference).

Writing style guidelines

- Use passive voice in academic writing (unless your supervisor prefers otherwise)
- Use low/medium certainty wording: might/could/will/should
- Use consistent formatting style for tables, graphs, in-text, and reference lists (ask your supervisor for his/her preference regarding formatting)
- Maintain a high standard of English language, spelling, and grammar
- Use of past vs present tense should typically follow the table below.

Paper section	Recommended tense	Example
Literature review (and discussion other researchers work)	Past	Yang et al. (2023) reviewed the literature
	Present perfect	Researchers have studied
Method	Past	Data was collected
	Present perfect	Koolhof et al. (2021) amongst others have used similar approaches
Reporting on your own or other researchers results	Past	Results showed Performance increased as
Personal reactions	Past	I felt surprised by this result but upon closer analysis...
	Present	I believe (individual believe) We believe that (team believe)
Conclusions, discussion and limitations	Present	The findings mean that
		A limitation of the study is
		I conclude

Table 1: Tense as recommended per paper section. Modified from <https://apastyle.apa.org/style-grammar-guidelines/grammar/verb-tense>

Writing tips

- **Just start**
The trick about writing is to get a first draft. *Don't wait until the project is completed to begin writing. Start NOW!* Writing is a way of thinking. By writing you refine your research. Every time you work on your project make notes, write a paragraph, summarize your findings in one document (which will later be your thesis document).
- **Foreground the research**
When writing in APA Style, you can use the first person point of view when discussing your research steps ("I studied ...") and when referring to yourself and your co-authors ("We examined the literature ..."). In general, you should foreground the research and not the researchers ("The results indicate ..."). Avoid using the editorial "we"; if you use "we" in your writing, be sure that "we" refers to you and your fellow researchers.
- **Be concise**
"The goal of concise writing is to use the most effective words. Concise writing does not always have the fewest words, but it always uses the strongest ones. Writers often fill sentences with weak or unnecessary words that can be deleted or replaced. Words and phrases should be deliberately chosen for the work they are doing. Like bad employees, words that don't accomplish enough should be fired. When only the most effective words remain, writing will be far more concise and readable." (Purdue University, n.d.)
- **Rewrite, rewrite and rewrite again**
"The Essence of writing is rewriting...professional writers rewrite their sentences over and over and then rewrite what they have rewritten." Zinsser (2006).

- **Learn from and imitate what is good**

Look for examples in the papers you have read. Identify good papers and use these as examples on how to write, how to structure and what to discuss. Stand on the shoulders of giants

Outline of thesis

The following can be used as a guideline for the thesis writing. Note that this is an example and that depending on the project chapters and structure of the thesis may differ.

Component	Content	Tips/remarks
Title page	Project title, Author name and student ID, University of Amsterdam name and logo Program (BSc Business Analytics), UvA supervisor, Company and company contact person (if applicable), Date	
Abstract	Short and concise overview of the whole project. All elements of your paper should be reflected in the abstract: introduction, methodology, results, conclusion and discussion.	Important to attract readers interest About 150 - 200 words (max 250)
Table of content	Chapter/section/sub-section/heading, list of references, appendices, list of tables and figures	
Introduction	Discuss research goal and its scientific and/or practical relevancy Describe in general terms background/method/topic Discuss position in literature Short overview of sections still to come	Who cares about this research? You place summarize existing knowledge/ literature and what the open question is that your work will study. This is essentially a 1 or 2 paragraph summary of your literature section.
Literature review	Overview of relevant theories related to and grounding the RQ. With eventually a theoretical or conceptual framework to structure the answer to the RQ	Typically 5 – 15 papers directly related to the project are included.
Case background	Describe company and case background Describe data	This section can also be part of Method section.
Method / case report	Describe the project work step-by-step	If applicable this section will follow a framework such as CRISP-DM
Results	Describe the project results	Non significant results are also results. Learning about what does not work is also important to report.
Product description	A concise description of the project deliverable and how it can be used/implemented.	May also be included in results section
Conclusion/ discussion	Summarize your findings/lessons learned Relate findings to literature Generalize lessons learned	

	Conclude by answering your research question.	
Limitations and future research	Summarize most important limitations Give solutions to limitations and relate these to future research opportunities	No study is perfect, be upfront about the limitations of our study, but don't shoot yourself in your foot.
Practical implications	How does the field move forward with the gained insights?	Ask yourself questions like: What decision making should be adjusted? How can the results be implemented?
Acknowledgement		
References	List of reference according to APA style (or another style as agreed with supervisor)	
Appendices		

Plagiarism

The UvA has strict rules regarding plagiarism. **Plagiarism = fraud = fail.**

- The main idea is that you should not claim words and ideas of others as your own. You should give credit where credit is due.
- Quotation marks should be used to indicate the exact words of another. Each time you paraphrase another author you need to credit the source in the text.
- Using an idea of somebody else? Credit the researcher(s) in the text through a reference!

Direct quotations: if you directly use someone else's words you put quotation marks around the text and add the reference.

Paraphrasing material: this will be a substantial part of your thesis (especially literature review and methodology). All paraphrased material should include a source. It should be clear where you got it from.

What NOT to do? Copy sentences into your document with the idea of rewriting them later on.

The correct approach: Summarize the part of a paper that is relevant for your research in your own words. Use these short summaries to write your own 'story' immediately add the reference to the source to text and your reference list.

For details see "Rules and Guidelines of the Examination Board" of the Faculty of Economics and Business, University of Amsterdam (also posted on Canvas).

Generative AI

Rules and Guidelines of the Examination Board" of the Faculty of Economics and Business, University of Amsterdam (also posted on Canvas), state in article 9.5 that

"Furthermore, 'plagiarism' is taken to include in any event: f) the use, including in rewritten form, of texts generated by artificial intelligence (AI, such as ChatGPT) unless the use is explicitly permitted in the study guide and is necessary to achieve the learning objectives of the course. This entry requires permission from the examiner and the Examination Board. "

Use (generative) AI for

- brainstorming
- helping with APA referencing styles
- suggestion how to structure texts
- ideas about methodology
- literature suggestions
- spelling and grammar checks

Do NOT use generative AI for

- writing and rewriting your texts
- creating and refining your idea's
- And always beware with confidential information: NEVER 'tell' ChatGPT anything confidential.

Useful resources**General Thesis guidelines of the UvA**

- <https://student.uva.nl/en/topics/thesis-and-graduation-project>

For managing references in Latex

- https://www.overleaf.com/learn/how-to/Using_bibliographies_on_Overleaf
- https://www.overleaf.com/learn/latex/Bibliography_management_with_natbib

For managing references in Word

- <https://support.microsoft.com/en-us/office/add-citations-in-a-word-document-ab9322bb-a8d3-47f4-80c8-63c06779f127>

References

Purdue University. (n.d.). Concision. Purdue Online Writing Lab. Retrieved April 11, 2024, from https://owl.purdue.edu/owl/general_writing/academic_writing/conciseness/index.html

Zinsser, W. (2006). On writing well: The classic guide to writing nonfiction (30th anniversary ed.). Harper Perennial.