

Guideline for Scientific Writing

released by the

Chair of Innovation Management

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for

Bachelor and Master Theses

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This document has been composed to provide basic guidelines for students intending to write a bachelor or master thesis at the Chair of Innovation Management. Moreover, it contains several templates that students may use for their cover page and/or declarations.

For reasons of clarity, a citation within the text has been omitted. A list of all used sources may be found in the last chapter.

Note: Students are encouraged to clarify with their supervisor in advance, whether these outlined specifications apply to their thesis or if adherence to other format and citation rules is requested.

1. Structure of the thesis

A thesis consists of the following parts and adheres to the following order:

- Cover page (refer to sections 10)
- Abstract
- Table of contents indicating page numbers
- List of figures (+)
- List of tables (+)
- List of abbreviations (+)
- List of symbols (+)
- Text content (Introduction, main part and conclusion)
- List of references
- Attachments (+)
- Samples of any survey and/or observation documents used (+)
- List/Transcript of interview sources (+)
- Signed declaration of authorship (for the digital version as scan in the language of the respective thesis, refer to section 8)
- Signed declaration of confidentiality (in case of surveyed companies/persons, refer to section 9) (+)

The parts marked with "+" shall only be included if relevant for the respective work.

2. Formatting and text layout

Page count:	<ul style="list-style-type: none"> • max. 60 pages of text for Master thesis and max. 50 pages of text for Bachelor thesis
Page format:	<ul style="list-style-type: none"> • DIN A4 (not double-sided)
Side margins:	<ul style="list-style-type: none"> • left 3.5 cm, right 2.5 cm, upper 2.5 cm (page numbers are excluded), lower 2.0 cm
Line spacing:	<ul style="list-style-type: none"> • 1.5-spaced lines
Font:	<ul style="list-style-type: none"> • Arial (11 pt.) or Times New Roman (12 pt.) aligned using justification "Blocksatz"
Font size:	<ul style="list-style-type: none"> • continuous text 11pt/12 pt; longer literal quotations 10pt.
Footnotes:	<ul style="list-style-type: none"> • single-spaced, their font should be 2pt smaller than the font of the text
General information:	<ul style="list-style-type: none"> • The text body of the thesis, the list of references and the attachments are to be numbered consecutively in Arabic numbers. • All parts before the text body (table of contents, list of figures, list of tables, list of attachments, list of abbreviations, list of symbols) are numbered using roman numerals. • The text is to be formatted as continuous text.

3. Methods of citation

a. General citation rules

The citation rules of the Chair of Innovation Management adhere to the guidelines of the American Psychological Association (APA). (Please click the following [link](#) for more information.) If other standards seem more appropriate, this has to be clarified in advance with the technical supervisor of the Chair.

In principle, for every thought taken from another source the author has to indicate the original source where it has been taken from. Whoever does not cite an external source is guilty of stealing intellectual property (plagiarism) and the seminar paper/thesis will be graded as “failed” in severe cases (refer to "[Merkblatt: Zitat und Plagiat](#)" of the University of St.Gallen). Quotable is only what the reader (especially with respect to the correction) is able to retrace and verify. This applies for publications. Unpublished, non-public sources (such as statistical material of an undertaking) are to be submitted as attachments together with the scientific work. In this case they may also be quoted. However, prior to using such sources, the author's permission must be obtained.

Verbal statements are citable only based on interview transcripts, which must be listed in the bibliography (refer to section 4). Referees, lecture scripts, self-made or group-written manuscripts, term papers, etc. are not adequate as quotable literature.

A violation of the outlined citation obligation is considered seriously and leads to the evaluation of the work as "unusable" - even if the subject is otherwise satisfactorily handled.

Use of literal (direct) citations

Literal quotations grant the author the right to insert sentences, phrases, terms, definitions, etc. in the same wording. Literal quotations must be enclosed in quotation marks, but longer literal quotations should be avoided. Direct citations have to be completely concordant with the original text, but the exceptions listed below are possible. If quotation marks have already been used in the quotation, these are replaced by single quotation marks '...'. Failing to indicate a direct citation is a strong violation of basic principles in scientific writing. This might result in the grade “failed”.

Quotes omissions and citation breaks

In order to fit a quotation grammatically in the author's own statements or to omit insignificant intermediate parts of the sentence, the omission of a word is to be indicated by two points, several words by three points. Examples of cited omissions or interruptions: The goal of every business model is both "...to create and capture value." "Empirical research has shown ... that business model innovation carries a great potential for success."

Quote extensions

Additional amendments or explanations in the quoted sentence are to be put in parentheses (...; by the author) or without the suffix "the author" in square brackets. Example of citation extensions: "The key driver (business model innovation; by the author) for successful sustainability has been identified by reported increases in profits." Textual highlights within the cited text should be adapted. In the case of own highlighting, the corresponding position must be marked with the suffix (adap. by the author).

Descriptions and comments must be made in such a way that the scope of the respective quote is clearly recognizable.

Use of indirect citations

In indirect citations, the idea of a certain text passage is adapted and you have to indicate the respective source within in-text citations (see chapter 3b).

Use of secondary references

Secondary references, i.e., quoting or paraphrasing from a source which is mentioned in another text, is strongly discouraged. Any quotation (direct or indirect) has to be checked against the original source. If, despite intensive research, you are unable to obtain the original text with justifiable effort, you may make an exception and cite the secondary source. Secondary sources must be indicated in the citation within the text as follows: "A cited in B", where A is the originator of the thought and B is the quotation at hand.

The translation of foreign language texts can lead to literal quotations or corresponding wording or comments. If correct rendering of a foreign-language text is desired, a literal quotation in the respective foreign language is recommended.

Longer literal or corresponding quotes are generally to be avoided.

Content accurate citation

Both literal and corresponding citations must properly express the opinion of the cited author and present the right context. It is considered as gross violation of the rules of diligent scholarly work when an author's wording has been taken out of context as evidence of an opinion that s/he does not represent.

b. Citations within the text

Following the guidelines of APA references appear within the text instead of using footnotes.

In-text citations

When the ideas and results of others are used in the thesis, they are mentioned with in-text citations. In-text citations consist of the surname of the author and the year of the publication. If there is more than one author, surnames of all authors shall be mentioned. If there is no author, the title or a short form of the title and the year shall be used. If you cite two or more references, the citations have to be ordered alphabetically in the same order in which they appear in the reference list and the citations have to be separated by semicolons.

Examples:

Gassmann, Böhm and Palmie (2018) evaluated the strengths and weaknesses of smart city lighthouse projects.

In Munich the transformation to a smart city started without any strategic initiation (Gassmann, Böhm & Palmie, 2018).

Interviews

If interviews have been conducted to gain additional information about your topic, the interviewee has to be asked for permission in order to cite the source as a personal communication.

Examples:

(M. Csik, personal communication, January 28, 2019)

Footnotes

Footnotes can provide text explanations and additional, pertinent remarks by the author, which, although they supplement the text in content, could disturb the course of the text. In case additional information is based on a reference, the same rules for citation apply as within the text.

The reference number of a footnote has to be inserted immediately (without space) in the end of the sentence or paragraph to which it refers. Footnotes are to be delimited by an approx. 5 cm long bottom line from the text of the corresponding page. The explanation of a footnote always appears at the bottom of the same page where the footnote is located, starting with a capital letter and ending with a full stop “.”.

c. List of references

The list of references contains every literature source that has been quoted throughout the thesis. The references must be arranged alphabetically according to the surname of the first author and are listed chronologically starting with the latest publication. If several authors composed the publication, the authors are listed as indicated on the publication while the first author determines the position within the list of references. In contrast to the continuous text, it is usual to use single-line spacing for the reference list. There are several equivalent layout options for bibliographical references. It is important that students choose one option and keep it consistent.

Hereafter some format examples are presented that have to be applied for respective entries in the list of references (for further examples, please refer to an APA Citation Guide).

➤ Journal Papers (article in print)

Kubli, M., Loock, M. & Wüstenhagen, R. (2018) The flexible prosumer: Measuring the willingness to co-create distributed flexibility. *Energy policy*, Vol. 114, 540-548 (**Author, A. (Publication Year). Article title. Journal title, Volume(Issue), pp.-pp.**)

➤ Journal Papers (article found online)

Winterhalter, S., Zeschky, M., Neumann, L. & Gassmann, O. (2017). Business Models for Frugal Innovation in Emerging Markets: The Case of the Medical Device and Laboratory Equipment Industry. *Technovation*, 66-67, 3-13. DOI: 10.1016/j.technovation.2017.07.002 (**Author, A. (Publication Year). Article title. Journal title, Volume(Issue), pp.-pp. DOI:XX.XXXXX or Retrieved from journal URL**)

➤ **Monographs**

Moser, D.J. (2018). *The Platform Economy - Strategies, Governance, and Business Models*. St.Gallen, Thesis. **(Author, A. (Publication Year). Article title. Publisher city: Publisher (if available))**.

➤ **Books in print**

Uebernicketel, F., Brenner, W., Pukall, B., Naef, T. & Schindlholzer, B. (2015). *Design Thinking: Das Handbuch*. Frankfurt am Main: Frankfurter Allgemeine Buch. **(Author, A. (Publication Year). Article title. Publisher city: Publisher.)**

➤ **Books found in a database**

Gassmann, O., Frankenberger, K. & Sauer, R. (2016). *Exploring the Field of Business Model Innovation – New Theoretical Perspectives*. DOI: 10.1007/978-3-319-41144-6 **(Author, A. (Year of Publication). Title of work [E-Reader Version]. Retrieved from http://xxxx or DOI:xxxx)**

4. Methods of transcription

This chapter is only relevant for students who intend to use qualitative research methods. In this case, please clarify with your supervisor in advance what type of transcription method shall be applied. If no other agreement has been reached in this respect, we recommend transcribing the whole interaction/interview. The transcription document may be structured as follows:

- 1 A: Have you ever heard about Business Model Innovation?
- 2 B: Yes, of course.
- 3
- 4
- 5 A: How is your company explicitly doing to foster Business Model Innovation?
- 6 B: Well, we try to
- 7
- 8

If technical difficulties or interruptions occur, they should be identified with “(interruption)”. The statement that may have been made can be written directly behind it, but must be enclosed by brackets and end with a question mark.

- 9 A: Have you ever heard about Business Model Innovation?
- 10 B: Yes, of course. In our company we have established a special task force for this topic that
- 11 focuses constantly on the goal to (interruption) (create value for our customers and capture
- 12 value for our company?).....
- 13

Moreover, we would recommend preparing an overview list of all interviewed persons including the name of the interviewee, position/function and/or their organisational affiliation and the specific date the interview took place,

5. Notice on the use of internet sources

Please be especially critical in the selection and evaluation of internet sources. When using them, the volatility of this medium has to be taken into account. In general, internet sources should be cited in a comparable manner as conventional literature, i.e. in-text citation shall be used and included in the reference list.

In addition, a printout of the respective websites should be kept until final grading. For comprehensive internet sources, it's recommended to store the content (including graphics and tables) on an external hard drive e.g. USB stick. For a better structure, it is useful to create a separate folder for each source (website). Used PDF files are also to be printed or stored.

We would like to stress again, please be particularly critical when selecting and evaluating internet sources.

For citation of internet sources the rules of in-text citations apply. The list of references should list the following information about the internet sources:

- Complete source with full URL. For dynamically generated web pages, all parameters (behind the "?" in the URL) must also be listed.
- For PDF files, the URL refers to the corresponding PDF file (for example, https://unctad.org/en/PublicationsLibrary/tir2018_en.pdf).
- Format description when necessary e.g. PDF file, JPG, XY homepage etc.
- The date of the last change of the page (for example "Status: 11.12.2018" or "Notification dated 11.12.2018") or if there is no information the date of your access ("Retrieved 11.12.2018").

Examples

United Nations. (2018). Technology and Innovation Report 2018 [PDF file], Retrieved 11.12.2018 from https://unctad.org/en/PublicationsLibrary/tir2018_en.pdf.

UBS Group AG. (2018). Annual Report 2017 [PDF file], Retrieved 20.02.2019 from https://www.ubs.com/global/de/about_ubs/investor_relations/annualreporting/2017/_jcr_content/par/teaserbox_1087569181/teaser/linklist/link.0515972108.file/bGluay9wYXRoPS9jb250ZW50L2RhbS9zdGF0aWMvZ2xvYmFsL2ludmVzdG9yX3JlbGF0aW9ucy9hbm51YWwtcmVwb3J0LzlwMTcvZnVsbC1yZXBvcnQtdWJzLWdyb3VwLWFnLWNvbNvbGikYXRIZC0yMDE3LWVuLnBkZg==/full-report-ubs-group-ag-consolidated-2017-en.pdf.

6. Indexes/lists

a. Figures and tables

Figures and tables should complement the text in a clear and concise manner. They are used to show research results or to visualize or describe complex structures. Figures and tables have to be integrated into the text via references or explanations.

All figures and tables have to be numbered consecutively and have to be assigned a conclusive caption (figure 1: Porter's five forces model). If they are based on sources, those sources have to be mentioned in the caption using the in-text citation method.

All figures and tables have to be listed in the list of figures and the list of tables, respectively, with their number.

b. Abbreviations

Subject-specific abbreviations used throughout the thesis have to be listed in alphabetical order in the list of abbreviations. They have to be defined when used the first time in the text, for example Business model innovation (BMI) and should be kept to a minimum. Commonly used abbreviations such as i.e. or etc. are not required to be listed.

c. Attachments

All attachments are listed in the appendix. The appendix headings should be written in the same manner as the chapter headings. There is no separate list of attachments so they are listed in the table of contents. The appendix provides supplementary information to the thesis and should always appear after the references. Content of the attachments can be (examples): surveys, supplemental tables and figures, simulations, models. If applicable, samples of any survey and/or observation documents, a list of interviewees and the respective transcripts will be attached as final documents.

7. Submission modality

To comply fully with the submission requirements defined by the University of St. Gallen, we kindly ask students to consider the bachelor and master thesis [information sheet](#) for the preparation and finalisation of their thesis.

8. Declaration of authorship

You have to append the following declaration to your thesis and put your signature to it:

"I hereby declare

- that I have written this thesis without any help from others and without the use of documents and aids other than those stated above;
- that I have mentioned all the sources used and that I have cited them correctly according to established academic citation rules;
- that I have acquired any immaterial rights to materials I may have used such as images or graphs, or that I have produced such materials myself;
- that the topic or parts of it are not already the object of any work or examination of another course unless this has been explicitly agreed on with the faculty member in advance and is referred to in the thesis;
- that I will not pass on copies of this work to third parties or publish them without the University's written consent if a direct connection can be established with the University of St.Gallen or its faculty members;
- that I am aware that my work can be electronically checked for plagiarism and that I hereby grant the University of St.Gallen copyright in accordance with the Examination Regulations in so far as this is required for administrative action;
- that I am aware that the University will prosecute any infringement of this declaration of authorship and, in particular, the employment of a ghostwriter, and that any such infringement may result in disciplinary and criminal consequences which may result in my expulsion from the University or my being stripped of my degree."

Date and signature

.....

By submitting this academic term paper, I confirm through my conclusive action that I am submitting the Declaration of Authorship, that I have read and understood it, and that it is true.

Note: Please check the the studentweb page for recent declaration updates.
(<http://studentweb.unisg.ch/en/masterstufe/leistungswesenmaster/masterarbeit>,
<http://studentweb.unisg.ch/en/bachelorstufe/leistungswesenbachelor/bachelorarbeit>)

9. Declaration of discretion

The following text has to be added to the work and signed:

The Undersigned

hereby undertakes and warrants to treat any information obtained by the enterprise/administration concerned in strict confidence. In particular, he / she shall only permit people other than the referees to inspect his / her written work with the express consent of all the parties that have provided information.

The Undersigned hereby takes cognizance of the fact that the University of St.Gallen may check his / her work for any plagiarism with the help of a plagiarism software and that the undersigned shall have to notify the enterprise/administration surveyed accordingly.

Date and signature

.....

Note: Please check the the studentweb page for recent declaration updates.
(<http://studentweb.unisg.ch/en/masterstufe/leistungswesenmaster/masterarbeit>,
<http://studentweb.unisg.ch/en/bachelorstufe/leistungswesenbachelor/bachelorarbeit>)

10. Template for cover page

Master/Bachelor thesis for the attainment of the degree

Bachelor of Arts / Master of Arts

at the University of St. Gallen

Title of the thesis

Supervisor: Prof. Dr. Oliver Gassmann
Chair of Innovation Management
Institute of Technology Management
University of St. Gallen

Study program: XXX - Master / Bachelor (e.g. Business Innovation – Master)

Composed by: Max Mustermann
Musterstrasse 1
CH-xxxx Musterort
Tel.: +41 (0)71 XXX XXXX
Matriculation number:

Submitted on: DD/MM/YY

11. *Related Literature*

Contents of this document have been adapted from the following sources:

Bänsch, A. (2009). *Wissenschaftliches Arbeiten*, 10. Auflage, München: Oldenbourg.

Creswell, J. W., Cheryl N. (2018) *Qualitative inquiry & research design : choosing among five approaches*. Fourth edition. CA: SAGE Publications.

Kuckartz, U. (2014). *Qualitative text analysis: a guide to methods, practice & using software*. London: SAGE Publications

Universität St. Gallen (2019). Fact Sheet Master's thesis; Declaration of Discretion & Declaration of Authorship [PDF files], Retrieved 02.04.2019 from <http://studentweb.unisg.ch/en/masterstufe/leistungswesenmaster/masterarbeit>.

Universität St. Gallen (2019). Fact Sheet Bachelor's thesis; Declaration of Discretion & Declaration of Authorship [PDF files], Retrieved 02.04.2019 from <http://studentweb.unisg.ch/en/bachelorstufe/leistungswesenbachelor/bachelorarbeit>.

Universität St. Gallen (2019). Merkblatt: Zitat und Plagiat [PDF file], Retrieved 02.04.2019 from http://studentweb.unisg.ch/~media/internet/content/dateien/studentweb/allgemeineinformatio_nenzumstudium/pruefungssystem/plagiat_disziplinarkommission/plagiatsmerkblatt.pdf?fl=de.

Universität St. Gallen (2019). Zitierrichtlinien des Lehrstuhls für Controlling/Performance Management [PDF file], Retrieved 02.04.2019 from <https://www.google.ch/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=2ahUKEwj92bL9x7HhAhVJ1eAKHbpwD9MQFjABegQIAxAC&url=https%3A%2F%2Faca.unisg.ch%2F-%2Fmedia%2Fdateien%2Finstituteundcenters%2Faca%2Fmoeller%2F160523-zitierrichtlinien-cpm.pdf&usq=AOvVaw1ccF609k2YGdH1ddrtP-8u>.

Technische Universität München (2019). *Scientific Writing Guidelines* [PDF file], Retrieved 02.04.2019 from https://www.ef.wi.tum.de/fileadmin/w00bnp/www/EF_Scientific_Writing_Guidelines_2015_03.pdf.

Theisen, M. R. & Theisen, M. (2017). *Wissenschaftliches Arbeiten: erfolgreich bei Bachelor- und Masterarbeit*. 17. aktualisierte und bearbeitete Auflage, München: Verlag Franz Vahlen.

The Writing Lab & The OWL at Purdue and Purdue University (2019). *General APA Guidelines* [website], Retrieved 02.04.2019 from https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/general_format.html.