



VILNIUS UNIVERSITY
BUSINESS SCHOOL

**METHODOLOGICAL GUIDELINES FOR PREPARATION,
DEFENCE AND EVALUATION OF MASTER'S THESES**

For students of second cycle degree programmes of Vilnius University Business School



Vilnius, 2022

Prepared by *Dr. Danguolė Oželienė*

Reviewed by *Assoc. Prof. Dr. Elzė Rudienė*

Translated by *Lect. Leonora Norvilienė*

Vilnius University Business School

The Methodological Guidelines were approved by Resolution No. (1.2 E) 280000-TPN-1
of the Council of Vilnius University Business School of 8th of February 2022

Table of Contents

INTRODUCTION.....	4
1. GENERAL REQUIREMENTS FOR THE FINAL MASTER’S THESIS.....	6
1.1 Purpose and scope of the final master’s thesis	6
1.2 Consulting the supervisor	6
2. PREPARATION OF THE FINAL MASTER’S THESIS	8
2.1 Choice of the topic of the final master’s thesis	8
2.2 Structure of the final master’s thesis	8
3. FORMATTING THE FINAL MASTER’S THESIS.....	16
4. DEFENCE AND ASSESSMENT OF THE FINAL MASTER’S THESIS.....	19
BIBLIOGRAPHY AND A LIST OF REFERENCES	21
ANNEXES	23

INTRODUCTION

Students of Vilnius University Business School (hereinafter – VU BS) shall prepare the final thesis for obtaining a master's degree. The Master's thesis shall be started at the time set by the VU BS Study Programme Committees.

The methodological instructions for the preparation of the final master's thesis establish the procedure for the preparation, formatting and defence of the final theses prepared by the second cycle students of VU BS.

The final master's thesis is an independent analytical and original research work of a second cycle student in one of the fields of business, finance, marketing or management. The final work examines a new or newly interpreted scientific or practical problem, presents the results of empirical research performed by the student. In this work, the student demonstrates not only the knowledge and skills acquired during the master's studies in business, finance, marketing or management, but also the abilities to research, analyse and creatively solve problems relevant to science or business.

Following the examples of the world's best business schools (ESADE, ESCP, Barcelona Business School, CUHK Business School in Hong Kong, etc.), in pursuit of its vision and mission, VU BS provides master students with the opportunity to prepare a new type of thesis – a business consulting project (more information is available in Methodological Guidelines for Business Consulting Projects).

Students shall prepare their final master's thesis (hereinafter – the FMT) honestly and independently, in consultation with the supervisor, in accordance with the Law on Copyright and Related Rights of the Republic of Lithuania, the Description of Study Cycles approved by Order No. V-1017 of the Minister of Education and Science of the Republic of Lithuania of 17 November 2016 (a new version No. V-1569 of 15 October 2020), the Code of Academic Ethics of Vilnius University, the Regulations for the Preparation, Defence and Storage of Students' Academic Writing Papers of Vilnius University, the Description of the Procedure for Preparation, Defence, Assessment and Storage of Academic Writing Papers of Vilnius University Business School and the requirements provided for in the relevant study program, these Methodological Guidelines and other legal acts.

Having prepared and defended their final master's thesis, students demonstrate that the learning outcomes defined in the study program have been achieved and are awarded a master's degree in Business Administration.

These Methodological Guidelines have been prepared partly on the basis of the previous publication for students of Vilnius University Business School: Methodical Guidelines for Writing Master's Theses. Kasnauskienė, G. (2016).

1. GENERAL REQUIREMENTS FOR THE FINAL MASTER'S THESIS

1.1 Purpose and scope of the final master's thesis

The final master's thesis is an independent qualification work, the aim of which is to demonstrate the knowledge of business, marketing, finance or management acquired during studies, the ability to creatively, comprehensively, thoroughly analyse relevant scientific or business problems, apply original research methods, formulate conclusions and recommendations, and provide directions for further research.

The FMT is a research work of a student, with the original content, distinguished by the completeness and depth of the analysis. The mandatory formal requirements for the structure, formalisation, ethical citation and bibliography of the master's thesis are the same as the requirements for the first cycle final theses.

The final work shall apply a holistic or systematic approach while analysing and critically evaluated the issues related only to the problem under analysis. Unfairness of the student, plagiarism, deliberate distortion of facts shall not be allowed.

The approximate volume of the FMT, excluding lists of tables, figures and abbreviations, summaries in English and Lithuanian, bibliography and annexes, is 55–70 pages. In terms of the scope of work in specific cases of FMT, students shall consult the supervisor.

1.2 Consulting the supervisor

Students write their FMT independently, following these methodological guidelines and under the guidance of an experienced supervisor equipped with a good knowledge of the field. The work can be supervised only by a lecturer working at VU BS, except in cases when the student is studying for a double diploma (in each specific case it is necessary to apply to the Study Service).

Students choose the supervisor of the final thesis according to the topic and the lecturer's competence of the subject. The duty of the supervisor is to advise the student during the writing of the entire work: choosing the topic and drawing up the work preparation plan, searching for scientific literature sources, selecting appropriate empirical research methods and analysing the results, discussing the structure of the FMT. The supervisor advises the student according to a pre-agreed consultation schedule. Consultations are initiated by students. The supervisor advises on methodological and subject issues, critically evaluates the prepared parts

of the FMT, provides advice on how to improve the content of the work. The supervisor is not responsible for the content of the work, the accuracy of the empirical research data, does not provide prepared solutions, does not have to correct grammatical and proofreading errors, but must warn the student about the inadequate quality of the master's thesis and methodological requirements.

The student is responsible for choosing the topic of the thesis within the deadlines, while the supervisor is in charge of ensuring that the prepared thesis meets the formal requirements, is uploaded to the Vilnius University information system (hereinafter – VU IS) and defended in time. The student is responsible for the content of the work, the accuracy of the research data and facts provided, the validity of the conclusions and proposed solutions. The final assessment reflects the competence of the student, not the supervisor.

The supervisor, having received the final version of the final thesis, must evaluate the student's work and prepare a feedback. This assessment shall be introduced to the student during the defence. The decision of the supervisor to approve the FMT for defence/ not to approve the FMT for defence is formalized with the appropriate attribute selected in VU IS – the FMT approved for defence/the FMT not approved for defence.

2. PREPARATION OF THE FINAL MASTER'S THESIS

2.1 Choice of the topic of the final master's thesis

Generally, students choose FMT topics during the first semester in accordance with the procedure established by the relevant study program committee, based on a list of topics proposed by VU BS lecturers, organisations or social partners, which is approved by the relevant study program committee.

Students, in coordination with the supervisor, may propose a topic for their FMT that is relevant to the content and objectives of the study program. After formulating and coordinating the thesis topic with the supervisor, the student submits a free-form application to VU IS with an indication of a formulated topic in Lithuanian and English and the chosen thesis supervisor.

It is recommended to choose a FMT topic that is modern, interesting for the student, important for the theory and practice of management, marketing, finance or business studies, relevant to a specific business sector. When choosing a topic, the student must evaluate the possibilities of conducting empirical research and obtaining the necessary data. The topic of the FMT must correspond to the study program and the intended results of the study program.

2.2 Structure of the final master's thesis

The FMT consists of a title page, summary in English, summary in Lithuanian, content, list of tables, list of figures, list of abbreviations, introduction, theoretical work section, methodical work section, research (analytical) work section, conclusions and recommendations, references and sources, and annexes.

Title page. It contains the requisites of VU BS, the author and the FMT. An example of a title page is given in Annex 1.

Summary in English. The summary identifies the problem, the objective and the tasks, research methods used in the work, research results, conclusions and recommendations in English. The student is responsible for the summary to be written in correct academic English. It is 200–250 words long (excluding articles *a, the*, as well as prepositions *in, to, of*, etc.). If the work is written in English, a summary in English shall be provided below the title page, and a summary in Lithuanian on the next page.

Summary in Lithuanian. The summary in an impersonal form briefly describes the problem, objective, tasks and research methods used in the work, the research carried out and its results, conclusions and recommendations, provides information on the publication or application of research results.

The summary shall be presented on a separate page after the summary in English. Its length is 200–250 words. An example of a summary is provided in Annex 2.

Summary in English. The summary identifies the problem, the objective and the tasks, research methods used in the work, research results, conclusions and recommendations in English. The student is responsible for the summary to be written in correct academic English. If the work is written in Lithuanian, the summary shall be presented on a separate page after the summary in Lithuanian. It is 200–250 words long (excluding articles *a, the*, as well as prepositions *in, to, of*, etc.). If the work is written in English, a summary in English shall be provided below the title page, and a summary in Lithuanian on the next page.

Contents. The sections, subsections and subsubsections of the work shall be numbered in Arabic numerals. The page numbers of the structural parts of the content are given. Introduction, conclusions and recommendations, list of literature and references, and annexes are not numbered. The titles of the structural parts of the content must be short, clear, correspond to the content of the work, but may not duplicate the title of the FMT topic. The content must be created automatically. An example of content formatting is provided in Annex 3.

Lists of tables and figures shall be compiled if the FMT contains more than one table or figure. The number and the title of the table, and page where the table is presented shall be indicated in the list of tables; the number, title and page of the picture shall be indicated in the list of pictures.

A list of abbreviations is a list of abbreviations arranged in alphabetical order, which is required if the work uses specific terms or abbreviations in a foreign language (usually English) that do not have a clear equivalent in Lithuanian. If the use of abbreviations is low, it is sufficient to provide an explanation in the text next to the specific abbreviation (in brackets).

Lists of tables, figures and abbreviations shall be provided below the content of the work, but are not included in the content as separate structural parts.

If students wish to express their gratitude to specific persons for valuable advice in preparing the FMT, acknowledgements can be inserted between the summary and the content.

Introduction. The introduction shall include justification of the novelty and relevance of the research, formulation of the problem, subject matter, objective, tasks, chosen research methods, structure of the work, a brief identification of the difficulties and limitations of the research that the student encountered while writing the work. According to Kardelis (2017), the novelty of work shall be indicated as follows:

- for the first time, a less researched question or a problem has been summarized (a theoretical aspect);
- another area has been investigated using known research methods;
- the problem has been viewed from another perspective;
- a new research method has been used, and the obtained original data confirm, deepen and expand the already known theory or its statements or, on the contrary, refute them.

By proving the relevance, the student provides arguments regarding the importance of research, the level of depth of the research. Relevance must substantiate the problem of the FMT – a statement or question to which the student seeks an answer in the master's thesis. The introduction formulates the subject matter of the FMT, sets out the objective of the work (briefly, in one sentence and corresponding to the title of the topic). To achieve the objective, 4-5 tasks shall be set. The wording of the tasks begins with the verbs “examine”, “systematise”, “identify”, “calculate”, “evaluate”, “develop”, “compile”, “prepare”, “present”, “create” and so on. The wording of the tasks cannot duplicate the formulations of the objective or problem of the FMT. The methods used for the research are listed (a systematic analysis of scientific literature, qualitative/quantitative research, triangulation, content analysis of documents, expert evaluation, multi-criteria evaluation, cost-benefit analysis, modeling, etc.). At the end of the introduction, the structure of the work, the scientific and practical benefits of the FMT, the novelty of the research, the practical applicability and reliability of the research results obtained shall be briefly described. If a consulting business project is being prepared, in the introduction, it is necessary to briefly justify such a choice and the expected outcome for the organisation.

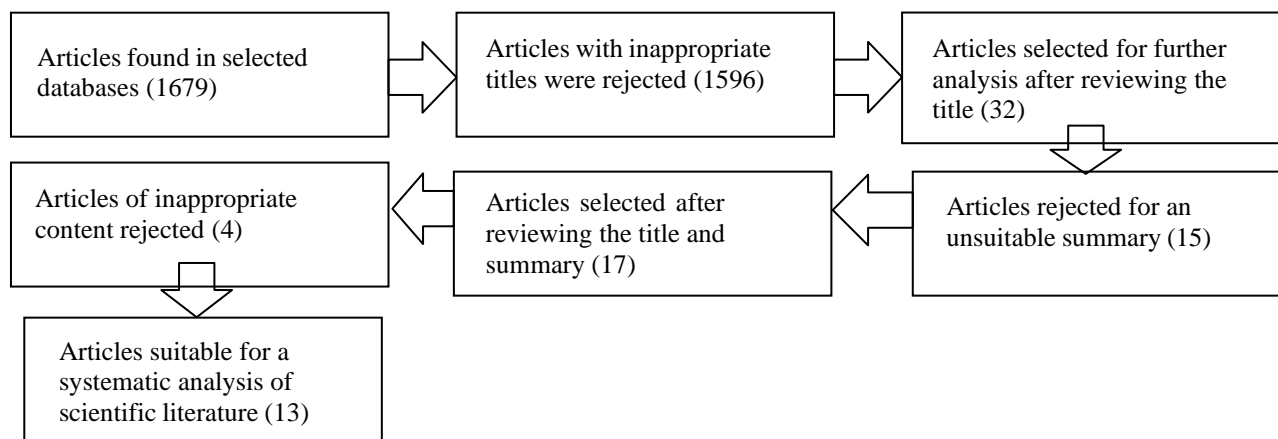
The volume of the introduction shall be 5 % of the work scope.

Theoretical part of the work. In this part, the research problem shall be analysed from a theoretical point of view, i.e. literature sources (scientific articles, monographs, scientific studies, dissertations, materials of scientific conferences) not older than 5 years shall be selected for analysis. The sources may be older if the student is studying the fundamental work of recognised, world-renowned researchers relevant to the problem at hand. However, their bibliography should include no more than 25 percent. When writing a master's thesis, it is not recommended to use textbooks, teaching aids, lecture notes, unreliable sources (e.g. Wikipedia). It is not necessary to describe and retell the results of theories or research in the theoretical part of the work. The latest knowledge or research related to the topic and problem, already systematised and summarised by the student, shall be presented here. Searching scientific articles databases is recommended by keywords (preferably in English) related to the

FMT topic and problem. The search for scientific articles shall be performed through a sequential title review, a summary review, and a full-text review. The stages of selection of scientific articles and the change of the number of articles (the number in brackets) at each stage of selection shall be presented in the figure.

Figure

Stages of selection of scientific articles



Source: Morkevičiūtė, Endriulaitienė, 2020, p. 29

The selected articles shall be carefully read and critically evaluated by the student. In preparing the FMT, the student must examine at least 50 different sources (scientific articles, statistical data, reports of previous research, legal acts, standards, etc.) related to the problem of the master's thesis. In this part of the work, the definitions, concepts, various approaches, theories, models, and innovative problem-solving methods shall be analysed by quoting or paraphrasing. New aspects of the topic under analysis shall be sought, efforts shall be made to identify an unexplored/scarcely researched aspect or area and to contribute to the study of this problem. The material under analysis must be summarized, critically evaluated, also students shall provide their personal opinion and insights. It is recommended to use tables, figures, notion/concept maps to systematise the information. When quoting, paraphrasing the thoughts of other authors, it is necessary to follow the rules of the APA bibliographic description (<https://apastyle.apa.org/learn/quick-guide-on-references>).

When searching for literature sources, it is recommended to use VU subscribed databases (*Emerald Management eJournals Collection, Business Source Complete (EBSCO), Regional Business News (EBSCO), Wiley Online Library, Science Direct: Freedom Collection, Taylor & Francis, Passport (Euromonitor International), SAGE Journals Online, Springer LINK, JSTOR, etc.*).

At the end of the section, the student must develop a conceptual model for solving the problem (see Annex 6), all the elements of which shall be described and analysed in detail.

The volume of the theoretical part shall be about 35 % of the work scope.

Methodological part of the FMT. This part describes the empirical research methods that will be used to conduct the research, based on the academic literature. The objective of the research shall be formulated, the research methodology shall be developed, hypotheses or research questions shall be formulated, the studied variables shall be named, the formula for calculating the relationships between variables shall be presented, and the reliability of the research shall be justified. Quantitative research allows to objectively determine statistical relationships between dependent variables. In the case of a qualitative study, the variables shall be evaluated according to certain defined characteristics or categories of variables.

According to Kumar (2019), the quantitative method shall be chosen when theories and hypotheses are tested. The analysis is mostly carried out by using mathematical and statistical analysis, the results are usually expressed in numbers, represented by graphs and tables. This type of research requires a large number of respondents who shall be surveyed by closed (multiple-choice) questions.

According to Creswell, J. W., Creswell J. D. (2018), the qualitative method shall be chosen when the focus is laid on the exploration of ideas or the formulation of a theory. The analysis shall be carried out by summarising, categorising, and interpreting verbal data, images or symbols. Qualitative research does not require a large number of respondents, and respondents are usually asked open-ended questions.

If a quantitative survey is planned, it is necessary to justify the size of the selected sample, obtain representative data, calculate the reliability of the survey, describe the sampling method, describe the principles of the survey instrument (e.g. a questionnaire), data processing methods (correlation, regression, cluster analysis, factor analysis, etc.). The questionnaire must be provided in the annex to the FMT.

In the case of qualitative research, the choice of research methods (interviews, focus groups, observation, case studies, analysis of secondary sources, etc.) the sampling method and processing of results (content analysis, description of phenomena, etc.) shall be justified. The stages of the quantitative and qualitative research process are presented in Annexes 4–5.

In the master's thesis it is advisable to apply the method of triangulation - to integrate both qualitative and quantitative methods in solving the problem. The integration of different methods allows for a deeper and more comprehensive study of the problem under investigation.

Multi-criteria assessment methods are often used to analyse complex social phenomena and make managerial decisions. The stages of the multi-criteria assessment are presented in Annex 7, and the variety of methods is presented in Annex 8.

These methods allow the researchers to evaluate the alternatives to the solutions or choose the best of several alternatives. Expert judgment may be used when assessing the significance of criteria/factors. When planning an expert evaluation, it is necessary to answer the following questions: how many experts must be involved in the research, how to select them, what criteria would indicate the competence of the experts and how to interpret the received evaluation. When choosing an expert assessment, it is necessary to calculate the concordance of opinions (concordance coefficient), which shows more or less uniformity of expert opinions.

The table shows the process of calculating the concordance coefficient.

Table 1

The process of calculating the concordance coefficient

Operations	Calculation formulas
Calculation of the sum of the ranks	$e_i = \sum_{j=1}^r e_{ij}$
Calculation of the deviation \check{e} from the sum of the squares of the total mean	$S = \sum_{i=1}^m (e_i - \bar{e})^2$
Calculation of the overall mean	$\bar{e} = \frac{\sum_{i=1}^m e_i}{m} = \frac{\sum_{i=1}^m \sum_{j=1}^r e_{ij}}{m}$, where m – number of factors
Calculation of the concordance coefficient	$W = \frac{12S}{r^2 m (m^2 - 1)}$, where S – rank sums of each kiekvieno i - criterion, m – number of factors, r – number of experts

Source: compiled by Oželienė according to Ginevičius 2008)

When analysing the chosen topic and solving the problem, it is necessary to choose such research methods that would correspond not only to the title of the topic, but also to the objective possibilities of the students.

The volume of the methodological part shall be about 10 % of the work scope.

Research (analytical) part of the FMT. In this part the student shall describe and interpret the results of the research, which were obtained by applying the methods selected in the methodological part of the work, provides practical solutions to the problem, the results of calculations. It is recommended to process quantitative research data with SPSS, MS Excel or other statistical software (e.g. statistical analysis software R or Python).

Qualitative data shall be coded, categorised, interpreted, while audio recordings shall be transcribed. Computer programs ATLAS.ti, MAXQDA, NVivo, etc. can be used for data processing. The research results shall be visualised by presenting them in tables and figures. If the figures show the results of an empirical study, it is necessary to clearly name the variables, indicate the units of measurement or scales, the names of the coordinate axes. In this section, it is recommended to provide only essential calculations, and all intermediate calculations shall be presented in the annexes.

If formulas are used in the work, they must be created using *MS Word Insert* → *Equation* function. All formulas shall be numbered and the symbols explained below each formula, for example:

$$(1) I_{DP} = \sum a_d I_d, \quad (1)$$

where I_d - dimensional indices, a_d - dimensional significance, I_{DP} - integrated sustainable development index.

At the end of the section, the results of the research shall be interpreted by comparing them with the results analysed in the theoretical part of the work and the solution of the problem raised in the introduction of the FMT shall be proposed.

The scope of the research (analytical) part shall be 45 % of the work scope. All parts of the FMT (“Theoretical Part”, “Methodological Part”, “Research (Analytical) Part”) must be logically related and have specific titles that correspond to the topic of the work and the problem under consideration. Each section shall be concluded with a brief (one-paragraph) summary.

Conclusions and recommendations. This section shall provide the main conclusions and recommendations. The conclusions must be in line with the objectives set out in the introduction. The number of conclusions must be no less than the number of objectives. The conclusions shall be numbered. Conclusions should not contain visual information. The conclusions shall be followed by recommendations on how to address the problem under

analysis. Recommendations must be research-based, specific and implementable. Theoretical recommendations should indicate how and in what direction the research could be developed in the future. This would help researchers who continue their research on this topic in the future to avoid mistakes. Practical recommendations emphasise the peculiarities of practical application of solutions in organisations, the relevant business sector or specific individuals (managers, consumers, customers). Recommendations shall be formulated in a discrete manner, categorical statements avoided.

The FMT conclusions and recommendations shall cover 5 % of the work scope.

Bibliography and a list of references. At the end of the FMT there is a list of used literature and sources (see Annex 9), which includes only those sources that have been cited or mentioned in the text. It is highly important that the list is edited correctly and complies with the rules of the APA bibliographic description (<https://apastyle.apa.org/learn/quick-guide-on-references>). The bibliography and a list of references shall present bibliographic descriptions in alphabetical order, making inverted indent of 0.8 cm, the bibliographic descriptions shall be numbered. The list of literature should be compiled automatically using the programs *Mendeley*, *RefWorks*, *Zotero*.

Annexes. The annexes shall present large-scale (more than 1 page) tables, detailed calculations, questionnaires used in the study, transcribed texts, processing schemes of the results, etc. Annexes shall be provided only numbered, they must have a title and be discussed in the text. The scope of annexes is not limited.

After writing the FMT, it is recommended to check that it does not contain grammatical, stylistic errors, that it is cited ethically, and that the tables and figures are formalized according to the methodological requirements.

Before defence of the FMT, the work independence check shall be performed in the VU system. It is not allowed to defend plagiarized or otherwise fraudulently prepared theses in the FMT Defence Commission.

3. FORMATTING THE FINAL MASTER'S THESIS

The FMT must be written in correct academic English language. Avoid writing in a publicist style, express ideas in a scientific style, and present the MBD without mistakes in grammar, style, linguistic culture and proofreading (Girnienė et al., 2018). The requirements for formatting the FMT according to the adapted APA style are given in the table.

Table 2

Requirements for formatting the FMT

	Description
Font	Times New Roman, 12 pt
Line spacing	1.5
Text alignment	Justify
Margins	- normal, 2.54 cm on all sides (left, right, top, bottom); - the first line of the paragraph is indented 1.27 cm from the left edge of the text field.
Highlighting of information	- <i>italic</i> , bold or <i>underline</i> text formatting; - letter thinning function.
Writing most important information	- <i>Times New Roman</i> 10 pt font, indented 1.27 cm from the left margin; - citing the most outstanding authors in the field of science or the results of a previously conducted and recognized study.
Page numbering	- Arabic numerals in the upper right-hand corner of the page, without dots or dashes; - absolutely all pages of the work are numbered and the numbers start from the title page. - the numbering is continuous, including the literature list and all annexes.
Numbering of structural parts	- Arabic numerals; - each smaller part (subsection, sub-subsection) must have the number of the relevant work section, extended by an additional digit separated by a period (for example, 3.1; 3.1.1).
Writing section titles	- in bold, capital letters <i>Times New Roman Normal</i> , 14 pt, Bold; - no punctuation marks are placed at the end of section names and other structural elements.
Arrangement of section titles	- starting from the left edge of the page, without indentation; - section titles may not contain words in parts; - it is not possible to write the title on one page and start the text on another.
Writing parts of the text	- by inserting a one-line space and a 1.27 cm indent of the first line of text from the left margin of the page (Paragraph / Indentation / left / by 1.27).
Writing subsections	- immediately after the text, omitting one line.
Writing subsection titles	- starting from the left edge of the page, without indentation; - <i>Times New Roman Normal</i> 12 pt bold Bold, lowercase, starting with a capital letter; - no punctuation marks shall appear at the end of the section titles.

Writing captions for tables and figures	- on the same page as the tables or figures presented (see Annexes 10, 11).
Numbering and writing tables	<ul style="list-style-type: none"> - the number is given in the order of the table in the text; - the number is written above the table heading, in the left corner in Arabic numerals and the word "table" (e.g. Table 1) after a one-character space; - if there is only one table in the text, only the word "Table" shall appear on the left-hand side of the page above the table heading; - if there are several logically related tables in a row in the text, then the tables can be numbered by adding a letter to the table number to emphasize the continuity of the data they contain (eg Table 1, Table 1a, Table 1b); - the title of the table is written in italics (lowercase, starting with capital) above the table and is written starting from the left edge of the page. The title should consist of key words combined into a meaningful sentence and reflecting the content of the table. When designing the table, it is necessary to explain all abbreviations (except for the generally accepted ones), indicate the units of measurement (see the example of the table in Annex 10); - when formatting tables, it is recommended to use as few lines, dots, dashes or colours as possible; - <i>Times New Roman Normal</i> 10 or 12 pt font; - line spacing - 1.5; - the margins depend on the size of the table, but must be at least 2.54 cm; - care should be taken not to split the table. If necessary, the table can be moved to another page "Continuation of Table 1"; - Each table is followed by the name of the source and, where appropriate, a page. -if the table is compiled by the author of the work, it is written "compiled by the author". If the source of the table is an article, book or other bibliographic source, the author and year of that source shall be indicated. If the table is compiled by the author, but based on a particular source, it is necessary to indicate the original source. For example, "compiled by the author based on Smith (2018)". If several authors have been relied upon, they are separated by a semicolon, for example, "compiled by the author on the basis of Čekanavičius et al. (2021); Samuel et al. (2020)"

The last pages of the sections must be at least 60% full. Each section of the FMT begins on a new page, and subsections and sub-subsections begin on the same page. The volume of the subsection cannot be less than 3 pages, the subsection – less than 2 pages.

The student – the author of the FMT is personally responsible for the authorship of the work and proper citation of the sources used. It is recommended to cite two or three sentences, quoting them (direct citation) or without punctuation (side citation), giving references to the sources included in the literature list.

Clause 19 of the Code of Academic Ethics of Vilnius University indicates the signs of plagiarism: a work is considered unfairly prepared (plagiarism) if the thoughts of another author are copied/rewritten, without quoting them and without indicating the source, another author's text is paraphrased in the student's own words or research conducted by another author is used without reference to the source (VU Code of Academic Ethics, 2018). A thesis is considered plagiarised if the total number of overlaps with other works in the verification system is 15% or more, and with one source - 5% or more, excluding overlaps that are not considered plagiarised (list of references, proper references to sources, citations, general knowledge, etc.) (Dikčius, Kasnauskienė, 2019). It is recommended to avoid self-plagiarism when one's own work or part of it is used without indicating the original source. Fraud by providing incorrect data, calculations or references to non-existent sources is not allowed.

The APA (*American Psychological Association*) citation style shall be used. When quoting or paraphrasing the thoughts of another author, reference to the literature source included in the list of literature is necessary. For citation, it is recommended to use the following tools: *Mendeley*, *RefWorks*, *Zotero*.

The citation of the text is given in the text (or in a table, figure, footnote or annex) and it indicates the author of the cited work and the date of publication of the source. The name of the cited author (s) may be given at the end of the sentence "... (Peterson, 2019)" or inserted in the text "Peterson (2019) claims...". If a work by two authors is cited, the names of both authors are indicated at the end of the sentence "(Peterson and Johnson, 2019)" or inserted in the text "Peterson and Johnson (2019) states....". When quoting a work prepared by three or more authors, the name of the first author is indicated and "et al." is added: (Peterson et al., 2019) or "Peterson et al. (2019) state....".

Only works and thoughts read by students are cited. It is recommended to cite primary sources and only in rare cases, if not possible, secondary sources. For example, if the student read a study by Lyon et al. (2014), citing Rabbitt (1982), and there was no opportunity to read Rabbitt's work, in such cases Rabbitt's work shall be cited as the primary source and Lyon et al. study shall be given as the secondary source: "(Rabbit, 1982, as cited in Lyon et al., 2014)". Only Lyon et al. work shall be included in the list of literature.

It is not allowed to use online sources that can no longer be found. Each cited source must be included in the list of literature sources, and conversely, every source in the literature list must be cited in a text (table, figure, footnote, or annex).

4. DEFENCE AND ASSESSMENT OF THE FINAL MASTER'S THESIS

When completed, the final master's thesis shall be defended publicly by the students in the meeting of the commission for the defence of the final master's thesis. The order of defence of the FMT is described in the Vilnius University Business School's procedure for preparing, defending, evaluating and storing Written Papers (hereinafter VU BS Written Papers procedure). A student is allowed to defend a master's thesis if the thesis meets the following requirements:

- prepared in accordance with the VU BS Written Order of Procedure for Academic Writing Papers and the methodological instructions for the preparation of the FMT;
- prepared without violating the VU Code of Academic Ethics;
- uploaded to the VU IS system within the set deadlines.

The student must submit the final version of the thesis to the supervisor no later than 30 calendar days before the day of the thesis defence. The supervisor selects the attribute "approved for defence" when confirming that the prepared master's thesis meets the formal requirements.

The final FMTs shall be reviewed. The reviewer shall submit a review in the specified form. A copy of the review shall be sent to the student by e-mail address provided by the University no later than 24 hours before the meeting of the defence commission where the FMT will be defended.

The FMT defence consists of a presentation of the work and the student's answers to the questions. All students who have prepared their FMT must participate in the defence of the work in the commission meeting.

An important part of defending a master's thesis is a presentation prepared by MS Power Point or another program for presentations, which lasts up to 10 minutes. The presentation must include the following parts:

- title, relevance, novelty, problem, goal, tasks, research methods (up to 1 minute);
- conceptual problem solving model (up to 1 minute);
- research methodology (up to 1 minute);
- main results of the research (5–6 minutes);
- conclusions and recommendations (1–2 minutes).

The VU BS slide template is recommended for the presentation of the FMT. It is recommended to provide information in figures, diagrams, tables. The recommended text size

on slides is 24, 26 or even 36 pt. No more than 7 lines of text per slide, no more than 7 words per line. The text from the FMT shall not be copied to be used in slides.

When presenting their work, students must demonstrate an understanding of the research problem and, based on the findings of the research he/she has carried out, shall provide reasonable solutions to the problem.

The opponent coordinating the FMT presentation process critically evaluates all aspects of the work and its presentation, pointing out the advantages and inaccuracies of the FMT.

The FMT Defence Commission assesses the defended work on a ten-point scale (5–10 defended, 1–4 not defended), taking into account the assessment criteria.

It is not allowed to repeatedly defend the final work that has been negatively assessed/not defended in the commission. Appeals regarding the assessment of the final master's thesis are not accepted.

BIBLIOGRAPHY AND A LIST OF REFERENCES

1. American Psychological Association. (2020). *Publication Manual of the American Psychological Association (7th ed.)*. <https://doi.org/10.1037/0000165-000>
2. Bradley, L., Noble, N., & Hendricks, B. (2020). The APA publication manual: Changes in the seventh edition. *The Family Journal*, 28(2), 126–130.
3. Creswell, J. W., Creswell J. D. (2018). *Research design: qualitative, quantitative, and mixed methods approaches*. 5th ed, London: SAGE.
4. Dikčius, V., Kasnauskienė, G. (2019). *Magistro baigiamojo darbo metodiniai reikalavimai*. https://www.evaf.vu.lt/dokumentai/MAGISTRO_BAIGIAMOJO_DARBO_METODINIAI_REIKALAVIMAI_2019.pdf
5. Girnienė, I., Grigas, V., Mažylė, J., Petreikis, T., Petrikas, M., & Stonkienė, M. (2018). *Rašto darbų metodiniai nurodymai [Elektroninis išteklius]*. Vilniaus universitetas: Vilniaus universiteto leidykla.
6. Kardelis, K. (2017). *Mokslinių tyrimų metodologija ir metodai*. Mokslo ir enciklopedijų leidybos centras.
7. Kasnauskienė, G. (2016). *Magistro darbų rašymo metodiniai nurodymai*. Vilniaus universiteto Verslo mokyklos studentams. <http://www.vu.lt/uploads/pdf/metodiniai%202016/Magistrinio%20metodiniai%20nurodymai.pdf>
8. Katinienė, A. (2018). *Organizacijos darbuotojų žinių sinergijos vertinimas*. (Daktaro disertacija). Vilniaus Gedimino technikos universitetas.
9. Kumar, R. (2019). *Research Methodology: Step-by-step guide for beginners*. <https://corladancash.com/wp-content/uploads/2020/01/Research-Methodology-Ranjit-Kumar.pdf>
10. Lee, E. (2020). Environmental Regulation and Financial Performance in China: An Integrated View of the Porter Hypothesis and Institutional Theory. *Sustainability*. 1–22, 10183 doi:10.3390/su122310183.
11. Morkevičiūtė, M., Endriulaitienė, A. (2020). Psichosocialinės darboholizmo pasekmės: sisteminė literatūros analizė. *Visuomenės sveikata*, 2(89), 27–35. [https://www.hi.lt/uploads/pdf/zurnalo_vs%20info/2020%202/Vs%202020%202\(89\)%20LIT%20A%20Darboholizmas.pdf](https://www.hi.lt/uploads/pdf/zurnalo_vs%20info/2020%202/Vs%202020%202(89)%20LIT%20A%20Darboholizmas.pdf)

12. Oželienė, D. (2019). *Įmonės darnios plėtros veiksnių modeliavimas*. (Daktaro disertacija). Vilniaus Gedimino technikos universitetas.
- 13 Oželienė, D., Drejeris, R. (2017). Darnios plėtros aplinkosaugos komponento raiška įmonės veikloje. *Mokslas – Lietuvos ateitis* “konferencija ”Verslas XXI amžiuje, 1–10. DOI: 10.3846/vvf.2017.009.
14. Studijų pakopų aprašas (2016). Lietuvos Respublikos švietimo, mokslo ir sporto ministerija.
<https://eseimas.lrs.lt/portal/legalAct/lt/TAD/d32e4f70ad0811e68987e8320e9a5185?jfwid=-9dzqntza2>
15. Tamošiūnas, A. (2013). *Vadybos funkcijos*. Vilnius: Technika.
16. Vilniaus universitetas. (2018). Vilniaus universiteto Akademinės etikos kodeksas.
https://www.vu.lt/site_files/Senatas_Taryba/Senatas/2018-04/Akademines_etikos_kodeksas.pdf
17. Zimaitis, I. (2021). *Kursinio darbo ir verslo projekto rašymo metodiniai nurodymai*.
https://www.vm.vu.lt/external/vm/files/PDF/studentams/VU_VM_Kursinio_darbo_metodiniai_nurodymai.pdf
18. Žemaitis, E. 2019. *Inovacijos ir tarptautiškumas plėtojant aukštųjų technologijų sektorių*. (Daktaro disertacija). Vilniaus Gedimino technikos universitetas.

ANNEXES

Annex 1

Title page for Final Master's Thesis

**VILNIUS UNIVERSITY
BUSINESS SCHOOL**

INTERNATIONAL BUSINESS FINANCE PROGRAMME

(or the title of any other study programme)

Student's name, surname

Student's name, surname (if the thesis has been written by several students)

THE FINAL MASTER'S THESIS

<i>TITLE</i> <i>IN THE LITHUANIAN LANGUAGE</i>	<i>TITLE</i> <i>IN THE ENGLISH LANGUAGE</i>
---	--

Student _____
(signature)

Supervisor _____
(signature)

Name, surname, academic title, scientific
degree of the supervisor

Vilnius, 202__

Annex 2

*Example of a summary in Lithuanian***SUMMARY**

VILNIUS UNIVERSITY BUSINESS SCHOOL

..... STUDY PROGRAMME

STUDENT'S NAME, SURNAME

TITLE OF THE MASTER'S THESIS

Supervisor – abbreviation of the academic title and degree, name surname

Master's thesis was prepared in Vilnius, in 202_

Scope of Master's thesis – _____pages.

Number of tables used in the FMT - _____pcs.

Number of figures used in the FMT - ____ pcs.

Number of bibliography and references - _____ pcs.

The FMT described in brief:

.....

Problem, objective and tasks of the FMT:

.....

Research methods used in the FMT:

.....

Research and results obtained:

.....

Conclusions of the FMT:

.....

Information about the publication of FMT results or adaptation for publication

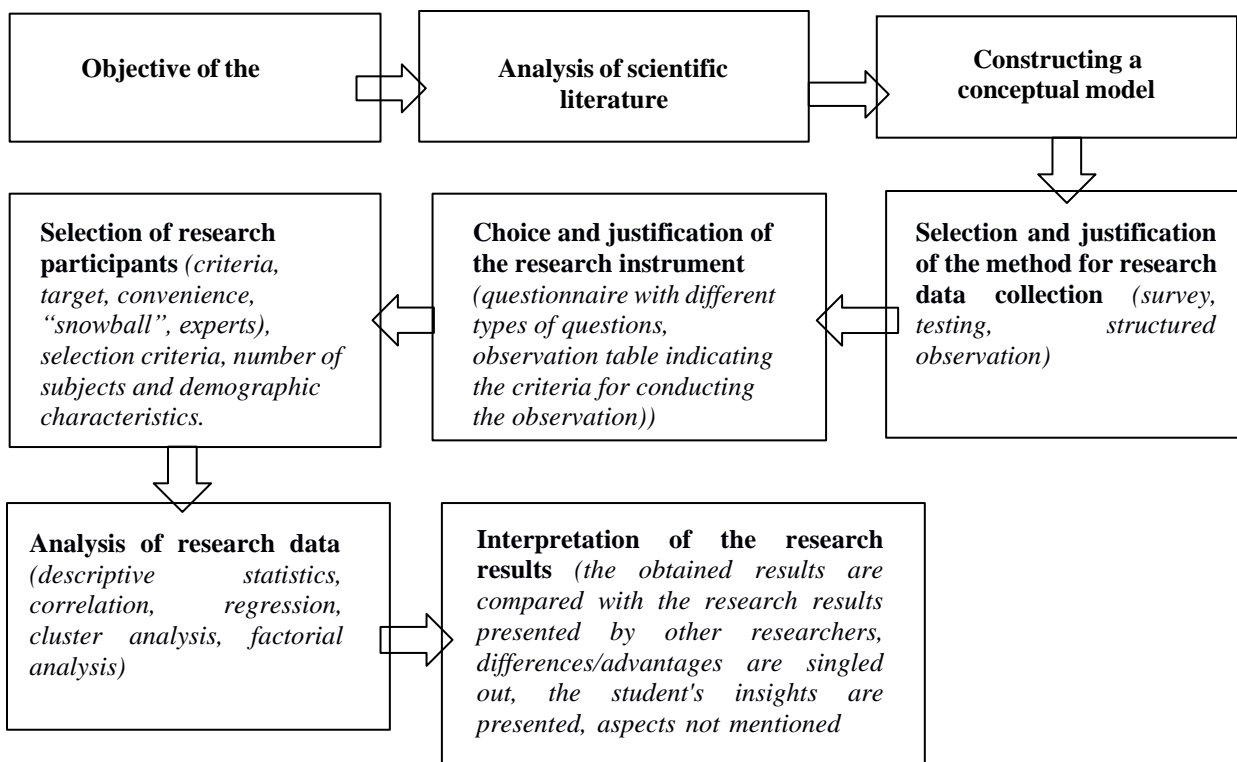
.....

Annex 3

*Example of a Table of Contents***TABLE OF CONTENTS**

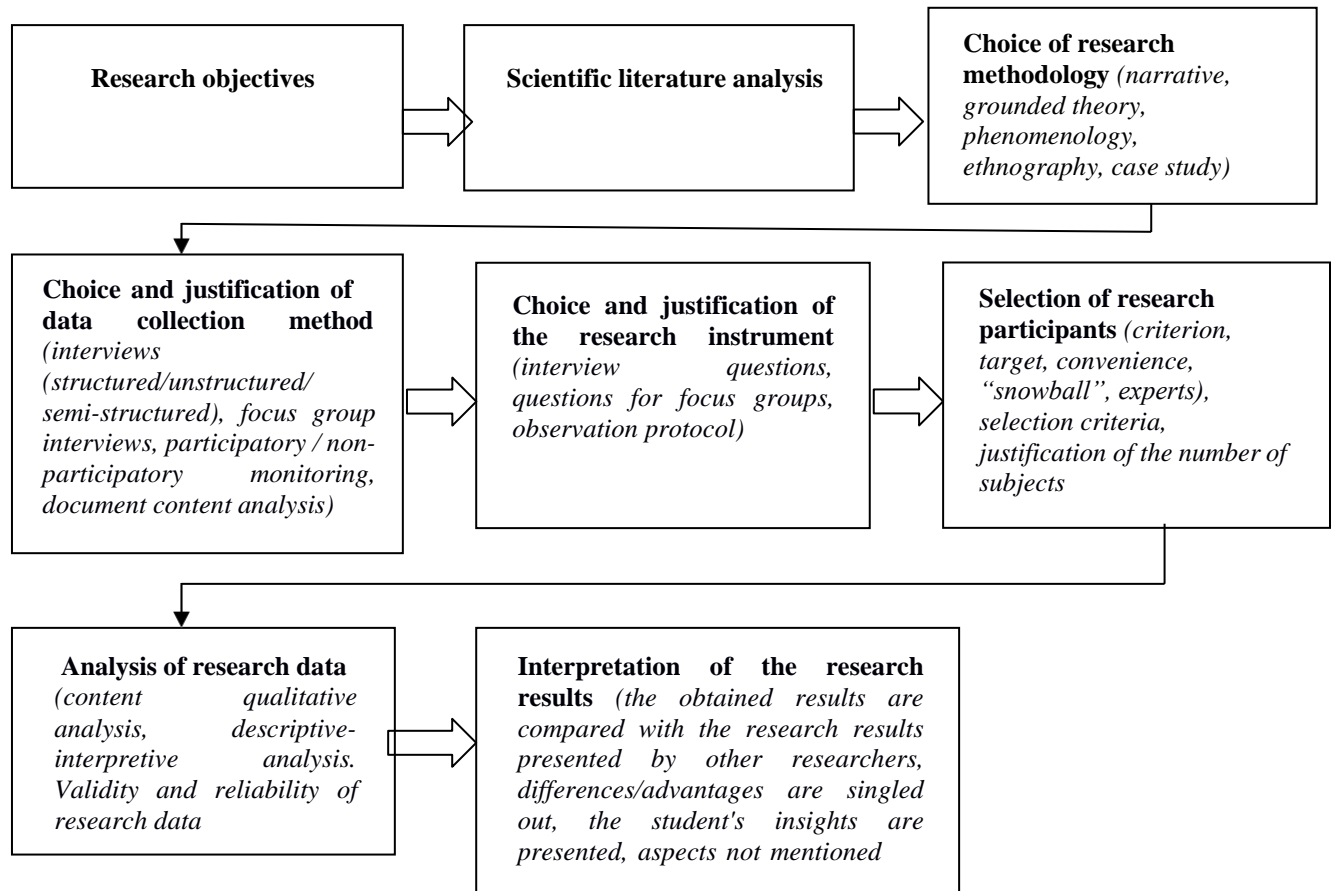
INTRODUCTION.....	5
1. SECTION ONE (A THEORETICAL PART).....	7
1.1. Subsection One of Section One	7
1.1.1. Subsubsection	9
1.1.2. Subsubsection	11
1.1.3.	13
1.2. Subsection Two of Section One.....	15
1.2.1. Subsubsection	15
1.2.2. Subsubsection	17
1.2.3.	19
2. SECTION TWO (A METHODOLOGICAL PART)	24
2.1. Subsection One of Section Two.....	24
2.1.1. Subsubsection	26
2.1.2. Subsubsection	28
2.1.3.	29
3. SECTION THREE (A RESEARCH PART).....	30
3.1. Subsection One of Section Three.....	30
3.1.1. Subsubsection	32
3.1.2. Subsubsection	36
3.1.3.	38
3.2. Subsection Two of Section Three	40
3.2.1. Subsubsection	44
3.2.2. Subsubsection	48
CONCLUSIONS AND RECOMMENDATIONS.....	52
BIBLIOGRAPHY AND A LIST OF REFERENCES.....	55
ANNEXES	60

Annex 4

Example of a Figure*Stages of the Quantitative Research process*

Source: compiled by the author based on Kumar, 2019

Annex 5

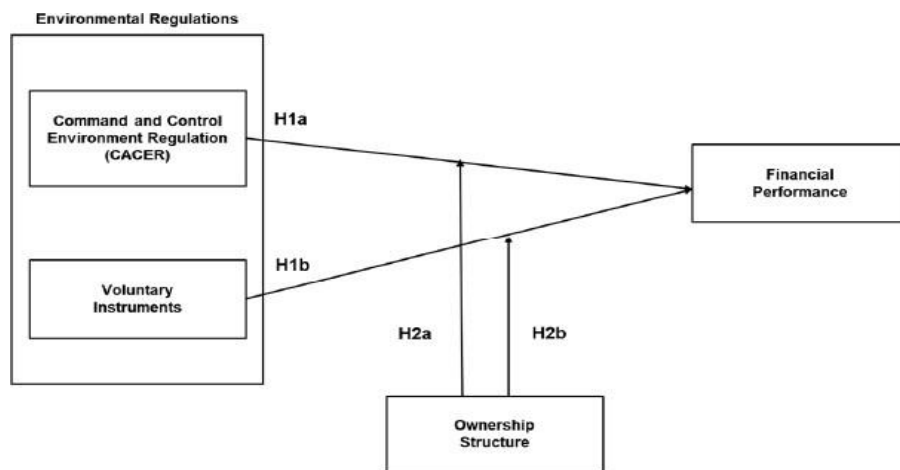
Figure*Stages of the Qualitative Research process*

Source: compiled by the author based on Kumar, 2019

Annex 6

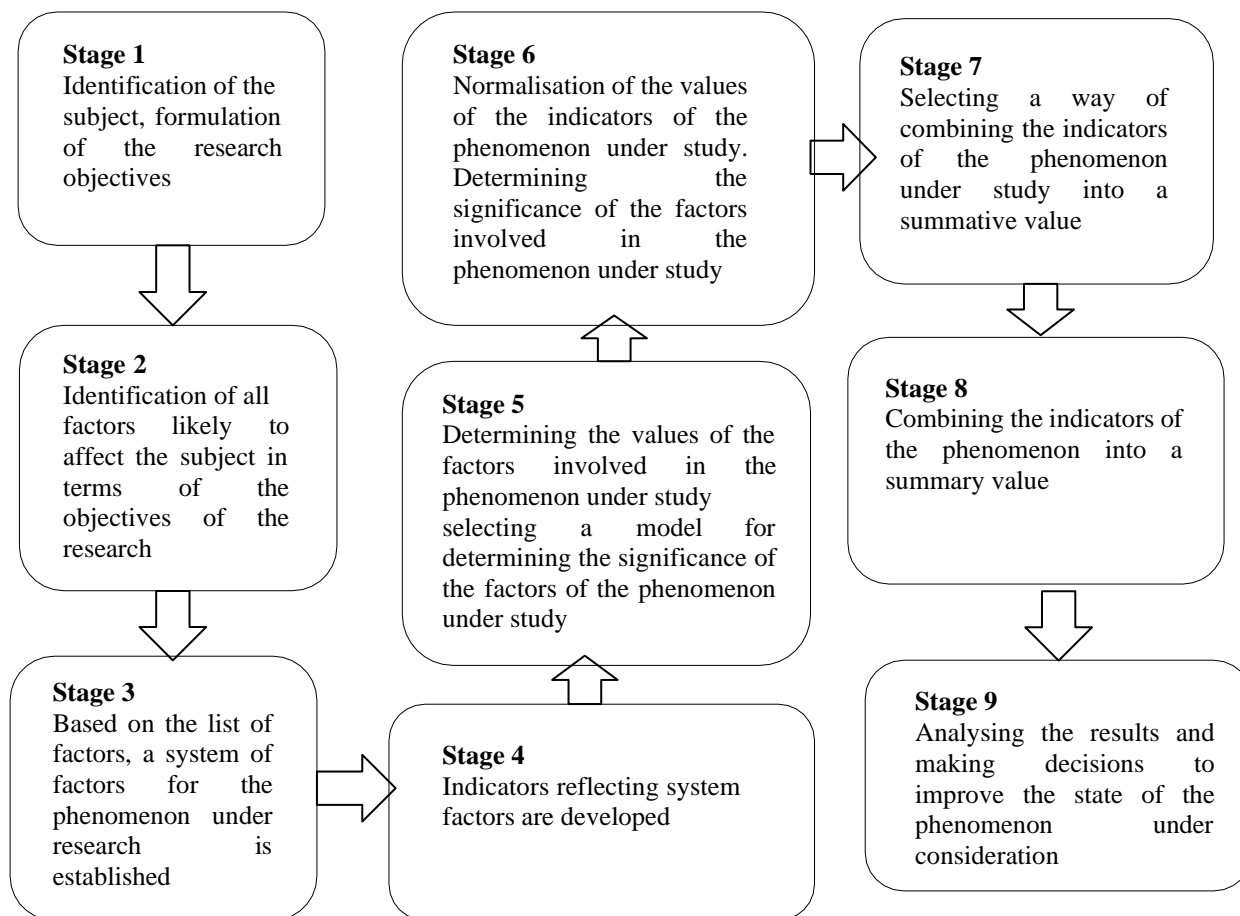
Figure

Example of a conceptual model



Source: Lee, 2020

Annex 7

Figure*Multi-criteria assessment stages*

Source: compiled by Katinienė, 2018 based on Andriušaitienė, 2008

Annex 8

Table*Variety of multicriteria methods*

Method	Description	Application
RS (<i>rank sum</i>)	Rank sum for each criterion is calculated	To solve tasks of ranking of indicators
GV (<i>geometric mean</i>)	Geometric means of the normalized values for all criteria are determined	To solve tasks of ranking of indicators
SAW (<i>Simple Additive Weighting</i>) MacCrimon (1968)	Simple Additive Weighting method	To solve tasks of comparison of alternatives and ranking of indicators
COPRAS (<i>Complex Proportional Assessment of Alternatives</i>) Zavadskas <i>et al.</i> (1994), (2009), Ginevičius <i>et al.</i> (2013).	Complex Proportional Assessment of Alternatives method. Multicriteria complex proportional assessment method.	To solve tasks of comparison of alternatives
VIKOR (<i>Vise Kriterijumska Optimizacija i Kompromisno Resenje – in Serbian</i>) Opricovic (1998)	Tiesiniu normalizavimu paremtas Method based on multi-criteria decision-making technique and measuring distances from the hypothetical best alternative.	To solve tasks of comparison of alternatives
TOPSIS (<i>Technique for the Order Preference by Similarity to Ideal Solution</i>) Hwang, Yoon (1981)	Ranking by similarity to ideal solution. Proximity to the ideal point method.	Finding alternatives to proximity to ideal solution
ELECTRE (<i>ÉL</i> imination <i>et</i> <i>Choix Traduisant la RE</i> alité (<i>EL</i> imination <i>Et</i> <i>Ch</i> oice <i>Tr</i> anslating <i>RE</i> ality)), Roy (1991)	Preference comparison based methods that eliminate inferior alternatives	To solve the tasks of indicator selection
PROMETHEE	Preference comparison	Alternative comparison

Source: compiled by Oželienė, 2019 based on Baležentis A., Baležentis T. 2011; Kareivaitė 2012; Vinogradova 2015; Katiniienė 2018.

Annex 9

*Examples of describing Bibliography and a List of References***Books and e-books**

1. Greetham, B. (2019). *How to write your undergraduate dissertation*. Red Globe Press.
2. Rogoff, B. (2003). *Cultural nature of human development*. Oxford University Press.
3. Svedsen, S., & Lober, L (2020). *The big picture/Academic writing: The one-hour guide* (3rd digital ed.) Hans Reitzel Forlag. <https://thebigpicture-academicwriting.digi.hansreitzel.dk/>
4. Atkočiūnienė, Z., Janiūnienė, E., Matkevičienė, R., Pranaitis R. ir Stonkienė, M. (2009) *Informacijos ir žinių vadyba verslo organizacijoje*. Vilniaus Universiteto Leidykla.

Edited or compiled book

1. Joffer, E.T. (Ed.). (2018). *The magic of business* (2nd ed.). New York, NY: Publishing House.
2. Lutkevičius, L. (Sud.). (2015). *Vartotojų elgsena elektroninėje erdvėje*. Vilniaus Universiteto Leidykla.
3. Arbulevičiūtė, B. (Red.). (2016). *Ekonomikos politika. Globalizacijos iššūkiai*. Vilniaus Universiteto Leidykla.

Sections of individual authors in books

1. James, E. N. (2020). The cognitive behaviour basics. In E.T, Johnsons (Ed.). *A guide cognitive behaviour* (2nd ed., p. 40–55). Goldsmith.
2. Davis, M. H. (2005). A “constituent” approach to the study of perspective taking: What are its fundamental elements? In B. F. Malle & S. D. Hodges (Eds.), *Other minds: How humans bridge the divide between self and others* (p. 44–55). The Guilford Press.
3. Ramanauskas, R. (2019). Žaidimų teorija. Iš L. Kardauskis (Sud.), *Ekonomikos pagrindai* (p. 186–197). Vilniaus universiteto leidykla.

Articles in scientific journals

1. Brownell, C. A. (2016). Prosocial behavior in infancy: The role of socialization. *Child Development Perspectives*, 10(4), 222–227. <https://doi.org/10.1111/cdep.12189>
2. Hatane, S. E., Nathania F., Lamuel J., Darusman F., & Devie. (2020). Intellectual Capital Disclosures and Corporate Governance in Gaining the Firms’ Non-Discretionary Profits

and Market Value in ASEAN-5. *Organisations and Markets in Emerging Economies*, 11(2), 276–304. <https://doi.org/10.15388/omee.2020.11.20>

3. Jerrentrup, A., Mueller, T., Glowalla, U., Herder, M., Henrichs, N., Neubauer, A. & Schaefer, J. R. (2018). Teaching medicine with the help of “Dr. House” *PLoS ONE*, 13(3), Article e0193972. <https://doi.org/10.1371/journal.pone.0193972>

Articles in conference proceedings

1. Duckworth, A. L., Quirk, A., Gallop, R., Hoyle, R. H., Kelly, D. R., & Matthews, M. D. (2019). Cognitive and noncognitive predictors of success. *Proceedings of the National Academy of Sciences, USA*, 116(47), 23499-23504. <https://doi.org/10.1073/pnas.19105101116>
2. Kushilevitz, E., & Malkin, T. (Sud.) (2016). *Lecture notes in computer science: Vol. 9562. Theory of cryptography*. Springer. <https://doi.org/10.1007/978-3-662-49096-9>

Articles and other sources on the Internet or other electronic media

1. Vertybinių popierių komisija. (2016, spalio 15 d.). *Įvairios investavimo priemonės ir jų rizika*. <http://www.vpk.lt/svietimas/index.php?fuseactio=products.view&mid=14&cid=135&id=38>.
2. Alexson, J.B. (2017, gegužės, 23 d.). *The fundamentals of economics*. <https://www.fundamentalsofeconomics.com>
3. International Organisation for Standardization. (2018). *Occupational health and safety management systems-Requirements with guidance for use* (ISO Standard No.45001:2018). <http://www.iso.org/standard/63787.html>

Sources of statistical information, databases

Bank of America (2020, balandžio 22 d.). *The unemployment rate*. https://www.bankofamerica.com/unemployment_rate

Dissertations, master's theses

1. Miranda, C. (2019). *Exploring the lived experiences of foster youth who obtained graduate level degrees: self-efficacy, resilience, and the impact on identity development* (Publication, No 27542827) [Doctoral dissertation, Pepperdine University]. PQDT Open. <https://pqdtopen.proquest.com/doc2309521814.html?FMT=AI>

2. Blare, A. (2020). *The impications of productivity* (Master dissertation). Auckland University of Technology.
3. Yu, S. F. (2004). *Effects of progressive muscle relaxation training on psychological and health-related quality of life outcomes in elderly patients with heart failure* (Publication No. 3182156) [Doctoral dissertation, The Chinese University of Hong Kong]. ProQuest Dissertations and Theses Global.
4. Petrulaitis, A. (2019). *Faktoriai, lemiantys ketinimą pirkti internetu pakartotinai*. (Daktaro disertacija). Vilniaus universitetas.

Annex 10

Example of a table

Table 1

Average turnover of a high-tech enterprise, mln. EUR

Countries	2012	2013	2014
Denmark	20.8	21.3	24.7
Germany	13.8	13.6	13.7
France	21.7	22.2	21.5
United Kingdom	6.6	6.1	6.3
Lithuania	1.9	2.1	2.3

Source: Žemaitis, 2019.

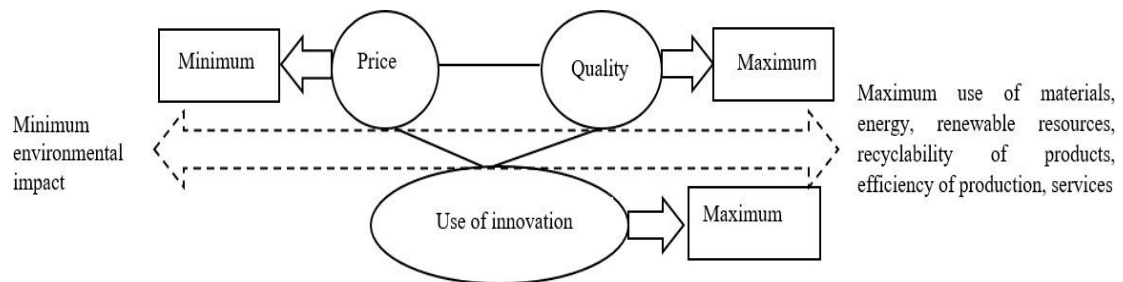
Table 2

SWOT areas of the organisation

SW areas of the organisation	OT areas of the organisation
<p><i>Market structure.</i> Products, substitutes, product characteristics, consumer structure, purpose of products.</p> <p><i>Growth and profitability.</i> Business history, profitability, liquidity, position in the product life cycle.</p> <p><i>Technology.</i> Basic technologies, innovations (technical, managerial, informational, scientific, knowledge).</p> <p><i>Investments.</i> Market entry costs, exit costs, degree of obsolescence of equipment.</p> <p><i>Marketing.</i> Sales and distribution methods, the importance of services.</p> <p><i>Competition.</i> Market share, competitors' advantages.</p> <p><i>Trends.</i> Demand, market structures, technologies.</p>	<p><i>Product market.</i> Size, share, segment, trends, distribution channel structure, competitive position.</p> <p><i>Technologies.</i> Research, development, technology substitutes.</p> <p><i>Finance.</i> Profitability in the sector, trends, earnings per share, company acquisition threats and opportunities.</p> <p><i>Social, economic, environmental, political areas.</i> Inflation, exchange rates, unemployment rate, public policy, political stability, demographic change, regulation of the business environment, barriers to market entry and exit, dynamics of global warming.</p>

Source: Tamošiūnas, 2013.

Annex 11

Figure*Determinants of sustainable technology selection*

Source: Oželienė, 2019.