Guidelines for final theses, seminar papers, and IDP/project study reports

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Additional information regarding your thesis, seminar paper, or report not mentioned in this slide deck can be found in the FAQ section of the TUM SoM website: <u>https://www.mgt.tum.de/faq-center</u>

Please use **templates** for the Declaration of Authorship and the coversheet provided on our homepage in the **download section**: <u>https://www.ie.mgt.tum.de/tim/teaching/final-thesis/</u>

https://www.ie.mgt.tum.de/tim/teaching/project-studiesidp/

Content



General remarks

- Scope and hand-in
- Formatting
- Structure, language, and style
- Use of unauthorized aids

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- Outline
- Text
- Footnotes

- Figures and tables
- Abbreviations
- Directory



- Direct quotations
- References in the text
- Bibliography

GENERAL REMARKS

- Master thesis:
 60 pages ± 10 %
- Bachelor thesis:
 30 pages ± 10 %
- IDP and project study report (B.Sc., M.Sc.): as discussed with supervisor
- Seminar paper:
 5000 words ± 10 %

This information refers only to the text part including illustrations, tables, graphics (directories and appendices are excluded from the limits).

Hand-in



• Seminar paper:

Hand in digitally; upload to the Moodle course (unless otherwise agreed)

IDP/Project study report:

Hand in digitally; PDF-file to the supervisor via email (unless otherwise agreed)

Final theses:

Hand in digitally; please refer to the detailed information on submitting your thesis in the TUM SoM Download Center: <u>https://www.mgt.tum.de/download-center</u>

 References and data to be provided via USB-stick/cloud drive (after consultation with supervisor)

Formatting

- **Margins**: left: 2 cm; right: 2 cm; top: 2 cm; bottom: 2 cm
- Font: Times New Roman
- Font size: 12 pt (headline font size may differ)
- Line spacing: 1.5
- Alignment: Justified

Page numbering:

- Directories (all except bibliography) consecutive Roman numerals
- Text with subsequent bibliography and appendix consecutive Arabic numerals

Footnotes:

- Font size: 10 pt
- Line spacing: 1 within footnotes, 1.5 between footnotes
- Line break: indent next line (hanging)

• Structure:

- Logical subdivision into three parts: Introduction, main part, conclusion
- The structure should not "jump"!
- Exact structure will be discussed with the supervisor

Language:

- Clear, unambiguous formulations
- No lengthy sentences
- Clear definitions of important terms
- No colloquial language

Style:

- Linguistically independent
- No "retelling" of studies

Use of unauthorized aids

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- Creating graded pieces of work (e.g., seminar papers, IDP/project study reports, final theses) by using unauthorized aids (e.g., ChatGPT) constitutes a cheating attempt. Cheating attempts result in failing the course/examination. In individual cases, even more serious consequences are possible.

GUIDELINES

Outline

- Arabic numbering (1, 1.1, 1.1.2...) without punctuation after the last digit
- 1, 2, 3, 4 ... is not particularly clear use sub-level structure (1.1, 1.2, etc.)
- Structure should not be too detailed, e.g. two pages of outline are too much for 15 pages of text. A maximum of 3 sub-levels should be used for final theses *Find a good average!*
- Headings should be meaningful



- Be careful with enumerations in the text should only be used occasionally and if needed
- A continuous text is optimal, supplemented by expressive graphics and occasional (economical and deliberate!) highlighting.
- Make paragraphs when you start a completely new train of thought within a chapter (a new line is not a paragraph)

Footnotes



- Footnotes are "foot" notes and are placed "at the bottom" of the page, not at the end of the entire thesis
- Further explanations, which are not necessary for a proper understanding of the text, as well as information on further literature should be placed as footnote

 Figures and tables should have consecutive numbering and include a title

Example: Figure 1: Potential sources of innovation

The exact indication of sources is obligatory
 Example: Source: Own representation;

Source: Own presentation (based on von Hippel (2005, p. 260)) Source: von Hippel (2005, p. 260)

 Do not embed figures in the text – always separate figures with respective numbering and source indication

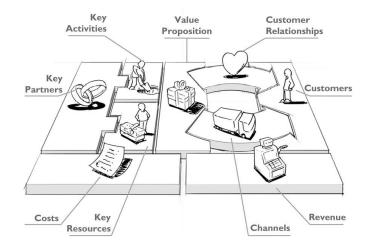


Figure 1: Business Model Canvas

Table 1: Overview of results

Means, standard deviations, and correlations with confidence intervals

Variable	М	SD	1	2	3	4	5	6
1. rating	64.63	12.17						
2. complaints	66.60	13.31	.83** [.66, .91]					
 privileges 	53.13	12.24	.43* [.08, .68]	.56** [.25, .76]				
4. learning	56.37	11.74	.62** [.34, .80]	.60** [.30, .79]	.49** [.16, .72]			
5. raises	64.63	10.40	.59** [.29, .78]	.67** [.41, .83]	.45* [.10, .69]	.64** [.36, .81]		
6. critical	74.77	9.89	.16 [22, .49]	.19 [19, .51]	.15 [22, .48]	.12 [25, .46]	.38* [.02, .65]	
7. advance	42.93	10.29	.16 [22, .49]	.22 [15, .54]	.34 [02, .63]	.53** [.21, .75]	.57** [.27, .77]	.28 [09, .58]

Note. M and SD are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). * indicates p < .0.5. ** indicates p < .0.1.

Source: Osterwalder and Pigneur (2010, pp.18-19)

Source: Own representation

Abbreviations

- Abbreviations should not be used extensively in the running text
- Common abbreviations (cf. Duden), such as "e.g." are permissible and not to be indicated in the list of abbreviations
- Permitted abbreviations that need to be included in the list of abbreviations have to be written out when occurring in the running text for the first time - afterwards abbreviation shall be used:
 - Example: First occurrence → European Patent Association (EPA);
 afterwards → EPA
 - Common abbreviations in the scientific community or specific to the field, e.g. Artificial Intelligence (AI)
 - Common abbreviations of institutions, organizations or companies, e.g. United Nations (UN)
- Using abbreviations for convenience reasons is not permitted

The final thesis/seminar paper should comprise the below listed directories (if relevant) in the following order:

- Cover sheet
- Abstract (in German and English if paper is written in German)
- Table of contents
- List of figures
- List of tables
- List of appendices
- List of abbreviations
- List of symbols
- Bibliography (after the text part)
- Declaration of authorship

Directories

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- Each directory is on a separate page
- Directories do not include a sub-level structure
- The bibliography should be clearly laid out (e.g. indentations, paragraphs)
- The table of contents contains <u>page numbers</u>
- The list of figures is a <u>directory</u>, therefore it is included in the table of contents of the theses with all other directories. It does <u>not contain any</u> <u>figures</u>, only titles of figures and respective page numbers

CITATION RULES

- Basically every thought that is taken over from someone else must be quoted!
- All written work at the TIM Chair should use the short citation style (Harvard style or APA). The source shall be listed in the text immediately after the quotation.
- The correct use of citations and references is essential for all scholarly texts. Please be correct, accurate, and consistent throughout your work.

Direct quotations comprise literal reproductions of (partial) text

- Intermissions and omissions are indicated by "(..)" for one word and by "(...)" for several words
- For omissions at the beginning or end of the quotation no indication is needed
- Grammatical changes of and additions to the quotation shall be shown in square brackets
- Explanatory remarks and additions to the quotation shall be succeeded by "[author's note]"

One author:

- Furthermore, the structures of the decision-making problem are unclear and the variables are generally not known or not fully known (Hauschildt, 1997).
- Hauschildt (1997, p. 26) argues that ...

Two authors:

... business-related innovations (Zahn & Weidler, 1995)

More than two authors:

 Harhoff et al. (2001, p. 284) state that the following assumptions are relevant to the research and development of...

Several publications:

... (Larisch, 1987; Wipsmith, 1988; Ohmstead, 1990)

Several sources of one author from the same publication year:

... (Henkel 1998a) ... (Henkel 1998b)



Websites:

- If no information is available (e.g. author), websites shall be specified in a footnote with the URL and date of access in the text part. If required information is available, the reference including URL and date of access shall be included in the bibliography.
- Example:

The annual turnover in 2009 amounted to 1.5 million euros.¹

¹ www.xyz.de, retrieved on 05/21/2019

Interviews:

- A personal interview should not be included in the bibliography. They are not considered recoverable data (they cannot be found by a researcher). You should reference personal interviews as in-text citations instead
- Example: (J. Doe, personal communication, 12/12/2018)
- In addition, a list of all conducted interviews should be included in the thesis

Bibliography

- All sources (and only those!) referred to in the text and/or footnotes must be cited
- Sources must be listed in a bibliography (i.e. no separation according to type of source)
- Sources are listed alphabetically according to the author's surname
 - In the case of several works by the same author, the list is sorted according to the date of publication
 - Studies of an author together with co-authors are listed after the studies written by him alone
- All authors of a source shall be named in the bibliography and separated by a semicolon. The abbreviation et al. may only be used in the text, but not in the bibliography
- In case of several editions, the most recent edition should normally be used. However, this does not apply if a certain quote is included in an older edition or the most recent edition is not available

Monographs:

- Name of the author, first name (abbreviated) (year of publication): Title of the work: subtitle if applicable, edition if applicable, place of publication, publisher.
 - Hauschildt, J. (1997): Innovation Management, 2nd edition, Munich, Vahlen.
 - Pleschak, F.; Sabisch, H. (1996): *Innovation Management*, Stuttgart, Schäffer-Poeschel.
 - Alisch, K.; Winter, E.; Arentzen, U. (2005): Gabler Wirtschaftslexikon, 16th edition, Gabler, Wiesbaden

Contributions in collective work:

- Name of author, first name (abbreviation) (year of publication): Title of essay in: Name of the editor (ed.): *Title of the anthology*, place of publication, year of publication, page references of the article.
 - Thomke, S. (1998): The changing economics of problem-solving: Some implications for innovation and competitivness in: Franke, N.; von Braun, C.-F. (Ed.): *Innovation Research and Technology Management: Concepts, Strategies, Case Studies*, Berlin et al. 1998, 233-248.

Bibliography

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Articles in journals and newspapers:

- Name of the author, first name (abbreviated) (year of publication): Title of the contribution: subtitle if applicable, *title of the journal*, volume (issue), if applicable no., page references.
 - Henkel, J. (2000): The risk-return fallacy, Schmalenbach Business Review, 52(3), 363-373.
 - Arundel, A. (2001): The relative effectiveness of patents and secrecy for appropriation, *Research Policy*, 30(4), 611-624.

Working Papers:

- Name of the author, first name (abbreviated) (year of publication): Title of the working paper, university/institution where the paper was written, no., if applicable further details.
 - Henkel, J. (2004): Patterns of free revealing, Chair of Technology and Innovation Management, Working Paper, Faculty of Economics, Technical University of Munich.

Bibliography

Web pages (with access date and name of the page):

- The usual details of author(s), year of publication and title should be included (if available).
- The exact URL and date of access must be specified for all web pages.
 - EVCA (2002): Risk Capital Action Plan, EVCA Network News 7, December 2002, S. 3, http://www.evca.com/admin/attachments/tmpl_9_art_48_att_212.pdf, retrieved on 02/24/2019.
- If no information about the author is available, which is otherwise given in the bibliography, the footnote with the URL in the text part is sufficient. The URL does not have to be indicated in the bibliography anymore