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Guide for the drafting and defense of the Master of Science Thesis

Bocconi

Information valid starting from the July 2017 graduation session

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1. Introduction

This guide is intended for Master of Science students who aim to graduate starting from the July 2017 graduation session, irrespective of the year in which they enrolled on the study program[1].

This guide contains information on how best to organize the various activities to be completed in order to present a written paper of sufficient quality and prepare effectively for the oral presentation. For each course of study, additional information may be provided, depending on the particular requirements of the subjects studied. Such information will be published by the individual Program Directors and will, in any case, be discussed during meetings between the students and their Advisor Professor.

Information concerning the administrative procedures to be followed (from "title assignment" to "admission to the graduation session"), as well as the required format for the thesis, can be found in the Guide to the University published on the website www.unibocconi.eu/studentguide.

1 Official regulations state that two-year study programs started from the 2009-10 academic year are named Master of Science (LM), while those started prior to the 2008-09 academic year are named Master of Science (LS).

The thesis is the culmination of a study program and the result of an original project on a topic relevant to the subjects in the student's curriculum that is completed by the student under the guidance of an Advisor Professor.

The originality of the thesis derives from the fact that it must be the student's own independent work, it must pay particular attention to the citing of any sources used, and it must not profit from the contributions of others.

The University verifies the originality of final theses scrupulously, including with the use of *ad hoc* anti-plagiarism software. If any irregularities should result from these controls, the student will be reported to the Disciplinary Board, which will determine possible sanctions.

2. Choosing the Type of Thesis

The thesis may be:

- ✓ a paper (***Thesis)*** of descriptive or applied content that can take various forms (e.g. a description/analysis of a phenomenon based on the collection of quantitative and/or qualitative data and the processing, analysis and organization of this data in a structured format; a business plan; a case study; etc.) and is related to knowledge that has already been consolidated[2]. The paper must include a review of the literature on the topic of study. A descriptive paper covers the representation, organization and in-depth analysis of the issues associated to a specific topic studied "as is" or *in situ*. An example of a descriptive thesis would be an industry analysis. An applied thesis involves the application of existing theories, methodologies and tools to real situations. An example of an applied thesis would be the preparation of a business plan.

- ✓ a ***Research Thesis*** to produce new knowledge or new scientific methodologies, or to analyze a problem and provide an adequate solution[3]. This project must include an in-depth literature review, a specification of a research proposal based on a gap in research, a description of the research methodology used, an analysis of the results obtained, and a critical discussion of the contribution made to the literature.

  A research thesis offers an original contribution in terms of the innovation it presents. In a research thesis, the student must show an individual critical awareness and demonstrate the ability to advance, if only progressively, knowledge of the topic which the thesis addresses. Therefore, the innovation is found in a variety of aspects, including the topic presented, the questions inherent in the study, the research method implemented, and the context of the analyses.

Students must make a rational and deliberate choice of the type of project they intend to undertake.

Students must take into account that in order to achieve any real innovation, a research thesis requires a more substantial commitment in terms of energy and time than a thesis. This should be considered carefully when planning for the graduation.

Furthermore, the evaluation criteria adopted by the Degree Assessment Board are also in function of the type of thesis presented. A student who intends to present a research thesis must be aware that this will be judged according to a higher and more challenging standard than a thesis. However, choosing to write a research thesis does not ensure a higher score than that for a thesis. A research thesis that does not comply with the above requirements and does not fulfill the objectives of innovation and contribute to the literature may be awarded a lower score than a well-presented descriptive/applied thesis.

Notwithstanding the type of thesis chosen, it is important that the topic is related to a disciplinary field and/or specific course, preferably one present in the student's study plan. This element is crucial in enabling the student to identify not only the type of analysis, but also a potential Advisor Professor to whom the idea

[2] theses with descriptive/systematic content which are part of the Department of Legal Studies and completed by CLELI students may be developed in various forms (analysis of a legal institute, case-law review on a topic, etc.). The work must include a review of the literature on the topic under study.

[3] research theses which are part of the Department of Legal Studies and completed by CLELI students consist of an in-depth analysis of a legal institute or legal system, are accompanied by a comparative and/or supranational analysis, and are characterized by a critical approach. The work must include an in-depth review of the literature on the topic under study.

of the thesis may be proposed. The thesis orientation service offered by each Department (please see the link in the specific Department section) provides support in this respect. It is not sufficient for the student to identify a generic topic, e.g. "I want to do a thesis on the automotive sector, on China, or on the XYZ company". The contexts - sector/nation/company - may be analyzed from multiple perspectives (marketing, strategy, economy, finance, law, economic history...). Consequently, the student's starting point for the thesis should be the following: "I would like to do a thesis on..." (e.g. marketing or strategy or finance or...) "where I will analyze or apply the concepts learned in..." (e.g. "international marketing or internationalization strategies, or international finance" ...) "with reference to the XYZ sector/nation/company".

The paragraphs below present the most important elements in the process of preparing a t**hesis (section 3 of this document)** and a **research thesis (section 4 of this document).**

3. The Thesis

A thesis (as distinct from a research thesis, discussed in Section 4, below) deals with a specific topic related to the student's study program. Generally speaking, the thesis might, for example, include case studies (industry analysis), business plans, the gathering and processing of data on a topic related to the study program, or an analysis of the literature on one specific topic related to the study program.

The type of work cannot be specifically defined here, as it will be closely related to the particular features of the program involved. Some particular types of thesis within the different study programs are as follows:

AFC, CLELI, AFM

- ✓ Study of assessment-related case (e.g. companies, assets, liabilities), balance sheet analysis, forensic/fraud accounting;
- ✓ Presentation of problems regarding the application of regulations and accounting standards;
- ✓ design and check ups of control systems.

IM, M, MM, ACME, EMIT, INTENT

- ✓ Case studies;
- ✓ Industry analysis;
- ✓ Market research;
- ✓ Business plan/marketing plan.

GIO

- ✓ Policy evaluation report;
- ✓ Organizational analysis of a public sector body (national or international);
- ✓ Business plan or strategic plan of a public sector organization.

FINANZA-FINANCE

- ✓ Study of assessment-related cases (e.g. companies, assets, liabilities);
- ✓ Presentation of problems regarding the application of regulations related to financial intermediaries and risk management/solvency;
- ✓ Collecting and processing of data or other objective elements without formulating any innovative hypothesis or theory.

ESS

- ✓ Commented empirical analysis of a research topic;
- ✓ In-depth analysis of a research topic (of a descriptive nature, with broad reference to the literature and possibly to an internship, but generally without any empirical analysis).

PPA

- ✓ Detailed analysis of a policy reform in the economic-political context
- ✓ Policy brief
- ✓ Analysis and critical review of a socio-economic-political research topic

DSBA

- ✓ Annotated analysis of AI and NLP on market dynamics and / or social phenomena
- ✓ Development of simulation models to optimize choices
- ✓ Empirical analysis of digital and / or traditional data
- ✓ Development and use of advanced statistical techniques for selected research problems

CYBER

- ✓ Case studies related to the analysis of cyber incidents, SOC development, and definition of cyber strategies
- ✓ Empirical analysis of a cyber risk model
- ✓ Design and / or assessment of cyber risk models
- ✓ Study and comparison of cyber strategies

TS

- ✓ Case studies related to the analysis and implementation of environmental, social and governance (ESG) strategies;
- ✓ Empirical analysis of a model designed to identify KPIs related to sustainability performance;
- ✓ Design and/or evaluation of sustainability engagement strategies and activities;
- ✓ Analysis and comparison of sustainability standards, practices and regulations.

AI

- ✓ Use ML and AI techniques to analyze application problems in various fields (medicine, bioinformatics, neuroscience, business, economics, social sciences, etc.)
- ✓ Development of learning and optimization models
- ✓ Theoretical analysis of algorithms and study of their computational complexity
- ✓ Analysis of cryptographic techniques
- ✓ Theoretical study and application of physical models to ML/AI problems

The various phases in the preparation of a thesis are summarized in Figure 1. It should also be remembered that this process is not necessarily linear, but may well be cyclical and iterative.

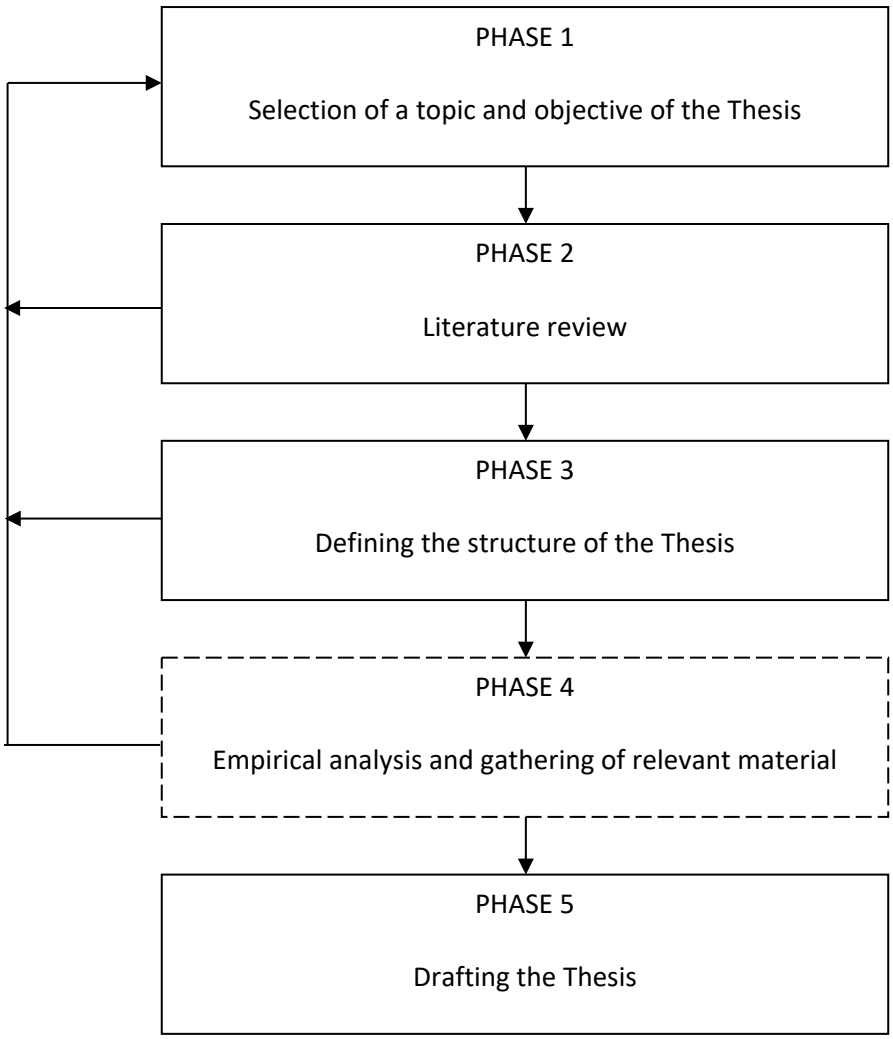

Figure 1 –The Thesis drafting process

3.1 Selection of a Topic and the Objective of the Thesis

The selection of the topic and objective of the thesis is a fundamental step in guaranteeing the quality of the project.

The student must select the topic. The Advisor Professor may help candidates to focus their interests, but will not, apart from in exceptional circumstances, "assign" a topic and the corresponding objective for a thesis.

Generally speaking, all the topics covered during a study program, or at least those related to the discipline selected, may be suitable for a Master of Science thesis (LM). It is very important to specify the limits of the selected topic precisely and to identify the aspects on which the study will focus.

Both the topic and the objective of the thesis can derive from subjects addressed during lessons. Attendance at conferences and seminars, readings from monographs and scientific journals, company visits, or an entrepreneurial opportunity may be useful in identifying a thesis topic.

One source of inspiration might be a curricular internship. The internship may provide a part of the empirical material to support the arguments presented in the thesis and/or offer useful contacts for a more detailed analysis of a topic. In any case, the thesis must focus on a topic that is both significant and relevant to the field of reference and cannot simply be a report on the activities undertaken during an internship.

Once an interesting topic and objective have been chosen, the focal point can be defined with the help of the Advisor Professor.

Whatever plan is followed in developing a topic, it is important that the following general requirements are met.

- ✓ COHERENCE. The topic must reflect the student's interests and be coherent with the study program undertaken.
- ✓ IMPORTANCE. The topic must be significant for the field of reference. Students can verify this aspect through interaction with experts in the field and, above all, in discussion with their Advisor Professor.
- ✓ ORIGINALITY. The topic and objectives must be presented in such a way as to form an original contribution, i.e. the Thesis must be the result of personal initiative and effort on the part of the student.

From the present recommendations, it should be clear that the significance of the topic selected conditions the quality of the entire project and constitutes an integral part of the final evaluation of the thesis.

3.2 Literature Review

A review of the relevant literature for the topic selected is a key element of the thesis project. During the preliminary phase, the review will help to identify or refine interesting issues related to the chosen topic. In a later phase when the objective has been defined, bibliographic searches help students to understand the positioning of their thesis within the existing field of knowledge.

Analysis of the literature is essential in that it helps to pinpoint the project objectives or to provide greater focus, if the aims have already been defined.

The literature review should follow these logical steps:

- ✓ begin with the topic of the thesis;
- ✓ decide on a number of keywords (from 3 to 7, depending on the complexity of the topic and the question) with which the actual bibliographic search can be conducted;
- ✓ once the material has been found and gathered, identify the most significant contributions;
- ✓ analyze the aspects that seem most relevant to the thesis.

The bibliographic search must cover an ample selection of Italian and international sources. The library can provide fundamental assistance. Attachment 1 briefly outlines the resources and services available through the library to support bibliographic searches for degree theses. Regarding periodicals, one useful tool for finding and selecting bibliographical sources is the Bocconi ranking of journals.

3.3 Defining the Structure and Preparing the Thesis

The structure of the thesis may vary considerably depending on the field and the topic selected, the method and approach used, personal preferences, and the recommendations made by the Advisor Professor.

A general outline - to be adapted to the specific needs of the given thesis and the indications of the Advisor Professor - could be as follows:

- ✓ Table of Contents;
- ✓ Introduction (a paragraph describing: the topic of the thesis; its positioning within the literature and the specific objectives; a brief illustration of the structure of the thesis);
- ✓ Review of the relevant literature (a paragraph illustrating the disciplinary framework of the thesis);
- ✓ Analysis and development of the topic selected for the thesis (this is the main part of the thesis; the form will vary according to the specific contents);
- ✓ Conclusions (including a brief summary of the work carried out and the main results);
- ✓ Bibliography (Attachment 2 gives details on how to compile the bibliography and how to cite the works used in the text).

The final draft of the thesis is a brief presentation of the work carried out during the various phases and it must be prepared according to the indications found in the Guide to the University.

3.4 Presentation and Defense of the Thesis

To complete the Master of Science, students must present and defend the thesis. The presentation must be properly prepared. The presentation and the defense must not exceed 15 minutes. The presentation must seek above all to highlight the objectives, the logical reasoning, the analysis, and the work's contribution.

It is important that the presentation clarifies:

- ✓ what was studied and why;
- ✓ the analysis undertaken;
- ✓ the contributions made and implications that may be drawn;
- ✓ the limitations of the study and potential future developments

During the graduation session, the student may project materials to the Degree Assessment Board (generally a maximum of 12 slides including tables, graphs, etc.) that might offer useful support for the defense.
During the candidate's presentation, the Degree Assessment Board members may ask questions to assess the candidate's work in greater depth.

4. The Research Thesis

A research thesis is generally prepared following the process illustrated in Figure 2. The figure shows the process as linear, but in practice it will be cyclical and iterative. The decision regarding the research questions, for example, may give rise to a partial or total revision of the topic and the context of the thesis. The feasibility analysis may suggest the selection of a different topic or the simplification of the research questions. Similarly, the literature review may lead to a reformulation of the research questions.

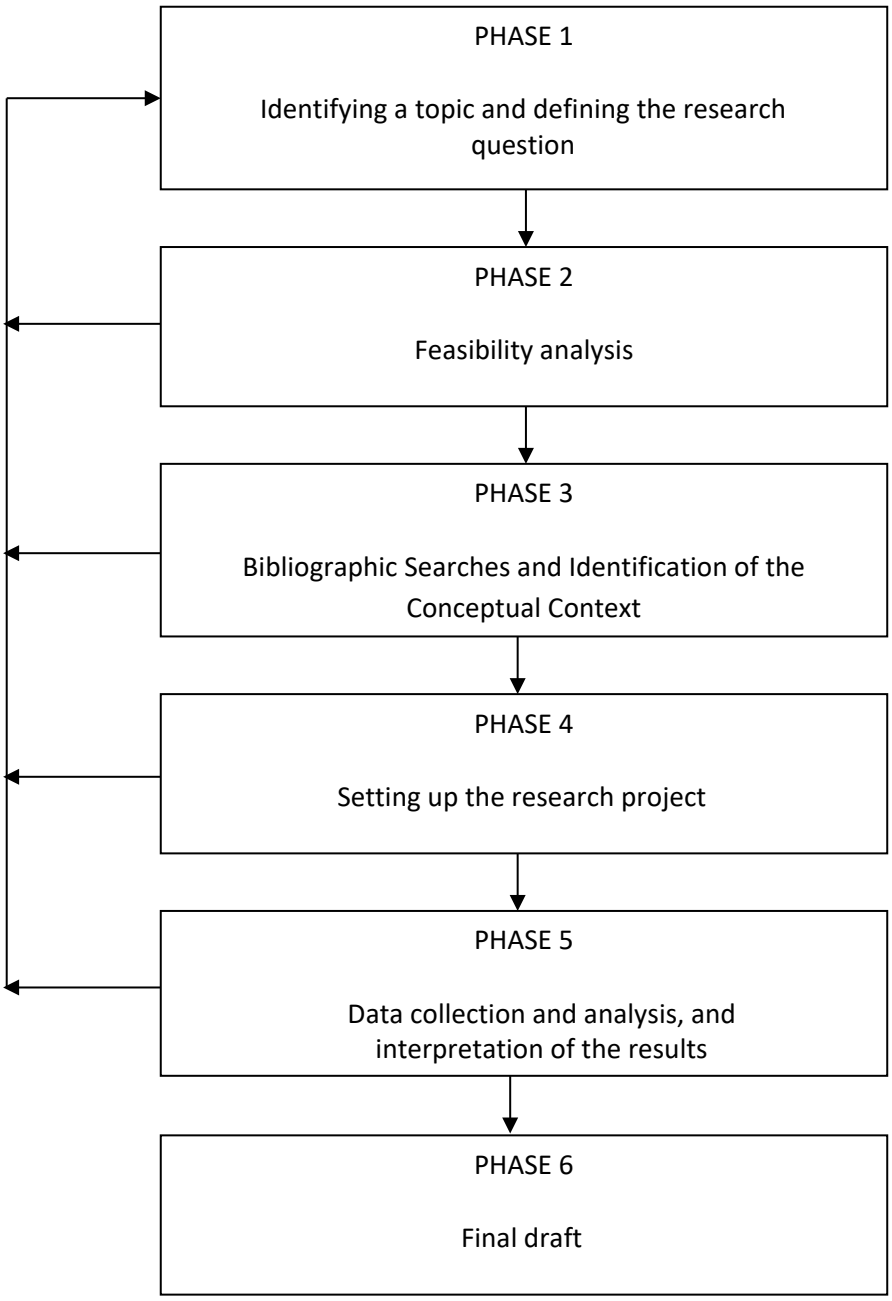

Figure 2 - The Research Thesis drafting process

4.2 Identifying a Topic and defining the Research Question

It must be underlined that given the importance and complexity of identifying a topic and research question, it is good practice to begin thinking about this early, without waiting to complete all other curricular requirements.

When starting a thesis, the student's attention should be focused not so much on finding a topic to write on ("what do I want to talk about in my thesis?"), as on the identification of one or two interesting research questions to be answered ("what, in particular, do I want to understand in my study?", "which are the interesting questions to ask about the topic I have chosen and how can these be connected?"). Even a topic that may seem "traditional" at first glance may offer inspiration for a highly innovative concept. Formulating one or more research questions related to the selected topic means:

- ✓ precisely defining the confines of the selected topic;
- ✓ identifying the aspects of the topic that should become the focus of the thesis;
- ✓ questioning the actual importance, in theoretical and practical terms, of the research theme selected.

The research topic and question often arise spontaneously, sometimes as a result of experiences during the course of studies, but always require a knowledge of the reference literature. The more recent and updated the sources consulted are, the more likely it is that an original and innovative research topic and question will develop. For this reason, albeit with some exceptions, manuals rarely offer innovative ideas for immediate exploration, because they are intended to present consolidated knowledge of a specific discipline or field. On the other hand, innovative ideas can be more easily found in, for example, academic and managerial periodicals, reports presented at conferences, seminars, and meetings, or in working papers published on the websites of research centers.

Once an interesting topic and one or more stimulating questions have been formulated, the focus can be defined more specifically with the support of an Advisor Professor. In all cases, it is important to meet the Advisor Professor with a number of research questions already in mind, after consulting at least a minimal part of the reference literature.

Whatever process is followed in developing a topic and the related research question/s, the topic of a research thesis must meet various general requirements.

- ✓ CONSISTENCY. The topic must represent the interests of the student and be consistent with the study program undertaken.
- ✓ RELEVANCE. The topic must be relevant to the field in question. As already mentioned, this can be verified by reading the specialized literature, interacting with experts in this field and, above all, by collaborating with the Advisor Professor.
- ✓ FEASIBILITY. The research topic and question must be appropriate to the student's skills and knowledge. Topics and questions that require a substantial use of statistical analysis tools are better suited to students with a sound quantitative preparation, while projects focusing on the analysis of texts and interviews are more easily handled by students with a talent for an interpretive approach. The research topics and questions must also be compatible with the resources available, i.e. the empirical data required; the supportive theoretical references; the amount of time available.
- ✓ ORIGINALITY AND INNOVATION. The research topic and question must be chosen so as to propose an innovative contribution to the current state-of-the-art. Given the importance of this

aspect, the paragraph below gives further details. Before starting work, students should always ask themselves the following questions:

- What are my research questions and why are they important?
- How can I best answer my research questions?
- What results do I expect to obtain? What conclusions do I expect to be able to draw from my research questions?

As already stated, it should be clear that the choice of the topic constitutes a fundamental part of the research thesis project and cannot, therefore, be delegated to others. The innovative contribution inherent in the research question - as well as the topic selected - determine the quality of the entire project and constitute an integral part of the final evaluation of the research thesis. The Advisor Professor can help students to optimize the focus on their interests, but, with very few exceptions, cannot "assign" the topic and respective research question.

4.1.1 The Originality and Innovation of the Research Thesis

A research thesis must take the form of an original and innovative research project and must always highlight the student's autonomous critical ability. In a research thesis, the student must demonstrate the ability to advance, if only progressively, the theoretical knowledge regarding the topic which the research thesis addresses. This will mean that students must have a solid understanding of what has been written on the selected topic, but, above all, be able to add something new that others have not yet said.

When we speak of originality with reference to the ability to provide an innovative contribution to knowledge, we are not thinking only of a radically innovative contribution. A contribution can be original even when it is limited to the proposal of a new way of interpreting an existing theory or conceptual model, or the study of a known phenomenon through innovative methods that reveal previously unknown aspects. Original contributions may also be made by replicating studies already conducted by others, or through the re-elaboration of existing studies from a different perspective, or the development of a new and expanded data set (beginning with "field" research or the creative use of published sources) to prove a theory or a conceptual model.

In brief, the originality of a research thesis can be revealed in the topic studied, in the approach or perspective adopted for the study, in the empirical method used, or in an innovative combination of these factors.

Although the discussion of the research results represents the final part of the work undertaken, it may be useful to hypothesize what one expects to discover and where conclusions may be drawn. This does not imply that results are pre-determined from the beginning, but rather serves as an early guarantee against obvious results or overly generic conclusions. This process may lead to the realization that the question needs to be refined or, in extreme cases, abandoned.

4.2 Feasibility Analysis

Given one or more potential research questions, it is important to understand (including in discussions with the Advisor Professor) whether these questions can be dealt adequately in the proposed research thesis. The questions that must be asked at this stage and which can help to organize the work correctly from the outset (or in some cases to realize that the initial idea should be abandoned) could be:

- ✓ How do I intend answer the research question? How will my research design be set up?
- ✓ If empirical data need to be analyzed, are they available? What format should I use (e.g. electronic or other)? How long will it take? What size "sample" is sufficient to draw the conclusions I am aiming for? Am I capable of handling the technology necessary to gather and process the data?
- ✓ If interviews or case studies are needed, how many are necessary in order to draw reliable and valid conclusions? Is it a realistic objective? How much time will it take? How am I planning to analyze the data I obtain? If I intend to observe a phenomenon or specific organizational dynamics, how can I gain access to make these observations, and how much time might that take?

It is important to answer the questions, because this will (a) identify potential weaknesses in the original idea or the need to refine the project before conducting a more extensive or in-depth analysis of the existing literature; (b) provide a preliminary definition of the research project (see section 4.4 below); (c) highlight any difficulties that may arise during the time available to complete the research thesis. For example, if interviewing or data collection is time-consuming, it might not be possible to undertake these activities only after the theoretical part of the project has been completed.

4.3. Bibliographic Searches and Identification of the Conceptual Context

Conducting accurate searches and analyses of reference literature is an integral and necessary part of a research thesis and ensures that at least two fundamental objectives can be realized in two distinct phases:

- ✓ during a preliminary phase (identification of the research questions), bibliographic searches allow the student to develop interesting and innovative research questions related to the topic selected;
- ✓ in a later phase when the research question/s have been established, bibliographic searches reveal where the thesis is positioned within existing knowledge of the research question/s raised. In this way, analysis of the literature will ascertain if the research question/s are truly interesting and innovative. If they are not, this analysis offers a timely opportunity to modify or refine the project objectives.

Therefore, the bibliographic search should not be aimed exclusively at "studying" the topic selected and summarizing the main profiles. The objective of the literature analysis is rather to identify any "gaps" in knowledge with a view to generating new ideas, questions and hypotheses to be verified during the thesis project.

In conducting the bibliographic search of the reference literature, the students must ask themselves:

- ✓ What are the most important contributions in the literature on this topic? Can these contributions provide new ideas and inspiration for the thesis?
- ✓ What answers and new ideas do they suggest?
- ✓ If the authors have verified their answers, how did they do so?
- ✓ Are there any gaps in the existing literature in terms of research questions that have not been answered, unexplored empirical issues, conflicts that have not been resolved between studies that reach opposing conclusions?
- ✓ What gap in the knowledge does my thesis propose to fill?
- ✓ What type of approach/model can be useful for answering the research questions proposed?

Consequently, an in-depth literature analysis is essential for various reasons:

- it highlights the aspects of the chosen topic that have been neglected by the literature (aspects that the thesis might be able to fill);
- it helps to define or, if they have already been defined, to focus more accurately on the research question/s;
- it avoids unintentionally replicating a study already conducted by others (or if the thesis seeks to replicate a previous study, it will reveal in detail how the study must be conducted);
- it directs the selection of the methods to be used through a careful study of the choices made by other researchers.

Given these objectives, the literature analysis may be carried out in the following logical steps:

- ✓ begin with the topic and the established research question/s;
- ✓ identify a number of keywords (from 3-7, depending on the complexity of the topic and the question) to be used in the actual bibliographic search; identification of keywords can be facilitated through: a discussion with the Advisor Professor; evaluation of initial readings; the use of dictionaries, encyclopedias, manuals; brainstorming with colleagues; the construction of simple logical-causal schemes;
- ✓ once the material has been identified and collected, develop the key ideas and analyze the prospects that seem most useful for the thesis, highlighting the results and the limits of the studies that provide useful ideas for the research;
- ✓ compare and criticize the different perspectives used, thereby avoiding an uncritical summary of the contributions selected;
- ✓ draft the definitive version of the description of the topic selected, specifying its limits and the research question/s that will be investigated.

The bibliographical search must cover an ample selection of Italian and international sources. Attachment 1 briefly outlines the resources and services available through the Library to support bibliographic searches for degree theses. Regarding periodicals, one useful support for finding and selecting bibliographical sources is the Bocconi ranking of journals.

4.4. Setting up the Research Project

The research project is the plan of action to be implemented in proceeding from the research questions to the conclusions of the research thesis. Defining the research project means answering the following questions:

- ✓ How will the study actually be carried out?
- ✓ What approaches, methods, and techniques will be used to collect and analyze the data?
- ✓ Which criteria will be used to guarantee the validity of the thesis? What might happen that could potentially invalidate the conclusions? How can I safeguard against threats to the validity of the study?
- ✓ How can these elements constitute a coherent strategy capable of leading from the research question to the conclusions of the thesis?

The potential answers to these questions and the selection of those best-suited to an individual research thesis vary according to the field of reference and the research questions. A careful analysis of the reference literature and consultation with the Advisor Professor will help the candidate to make the best choices.

However, some elements of the research project must be defined, if the research thesis is to be clear and effective.

The unit of analysis. Defining the unit of analysis clearly means specifying the subject of the study, the phenomenon on which the research thesis will focus. As a research thesis must provide an original contribution to a given topic, it is essential that the outline is precise, in order to avoid vague and indefinite conclusions.

The scope of the analysis. Defining the scope of the analysis involves specifying the field in which the research project will be carried out or where the data will be gathered. A given subject of study may in fact be studied using a relatively “micro” or “macro” analysis unit within the given field: the individual, the team, the corporate function, the company, the group, the sector, the country, and so forth.

The methods to collect and analyze data. The selection of the method or methods to collect and analyze the data is closely related to the research questions and to the most frequently adopted practices in the field of reference, as well as to personal preferences. A careful analysis of the literature and discussion with the Advisor Professor will identify the best methods for the research thesis. Moreover, the Advisor Professor can provide bibliographic indications to assess organizational and methodical aspects further.

4.5 Final draft

The final draft of the thesis is a brief presentation of the work carried out during the various phases and it must be prepared according to the indications found in the Guide to the University.
The structure of the research thesis may vary considerably depending on the discipline and the topic selected, the method and approach used, personal preferences, and recommendations made by the Advisor Professor.

A general outline - to be adapted to the specific needs of the given Research Thesis and the indications of the Advisor Professor. - might be as follows:

- ✓ Table of Contents;
- ✓ Introduction (a paragraph describing: the topic of the study; its positioning within the relevant literature, highlighting a summary of the "gaps" in the knowledge that the research thesis aims to fill, together with the research questions that gave rise to the study; the contributions offered by the research thesis; a brief illustration of its structure);
- ✓ Review of the relevant literature (a paragraph presenting a critical illustration of the disciplinary framework of the project; current gaps and controversies concerning the topic selected; the detailed research question/s addressed in the thesis and the logical reasoning behind their development);
- ✓ Method (a description of the potential empirical setting in which the study took place, the data collection criteria, the data analysis criteria that led to the generation of the conclusions);
- ✓ Data analysis (a paragraph including the empirical data collected and the results of the analyses undertaken);
- ✓ Discussion (in which the data and the results described in the previous paragraph are discussed in the light of existing theory and the contributions made by the thesis are highlighted);
- ✓ Conclusions (including a brief summary of the project and the results, the theoretical contribution, the managerial implications - if appropriate for the study - and the limits of the thesis;
- ✓ Bibliography (Attachment 2 offers some suggestions on how to compile the reference bibliography and on how to cite the works used in the text).

4.6 Presentation and defense of the Research Thesis

To complete the Master of Science degree students must present and defend the thesis. The presentation and defense should last about 20 minutes. The presentation should seek, above all, to highlight the originality of the contribution proposed by the thesis and the logical reasoning and analysis used by the candidate to achieve this result.

The most important aspects to present are:

- ✓ what the thesis intended to investigate and why (the research question/s and their relevance, briefly drawing on the literature analysis to motivate the choice);
- ✓ what method was followed (survey, analysis of archived data, case studies, experiments, etc.);
- ✓ a summary of the results;
- ✓ what contributions can be drawn from these results for theory or practice;
- ✓ the limits of the project and some potential ideas to overcome these.

During the graduation session, the candidate may distribute materials to the Degree Assessment Board (generally a maximum of 15 slides including tables, graphs, etc.) that might offer useful support for the discussion. Only paper and recyclable materials be used (avoid plastic covers and bindings). Remember that during the presentation, slides cannot be projected, except in exceptional cases at the Advisor Professor's request.

Following the presentation by the student, the members of the Degree Assessment Board and the student will discuss the thesis. This discussion aims to consider the work in detail and stimulate further thought on the various aspects of the project.

5. The role of the Advisor Professor, the Discussant, and the Commission during the Discussion

The role of the Advisor Professor during the defense of both a thesis and a research thesis involves:

- ✓ the drafting of a brief introductory report outlining the main features of the project;
- ✓ initiating the presentation by the student by asking the candidate to present the project in general or with reference to one of its more important aspects;
- ✓ contributing to any discussion that may follow the presentation made by the student, which generally will be initiated by the discussant.

The role of the discussant is to subject the candidate to a particularly attentive assessment, as well as to facilitate the other members of the Degree Assessment Board in their understanding of the strong points and potential shortcomings of the candidate's project. Once the candidate has completed the presentation and any explanations required by the Advisor Professor, the discussant will ask the candidate questions or request further explanation or clarification of any unclear aspects or a defense of any points that might be considered controversial.
In a research thesis, the discussant may ask questions to draw out the innovative nature of the thesis and its specific contribution to the reference literature.

Attachment 1: Bocconi Library resources for the preparation of a Master of Science Thesis

The Bocconi Library provides numerous resources that can be searched and accessed via its own website (http://lib.unibocconi.it/*ita). In addition to more traditional hard copy resources (books and magazines), there are also a number of online resources for various fields of the economic, legal, and social sciences (databases, e-journals, e-books, Master or Doctorate theses, statistics, etc.). Detailed information can be found on the Library web pages.

The Library also offers services to support research and study projects, e.g. book and magazine loans (including inter-library loans of material not present in the Library's own collection, orientation and consultation for the research project, specialized assistance for databases, support and information on copyrights, group study rooms that can be booked in advance.

Furthermore, the Library organizes workshops to develop skills and knowledge of resources and research strategies needed for working group, report writing and the effective preparation of Master of Science theses. During the course of the academic year, specialized meetings are offered to learn how to use databases, how to prepare bibliographic references and a bibliography, and how to use *RefWorks.* Information and program dates are available on the Library website.

Attachment 2: guidelines for bibliographic citations and the preparation of a bibliography

Premise

Bibliographic citations and bibliographies are the first requirements of every academic project. In addition to declaring the origins of the sources used, documenting the research carried out, and safeguarding intellectual property and copyright, the bibliographic citation also allows the reader to identify and easily find the sources (books, articles, chapters, web documents, statistical data, etc.) to which the author refers. It is therefore crucial that each citation (or bibliographic reference) contains the essential bibliographic data (author, title, year of publication, etc.) to ensure correct identification of the source.

The organization and the format with which the bibliographic references are presented constitute the style of the bibliographic citation. This is a standard model that must be strictly followed, as it indicates how to cite the sources both within the text and in the final bibliography.

There are different citation styles, some of which are commonly used internationally (e.g. the Chicago Manual of Style, the Harvard System, the APA Citation Style) and they are essentially based on one of the following standards:

✓ **author-date**: bibliographic reference inserted in a brief form directly in the main text (**in-text citations**) + complete references in the final **bibliography.**

✓ **classic:** bibliographic references inserted in a brief form in a **footnote** + complete references in the final **bibliography.**

Once you have chosen a system and the relative style, it is important to use it uniformly and consistently throughout the document.

In this guide, reference is made to the author-date system, the most commonly used in scientific disciplines and in social, managerial, and economic-financial sciences. The classic system is more common in the humanities.

A) **THE IN-TEXT CITATION**

Give just the surname of the author/s and the year the work was published, separated by a comma, are inserted directly into the text:

> The concept of the 'grounded theory building' (Glaser and Strauss, 1967) provides a detailed comparative method to develop theories, beginning with the inductive study of cases.

If the name of the author is already in the text (e.g. as the subject or object of a sentence), only the year of publication is required.

Famous examples of research based on case studies include the description proposed by Selznick (1949) of the TVA, or the study of the Cuban Missile Crisis by Allison (1971).

If the concept expressed refers to a document by more than one author, all the references are inserted in parentheses in alphabetical order, separated by a semi-colon. If there are various authors to which the concept can be linked, and if, for the sake of simplicity, only some examples are cited, their names will be preceded by "e.g.":

Case studies may concern one or more cases and numerous levels of analysis (e.g. Eisenhardt, 1989a; Yin, 1984).

If the author wishes to include an original excerpt from a source, copying it verbatim, the exact phrase must be presented in quotation marks. If the citation in quotation marks is a part of the cited text, the number or numbers of the page/s where the cited text can be found must be added, together with the indication of the author/date:

As noted by Bettenhausen e Murnighan (1986, p.352-3): "we observed the results of an experiment on group decision-making processes and the formation of coalitions..."

If there are more than 3 authors, it is sufficient to include the surname of the first author followed by "*et al*.", in italics (et al. Is the abbreviation of "et alii" - "and others"):

(Bickman *et al.*, 1998)
As sustained by Bickman *et al*. (1998)

B) THE BIBLIOGRAPHY

The bibliography is the **list of all the sources** cited in the text and used to prepare the project, each of which is given with **all the bibliographic data necessary** to identify and locate it. All documents correspond to a specific set of bibliographic data. All the references are then organized by author (or by title, if the authors' names are not included).

To save time and optimize the preparation of the bibliography, it is advisable to take note of the various sources as they are used, recording all the bibliographic data that will be required. Specific tools (*citation managers*) available online can collect information and bibliographic data on the documents found and automatically create a bibliography based on the different bibliographic citation styles. One of these tools, *RefWorks*, can be accessed online on the library website by all Bocconi/SDA staff and students.

Author and year of publication

The indication of the author (or authors) and of the year of publication is the same for all source types (articles, books, chapters, web documents, etc.):

- surname and initial of the author/s' name;
- if there are 2 or 3 authors, the last one is separated by "and" or "&";

- if there are more than 3 authors, it is sufficient to include the surname of the first author followed by "*et al*.", in italics (et al. is the abbreviation of "et alii" - "and others");
- if the publication has an editor (or editors), indicate the surname and initials of the editor(s) followed by "(Edited by)". In there are 2, 3 or more authors, the same rules apply as for the single author;
- if the author is an organization (e.g. a public sector body, agency, company), include the name of the organization;
- the year of publication is given after the author/editor, between parentheses, followed by "a", "b" etc. if there are multiple documents by the same author published in the same year.

Examples:

Peacock, A. (2000)
Antonietti, R. and Loi, M. (2014)
Caprara, G. V. *et al.* (2001)
Barbaranelli, C. and Vecchione, M. (2003a)
Barbaranelli, C. and Vecchione, M. (2003b)
Tooley, J. (edited by) (2001)
European Environment Agency (2005)
ISTAT (2010)
Nikon Corp. (2016)

Examples by type of document

The examples given here refer to the most common types of document.

Articles published in scientific journals

Bibliographic data to be cited:

- Author/s
- Year of publication
- Title of the article
- Title of the journal
- Volume
- Issue number
- First and last page numbers of the article

Eisenhardt, K.M. (1989a). "Building theories from case study research". *Academy of Management Review*, 14(4): 532-550.

Eisenhardt, K.M. (1989b). "Making fast strategic decisions in high-velocity environments". *Academy of Management Journal*, 32(3): 543-576.

Bloch, P.H, Sherrell, D.L. and Ridgway, N.M. (1986). "Consumer search: an extended framework". *Journal of Consumer Research*, 13(1): 119-126.

Books

Bibliographic data to be cited:

- Author/s
- Year of publication
- Title of the book
- Edition (only if the 2nd or successive edition)
- If necessary, the title of the work in its original language (optional; between parentheses)
- Place of publication
- Publisher

Bailey, K.D. (1995). *Metodi della ricerca sociale*. 2. Italian edition. (Original edition: *Methods of social research*, New York: The Free Press, 1982). Bologna: Il Mulino.

Iraldo, F. and Melis, M. (2012). *Green marketing: come evitare il greenwashing comunicando al mercato il valore della sostenibilità*. Milan: Gruppo24Ore

European Environment Agency. (2005). *The European environment: state and outlook 2005*. Luxembourg: Office for Official Publications of the European Communities

Chapters in books edited by other authors

Bibliographic data to be cited:

- Author/s of the chapter
- Year of publication
- Title of the chapter
- Editor/s of the book containing the chapter, with the indication "(Edited by)"
- Title of the book containing the chapter
- Edition (only if the 2nd or successive edition)
- Place of publication
- Publisher
- First and last page numbers of the chapter

Bickman, L., Rog, D.J., and Hedrick, T.E. (1998). "Applied research design: A practical approach". In: L. Bickman, e D.J. Rog (Edited by) *Handbook of applied social research methods*. Thousand Oaks, CA: Sage, pp. 5-37

Working Papers

Bibliographic data to be cited:

- Author/s
- Year of publication
- Title and subtitle of the WP
- Title of the series of the WP and number of the WP (if applicable)
- Editor/Place of publication

Easton, G. (2004). *One case study is enough*. Working Paper. Lancaster University.

Han, S-K., and Moen, P. (1998). *Clocking out: Multiplex time in retirement*. BLCC Working Paper, n.98-3, Cornell University.

Documents available online or in electronic/digital formats

Information and documents found and consulted online (articles, data, website pages, blogs, audio files, video files, slides, etc.) must also be cited. In addition to the same bibliographic data (author, title, …) required for printed documents, sufficient information must be provided to allow online consultation even with specific devices (e.g. an e-reader to read e-books):

- link/URL
- data of last access
- if necessary, the format/type of resource (e.g. audio, video, EPUB file, etc.)

1. **Article in an online scientific journal**

Naik, P.A. and Peters, K. (2015). "True Synergy for Real Effects: How to Control Integrated Marketing Successfully". *GfK Marketing Intelligence Review*, 7(1): 34-41. <http://dx.doi.org/10.1515/gfkmir-2015-0005> [last access: 03/10/16]

2. **E-book available online**

Viesti, G. and Prota, F. (2009). *Le nuove politiche regionali dell'Unione Europea*. Bologna, Il Mulino. <http://www.darwinbooks.it/doi/10.978.8815/142856> [last access: 03/10/16]

3. **E-books that can be consulted with e-readers**

Ravazzoni, R. (2011). *Liberare la concorrenza: lo stato dell'arte delle liberalizzazioni nel terziario in Italia*, Milan, Egea. EPUB File

NB – Here the URL is not indicated because this is a publication that can be consulted off-line using a mobile device (e.g. an e-reader).

4. **Video**

Ferroni, G. (1950). *Incontro con la Olivetti*. Archivio Nazionale Cinema d'Impresa. Video. <https://www.youtube.com/watch?v=iobjKjjiJy4> [last access: 03/10/16]

5. **Single web page**

Scarpetta, S. and Hijzen, A. (2014). "Articolo 18, l'effetto è sul contratto". *Lavoce.info*, 30 December. <http://www.lavoce.info/archives/32176/articolo-18-leffetto-contratto> [last access: 03/10/16]

6. **Website**

When the citation does not refer to a specific web page (see example No. 5, above) but the website as a whole, (e.g. a company website.):

FIAT. <http://www.fiat.it> [last access: 03/10/16]