



Guidelines for writing theses at the Schöller Endowed Chair for Information Systems (Digitalization in Business and Society)

Foreword

Dear students,

Thank you for your interest in the theses offered by the Schöller Endowed Chair for Information Systems (Digitization in Business and Society). Irrespective of whether your thesis is a seminar paper, project paper, bachelor's or master's thesis, this guide is intended to answer the most urgent questions regarding the design of your thesis and to provide you with an initial point of reference.

This guideline is provided in addition to templates offered by the Institute for Writing Your Thesis (using Word or LaTeX). These have been carefully created for you so you can rely on the formatting guidelines it contains without having to make any additional adjustments. We would also like to point out that it is not intended to avoid any personal contact with your supervisor. However, it serves to keep non-content-related questions in these conversations as low as possible to be able to place the content of the work in the foreground. Nevertheless, your supervisor has the final word, so this guideline is intended to be a generalized recommendation only.

We are looking forward to working with you and wish you much success in your work.

The faculty of the Chair for Information Systems (Digitization in Business and Society).

Table of Contents

Foreword	d	II
Table of	Contents	III
List of Ill	lustrations	IV
List of Ta	ables	V
List of A	bbreviations	VI
List of Sy	ymbols	VII
•	al Requirements	
	Application	
1.2 R	Registration and Supervision	1
1.3 Se	eminar Performance	1
1.4 St	ubmission	1
1.5 R	Leview and Grading	2
2 Forma	at	3
2.1 Pa	age Layout	3
2.2 Fo	Font 3	
2.3 Sc	cope	3
	Citations & Reference	
	.4.1 MISQ	
	.4.2 APA	
	ables and Figures	
	Directories	
	Appendixtatutory Declaration	
	•	
	ent	
	ntroduction	
	Concluding section	
4 Altern	native: Journal-Style Thesis	10
Closing F	Remarks	1

Remark

The table of contents is preformatted in the template of the institute and should be retained. To update it, right-click in the table of contents and then click on "Update fields".

List of Illustrations

Remark

The list of illustrations is preformatted in the template of the institute and should be retained.

To update it, right-click in the table of contents and then click on "Update fields."

List of Tables

Table 2-1: Format specifications for the page layout	3
Table 2-2: Format specifications for the font design	3
Table 2-3: Citation in text after MISQ	4
Table 2-4: Citation in text after APA	5
Table 2-5: Labeling of illustrations and tables	7
Table 4-1: List of possible conferences	10
Table 4-2: List of possible subject journals	11

Remark

The list of tables is preformatted in the template of the institute and should be retained. To update it, right-click in the table of contents and then click on "Update fields". If no tables are used in your scientific paper, the list of tables must be removed.

List of Abbreviations

API Application Programming Interface

CCG Central for Co-organization

CRM Customer Relationship Management

dpi dots per inch

EAN European Article Numbering

IaaS Infrastructure as a Service

JSON Javascript Object Notation

VBA Visual Basic for Applications

Remark

The list of abbreviations includes all abbreviations that are not commonly used or are not listed in the dictionary. Abbreviations such as "etc.", "e.g." and "i.e." do not require a definition and therefore do not belong in the list of abbreviations. All abbreviations separated in this way must be marked throughout the document with a protected space ([Ctrl]+[Shift]+[Space]). The protected space becomes recognizable as "o" after pressing the "¶" button in the toolbar.

List of Symbols

a0	Acquisition payment in $t = 0$
C	Net present value
dt	Surplus of deposits in relation to t
i	Calculated interest rate
n	Expected life-cycle
q	Interest factor 1 + i
rs	Distance of the step s in cm from the edge of the page
S	Step index
t	Period index

Remark

The (selected) entries can be sorted using the Sort function in Word. You can find it in the "Start" tab under "Paragraph". A list of symbols is not necessarily required in every scientific paper.

Formal Requirements

1 Formal Requirements

1.1 Application

First, please make sure that you meet the necessary requirements for writing a scientific paper at the chair. The examination regulations of your degree program are decisive; if necessary, the chair can also define its own requirements, which you can then find on our website. However, the student is solely responsible for ensuring that the thesis can be credited to his or her own studies.

Subsequently, you can choose one or more of the advertised topics. Apply for this with the required documents. Alternatively, you can also apply to write on a topic of your choice as long as it fits the research area of our chair. You will find the necessary information on the chair's homepage.

1.2 Registration and Supervision

Should you receive an acceptance for a topic, your supervisor will subsequently take over the registration of the thesis for you. The supervisors reserve the right to require the preparation of an exposé or a comparable performance before the registration of the thesis. The start of the thesis is (subject to deviating regulations of examination regulations) in principle possible during the entire semester. Please coordinate the processing time, especially about the desired end date, with your supervisor.

Please make the necessary documents available to your supervisor in advance before each meeting with your supervisor. Simply bringing the documents to be discussed to the appointment makes careful preparation impossible and is also inefficient.

1.3 Seminar Performance

If your examination regulations provide for an accompanying seminar service, we ask you to inform your supervisor at the beginning. They will then inform you about the exact modalities at the Chair.

1.4 Submission

The submission of your thesis is subject to the requirements of your examination regulations. Please note, print copies must be printed single-sided and be firmly bound with an adhesive Formal Requirements 2

binding. Spiral binding is not permitted. Together with the printed copies, you must submit your thesis in electronic form as a Word or LaTeX document and in PDF format, and all your associated data (e.g., interview recordings and transcripts). You will be notified of the last possible submission date by the Examinations Office. If you submit your work by mail, the postmark will count as the submission date. Be sure to allow enough time for proofreading, printing, and binding of the paper before submitting it.

1.5 Review and Grading

It usually takes up to six weeks to evaluate your work after submission. However, the date on the certificate is the date of submission and not the date on which the grade was announced. If, for an urgent reason, you require confirmation of submission or successful completion before the correction is completed, please discuss this with your supervisor.

2 Format

2.1 Page Layout

Follow the formal specifications for the page layout:

Table 2-1: Format specifications for the page layout.

Line spacing	Page margins	Alignment	Page numbers
1.5 Lines	Left 3,5 cm	Justification	Directories: Roman
	Right 1,5 cm		numerals
	Top & Bottom 2,5 cm		Text pages: Arabic
			numerals

Source: Own Illistration

These values are already preset in the templates provided by the institute.

2.2 Font

Follow the formal specifications for the font design:

Table 2-2: Format specifications for the font design

Font type	Font size	Font size for illistrations	Font size for tables	Font size for footnotes.
Times New Roman	12pt	10pt	10pt	8pt

Source: Original Illistration

Please use the provided format styles. In Word you will find templates in the tab "Start" under "Styles". There are templates for every imaginable use case (headings in three levels, footnotes, tables, continuous text, etc.), in which you can use to help structure your work.

These values are already preset in the templates provided by the institute.

2.3 Scope

Please consult with your supervisor regarding the length of your thesis.

2.4 Citations & Reference

Every time you reproduce someone else's ideas, you must identify them in the form of a quotation. Citations must not contain any content and/or meaning other than that given by the author of the original work. Correct citation is a main formal criterion in the preparation of a scientific paper.

A distinction is made between direct and indirect citations, and the former should be the exception. If they are necessary, they are indicated by quotation marks. Direct quotations must be identical to the original text but can be interrupted by three dots (...) to fit grammatically into the context. In addition, this way it is possible to omit the intermediate parts of the quotation that are irrelevant for your purpose. Likewise, you may expand the content of the citation in individual cases, which should be indicated by square brackets [...].

Please consult with your supervisor regarding the citation style which is most appropriate for you. Usually the citation styles "MISQ" or "APA" are used. In either case, the source is always in parentheses at the end of each citation, not in the footnotes. Overall, it is mandatory to use references, but the choice between which one to use is up to you.

2.4.1 MISQ

When using MISQ, the following format must be followed:

Number of authors **Documentation in the Text** Example(s) One author (Smith 2003, S. 17) (Last name author year, page numbers) Two authors (Last name author A and last name (Chenhall and Romano 1989, S. 17-20) author B year, page numbers) Three or more authors (Last name author A et al. year, (Morck et al. 1990, S. 39-41) page numbers) More than 5 authors (Last name author A et al. year, (Smith et al. 2005, S. 43) page numbers) More papers with the same year (Last name author(s) year letter, (Chenhall and Romano 1989a, S. page numbers) 17-20) (Chenhall and Romano 1989b, S. 43f.)

Table 2-3: Citation of Text in MISQ

Source: Original Illistration

The following format must be adhered to:

- If the quotation refers only to a specific page or is a literal quotation, the page must be included. Example: (Smith 2003, p. 17).
- If the quotation refers to two consecutive pages, this should be marked with "f.". Example: (Jones et al. 1995, p. 17f.).
- If the citation refers to several consecutive pages, these must be explicitly stated. The use of "ff. is not permitted. Example: (Chenhall and Romano 1989, p. 17-20).

The listing in the bibliography must be complete. All references listed in the text must appear in the index and vice versa. When formatting the bibliography, you can use the following examples as a guide:

Ackoff, R. L. 1961. "Management Misinformation Systems," *Management Science* (14:4), December, S. 147-156.

Bonini, C. P. 1963. *Simulation of Information and Decision Systems in the Firm*, Englewood Cliffs, NJ: Prentice-Hall.

Chenhall, R. H., and Romano, C. A. 1989. "Formal Planning and Control Presence and Impact on the Growth of Small Manufacturing Firms," in *Job Generation by the Small Business Sector in Australia*, W. C. Dunlop and A. J. Williams (Hrsg.), Newcastle: Institute of Industrial Economics, S. 71-89.

2.4.2 APA

There are several versions of the APA style, but they differ only slightly. The current one is APA 7th, but APA 6th is still a very common format in scientific literature. Please coordinate with your supervisor on this.

When using APA, the following format must be adhered to:

Table 2-4: Citation of text in APA

Number of authors	Documentation in the Text	Example(s)
One Author	(Author's last name Year, page number)	(Smith, 2003, S. 17)
Two Authors	(Last name author A & last name author B, year, page number)	(Chenhall & Romano, 1989, S. 17-20)
More than two authors	(Last name author A et al, year, page number)	(Smith et al., 2005, S. 43)
More papers with the same year	(Last name(s) of author(s), year and letter, page number)	(Chenhall & Romano, 1989a, S. 8) (Chenhall & Romano, 1989b, S. 4)

Source: Original Illustration

Also here applies:

■ If the quotation refers only to a specific page or is a literal quotation, the page must be included. Example: (Smith, 2003, p. 17).

If the quotation refers to two consecutive pages, this should be marked with "f.". Example: (Jones et al., 1995, p. 17f.).

If the citation refers to several consecutive pages, these must be explicitly stated. The use of "ff. is not permitted. Example: (Chenhall & Romano, 1989, p. 17-20).

The listing in the bibliography must again be complete. All references listed in the text must appear in the index and vice versa. When formatting the bibliography, you can use the following examples as a guide:

Balocco, R., Miragliotta, G., Perego, A., & Tumino, A. (2011). RFId adoption in the FMCG supply chain: An interpretative framework. *Supply Chain Management: An International Journal*, *16*(5), 299-315.

Coll, R. K., & Lajium, D. (2011). Modeling and the future of science learning. In M. S. Khine & I. M. Saleh (Hrsg.), *Models and modeling in science education: Vol. 6. Models and modeling: Cognitive tools for scientific enquiry* (S. 3-22). Dordrecht: Springer.

Schierenbeck, H., & Wöhle, C. B. (2012). *Grundzüge der Betriebswirtschaftslehre* (18. Aufl.). München: Oldenbourg.

2.5 Tables and Figures

Figures and tables serve to illustrate and/or clarify issues discussed in the text. The most important results of your work should therefore always be deepened or clearly summarized in a figure or table. It is essential that you explain all parts of a figure in the text or that you explicitly refer to the figure in the text. If you only need part of a graphic for your argumentation, it is advisable to adapt the figure accordingly.

Illustrations should always be created or traced yourself (e.g. with PowerPoint) and not scanned, as the process of scanning is usually detrimental to quality. There is no objection to the (partial) adoption of figures from e-books or electronically published journal articles.

Figures and tables are to be numbered consecutively in Arabic font with respect to the first level of outline. This means that the first table in chapter 3 is titled "Table 3-1: (...)", the second "Table 3-2: (...)" and so on. Word does this for you automatically with the "Insert Label" function in the "References" tab; all you must do when you make changes is adjust the numbers by right-clicking on them and using the "Update Fields" function.

Also, make sure that your figures and tables are labeled in a meaningful and self-explanatory way. Two figures created in the same or comparable notation should also use the same font size.

Abbildung 2-1: FAU Logo



Source: [...]

When indicating the sources of your figures or tables, please follow Table 2-5.

Table 2-5: Labeling of figures and tables

Type of adoption	Source provider in MISQ	Source provider in APA
Unchanged adoption	Source: Smith 2003, S. 17	Source: Smith, 2003, S. 17
When modifying a graphical representation	Source: In reference to Smith 2003, S. 17	Source: In reference to Smith, 2003, S. 17
Own representation, which is based on source content, but which is not shown as a figure/table in the source.	Source: Original figure with reference to Smith 2003, S. 17	Source: Original figure with reference to Smith, 2003, S. 17
Original Table/Figure	Source: Original Figure	Source: Original Figure

2.6 Directories

List of contents, list of figures, and list of references must be integrated; the creation of a list of tables, abbreviations, and/or symbols is only necessary if tables, abbreviations, and/or symbols are used. The necessary instructions for creating and formatting these lists can be found in the sample lists at the beginning of this guide.

Your bibliography deserves special attention. There, you must list all sources you have used in your paper in alphabetical order by author name. If you cite several works of an author, then arrange their sources in the bibliography chronologically by year of publication. If you cite several sources of the same author with the same year of publication, then list them with letters in ascending order (see chapter 2.5). Do not categorize the entries according to the type of works cited.

2.7 Appendix

An appendix is not absolutely necessary. However, if you have created more extensive graphics, tables, questionnaires or similar, which are important for your work, but would disturb the reading flow in the text part, then you can present these materials in the appendix.

2.8 Statutory Declaration

You must conclude your work with a declaration of non-plagiarism, which you have to sign by hand. This declaration is already available in the templates provided by the institute and only requires your signature with your current location and date.

Content 9

3 Content

True to the fundamental right of freedom of teaching and research, the institute-wide guidelines for you and your supervisor regarding the content of the paper are very limited. Only the structure of the introduction and the conclusion are given in the template of the institute. Please follow these guidelines, on the one hand they make it easier for the reader to get started and on the other hand created to meet the requirements of the different examination regulations.

Furthermore, please pay attention to the linguistic and logical comprehensibility of your argumentation and a scientifically correct use of language. Try to avoid long and difficult to understand nested sentences with more than 30 words wherever possible.

Components of any scientific paper include a definition and explanation of the central theoretical concepts and constructs of the paper, the current state of research, an explanation of the methodology used, and an evaluation and subsequent discussion of your findings. How you integrate these points structurally into your paper should be discussed with your supervisor. In most cases, the preparation of the theoretical foundations is found in chapter 2, the methodology in chapter 3, the presentation of the results in chapter 4, and the discussion in chapter 5, flanked by the introduction and conclusion in chapters 1 and 6.

3.1 Introduction

In the first subsection of the introduction, the relevance of the topic or the problem being dealt with is worked out and placed in a larger context. In the second subsection, you formulate the goal and distinguish it from other topics. Subsequently, you describe how you will further proceed in your work. Important term definitions are not part of the introduction.

3.2 Concluding section

In the first subsection of your conclusion, you should summarize the most important results of your work. Avoid describing the complete process of your work again in detail but limit yourself to a brief paragraph here. Rather, highlight the value you have created with your work in a comprehensive and easy-to-understand manner. In doing so, you should once again state the original problem and show how you addressed it in your work.

In the second subsection, point out the limitations of your work and derive a need for further research.

4 Alternative: Journal-Style Thesis

We would like to encourage students in the master's program with an interest in writing scientific publications to prepare their theses with the goal of publication in an international journal or conference. This is especially beneficial for those interested in pursuing an academic career or a PhD.

For this purpose, we offer an alternative form to the procedure described in chapters 2 and 3 of this guide, namely writing the project or master thesis in "paper style". When writing such a paper, the stylistic requirements of the selected journal or conference apply instead of the guidelines presented here. Only the cover page and the affidavit are to be inserted from the Institute's template into the thesis which will be submitted. If your examination regulations specify other mandatory components (e.g., an abstract), these must also be additionally included. Those interested in such a thesis should proactively approach their supervisor about this possibility.

The aim of this procedure is to give the students an insight into the scientific work that is as close to reality as possible. Accordingly, after the basic definition of the topic with your supervisor, you should from the beginning to the end take care that you do all the work necessary for a successful acceptance of the paper in the chosen journal or conference very carefully. This includes already the selection of the respective target journal or conference. The main thing to ensure here is that the chosen topic fits into the range of topics and methods of the chosen outlet.

In the case of seminar papers and project papers, the paper may be written with a view to publication both at a conference and in a journal. Table 4-1 includes the possible conferences, and Table 4-2 the possible journals.

Table 4-1: List of possible conferences

European Conference on Information Systems (ECIS)	
Hawaii International Conference on System Sciences (HICSS)	
Internationale Tagung Wirtschaftsinformatik (WI)	
Pacific Asia Conference on Information Systems (PACIS)	

Source: Original Figures

In the case of master's theses, submission to a conference is not possible. Accordingly, the possible target journals for master's theses written in paper style are exclusive to Table 4-2.

Table 4-2: List of possible journals

ACM Computing Reviews
ACM Computing Surveys
ACM SIGMIS Database
ACM Transactions on Computer-Human Interaction
ACM Transactions on Information Systems
ACM Transactions on Management Information Systems
AIS Transaction on Enterprise Systems
Artificial Intelligence
Business & Information Systems Engineering (BISE)
Communications of the ACM (CACM)
Communications of the Association for Information Systems (CAIS)
Computer Supported Cooperative Work (CSCW)
Computers and Operations Research
Computers in Industry
Data & Knowledge Engineering
Decision Sciences
Decision Support Systems (DSS)
Electronic Markets (em)
Group Decision and Negotiation
Human-Computer Interaction
IEEE Transactions on Engineering Management
IEEE Transactions on Software Engineering
Information & Management
Information and Organization
Information Systems (IS)
Information Systems and e-Business Management
Information Systems Frontiers
Information Systems Management
Information Technology and Management
International Journal of Electronic Business
International Journal of Information Management
International Journal of Information Technology & Decision Making
International Journal of Knowledge Management (IJKM)
International Journal of Mobile Communications
Journal of Computer-Mediated Communication (JCMC)
Journal of Decision Systems
Journal of Enterprise Information Management
Journal of Information Systems
Journal of Information Technology Theory and Application (JITTA)
Journal of the ACM (JACM)
MIS Quarterly Executive
-

Source: Original Figures

For this type of thesis, after selecting your target outlet, you will then need to follow the publicly available specifications of your chosen journal or conference. In addition to the formal requirements, this also applies to the content.

After writing the paper, you must submit it in the target format, supplemented by the cover page, the affidavit and other components required by the examination regulations, bound with adhesive binding to the examination office or to the chair. The requirements of chapter 1 of this guideline still will also apply.

This version of your thesis will subsequently be graded and will also form the basis for a possible final presentation, if your examination regulations provide for such a presentation. In the case of very good papers, however, there is the possibility of submitting this paper to the selected target outlet with the student author as first author and with co-authorship of the chair. Here, the chair team provides active assistance in finalizing the submitted version, in writing the necessary accompanying documents (e.g., the cover letter), and in any review process of the journal or conference.

At the end of this process, you will ideally have a scientific publication in an internationally recognized journal or conference to call your own, in addition to your thesis or grade.

Closing Remarks 1

Closing Remarks

Dear Students,

In the end, there is not much more to say than to wish you all the best for your thesis. This closing word is rather intended to point out to you once again that the list of references, the appendices and the statutory declaration must be numbered with roman numerals in analogy to the lists at the beginning of your work. For this, the page number usually must be manually adjusted to the required value. To do this, go to the header bar of the page and select the function "Format page numbers" under "Page number". In the appearing menu, you must set the correct value under "start at".

Otherwise, please consider that the purpose of scientific work is to prove that you can work independently on a specific problem with scientific methods within a given period and to present the results properly. Your supervisor has only a limited amount of time available due to his or her numerous obligations in research and teaching so that a high degree of initiative and autonomy on your part is required for the successful completion of your scientific work. This guideline is intended to make a decisive contribution to this.

We are looking forward to a pleasant and value-creating cooperation.

The faculty of the Chair of Information Systems (Digitization in Business and Society).