M506

Research Method and Scientific Work:

Introduction to Research, Scientific & Alternative Research Approaches, Forms of Research Problems

Week 1, Jan 2023

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Online Teaching and Learning

- Camera On
- Microphone Off please
- If you need to save on bandwidth, switch off camera
- Sessions will be recorded
- If you have something to say – feel welcome – unmute and chip in

Module Information

- **Module Number:** M506
- **Credits:** 5 ECTS
- **Level:** EQF 7
- **Mode of Delivery:** Hybrid
- **Workload:**
  - 50 hours directed study
  - 100 hours independent study
- **Pre-Requisites:** None
- **Co-Requisites**: None

Learning Outcomes

- **No. 1:** Critically analyse research-based concepts and methods relating to business and related disciplines
- **No. 2:** Specify problem areas that are relevant to organisations and develop a meaningful problem statement and research proposal.
- **No. 3:** Demonstrate ability to compose a research design and apply research skills in order to evaluate, inform and advance business management
- **No. 4:** Deploy techniques of analysis and enquiry in order to critically evaluate research strategies and findings
- **No. 5:** Produce a research proposal, and plan and execute a piece of independent research using primary and/or secondary data sources

Teaching & Learning Concept

- **Partially Flipped Classroom**: Online Inputs (a series of short online lecturers on core themes) *are to be watched and studied before the class*
- **In-class: Short overview-lectures (30 min)** with important core messages, then: *group work exercises* where the lecturer consults the different teams on their content
- S**tudent teams (2-3 persons) are assembled after the first session** and work together *throughout the module* on work packages toward the final assignment.
- **Specific trainings for academic writing will be included in the online content**

Summative (Final) Assessment

- **Final Assessment:** Mini Research Paper (individual assignment)
- **Weighting:** 70% (15% online quizzes; 15% attendance)
- **Submitted on:** Week 10 of the module
- **Word Count:** 3000 words +/- 10%
- **Submission Method:** Submission Folder on Canvas, with fully completed assessment submission form
- **Content Instructions**: The paper can contain both results of your group work and of individual work

Formative (Continuous) Assessment Concept

- **Student group tasks lead student teams into creating content relevant for the final assessment** (individual submission, but building upon the group work output)
- **Continuous engagement with the week's content leads is assessed by weekly online quizzes.**
- **Quizzes count into the final grade with altogether 15%.** Quizzes are assessed from week 3 till week 8.
- Each week's quiz is available for assessment **until each week's Sunday, 11:59pm**.
- Each student has **five attempts per quiz**, the average grade is taking for assessment.

Final Assessment: Group Work and Individual Submission – How does this work?

- The group works on **a single research project** about **a single industry** and **a single research problem**.
- Within this context, the group defined **a list of (sub-)research questions** looking at different aspects of the research problem (one per group member).
- Each group member writes his/her **individual mini-research paper about one of these (sub-)research problems**.
- **Students can use all material produced by the group work** for their individual assignment (e.g. literature review, conceptual model, research method, data collection tool, data, etc.), however need to **create a specific focus on his / her individual research question** throughout the paper.
- This implies that **Turnitin-similarities with other student's submissions** from the same research group **will not be counted as plagiarism or collusion**. Beyond that, **rules of academic referencing need to be fully kept**.
- High-flying groups **capitalize on their groups** to get their outcomes improved!

Module Content

- **Week 1:** Introduction
- **Week 2:** Research Question and Literature Review
- **Week 3:** Research Design I: What Role Does Theory Play in Your Research?
- **Week 4:** Research Design II: Choosing Research Methods and Data Collection Tools
- **Week 5:** Developing Your Data Collection Tools (Double Session)
- **Week 6:** Choosing your Research Sample and Collecting Data
- **Week 7:** Data Analysis I: Qualitative Data Analysis
- **Week 8:** Data Analysis II: Quantitative Data Analysis
- **Week 9**: Writing Research Papers: Good Practice **(only online content, no assessed quiz!)**

Group Work – Road Map

Week 1:
- Find Your Group (2-3) Members)

Week 2:
- Define an industry your are interested in
- Define one research problem for the group
- Define individual research questions specifying the group research problem
- Conduct initial literature review

Week 3:
- Define Variables of your research problem / research questions
- Build Conceptual Model(s) / Hypotheses

Week 4:
- Make Core Choices of Your Research Design
  - ✓ Basic or Applied Research?
  - ✓ Role of Theory: Inductive / Deductive- **Deductive research is mandatory!**
  - ✓ Research Method: Qualitative / Quantitative / Mixed?
  - ✓ Data Collection Tool: Survey, Case Study, Experiment, Action Research, etc.

Week 5:
- Develop Data Collection Tools

Week 6:
- Improve Data Collection Tools according to principles of reliability and validity

Week 7:
- Project Work Progress / Data Collection

Week 8
- Project Work Progress / Data Collection / Data Analysis (Pre-Test)

Week 10:
- Submission of Individual Papers

Introduction to you

Please talk about yourself

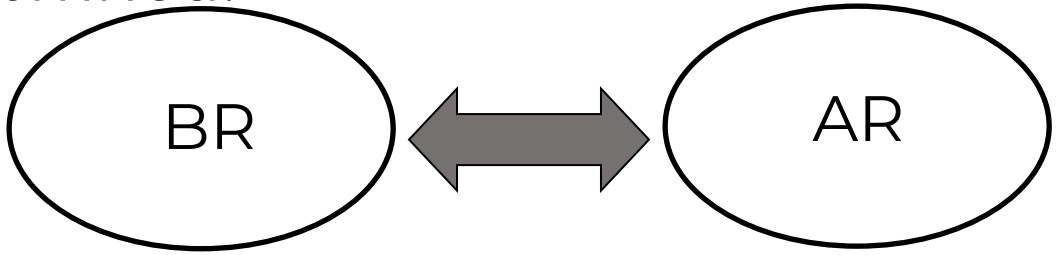
Something interesting?

Touchpoints with research?

(I) Introduction to Research

Nature of research

- Basic research (BR)
  - Contribution to scientific knowledge
    - Fundamental *organizational* research
  - Aim is *understanding* - theories
- Applied research (AR)
  - Contribution to a real-world situation by solving problems”
  - Aim is *interfering* - practical action, application
- The two are intertwined!



Basic vs. Applied Research

Basic research ⟷ **Applied research**

Purpose:

- expand knowledge of processes of business and management
- results in universal principles relating to the process and its relationship to outcomes
- findings of significance and value to society in general

Context:

- undertaken by people based in academia
- choice of topic and objectives determined by the researcher
- flexible time scales

Impact:

- initially academic community and researcher
- may also impact policy and practice

Purpose:

- improve understanding of particular business or management problem
- results in solution to problem
- new knowledge limited to problem
- findings of practical relevance and value to manager(s) in organisation(s)

Context:

- undertaken by people based in a variety of settings including organisations and academia
- objectives negotiated with originator
- tight time scales

Impact:

- initially policy and practice community and researcher
- may also impact academia

Pearson Education 2019, Sources: Sounders at al (2019); Easterby-Smith et al. (2012) ; Hedrick et al. (1993), MacIntosh et al. (2017)

Differences & similarities between Basic & Applied Research

- From BR to AR: Operationalization
- From AR to BR: Generalization
- Different starting points
  - BR: research questions are ‘created’ by researcher
  - AR: RQs are presented by client
- Different end points: theory versus usability and practical relevance
- Both are scientific, since they use established *research methods*
- It is the method that counts, not the type of objective!

Business Research

- Studying Business research serves two important purposes:

→ *To pursue business research with scientific / academic rigour (basic business research)*

→*To create relevant business knowledge for managers, business leaders and organisations for essential business decisions (applied business research)*

With reference to Greener 2008

Common Purposes of Research in Business

Source: Bougie & Sekaran, 2020, p. 4

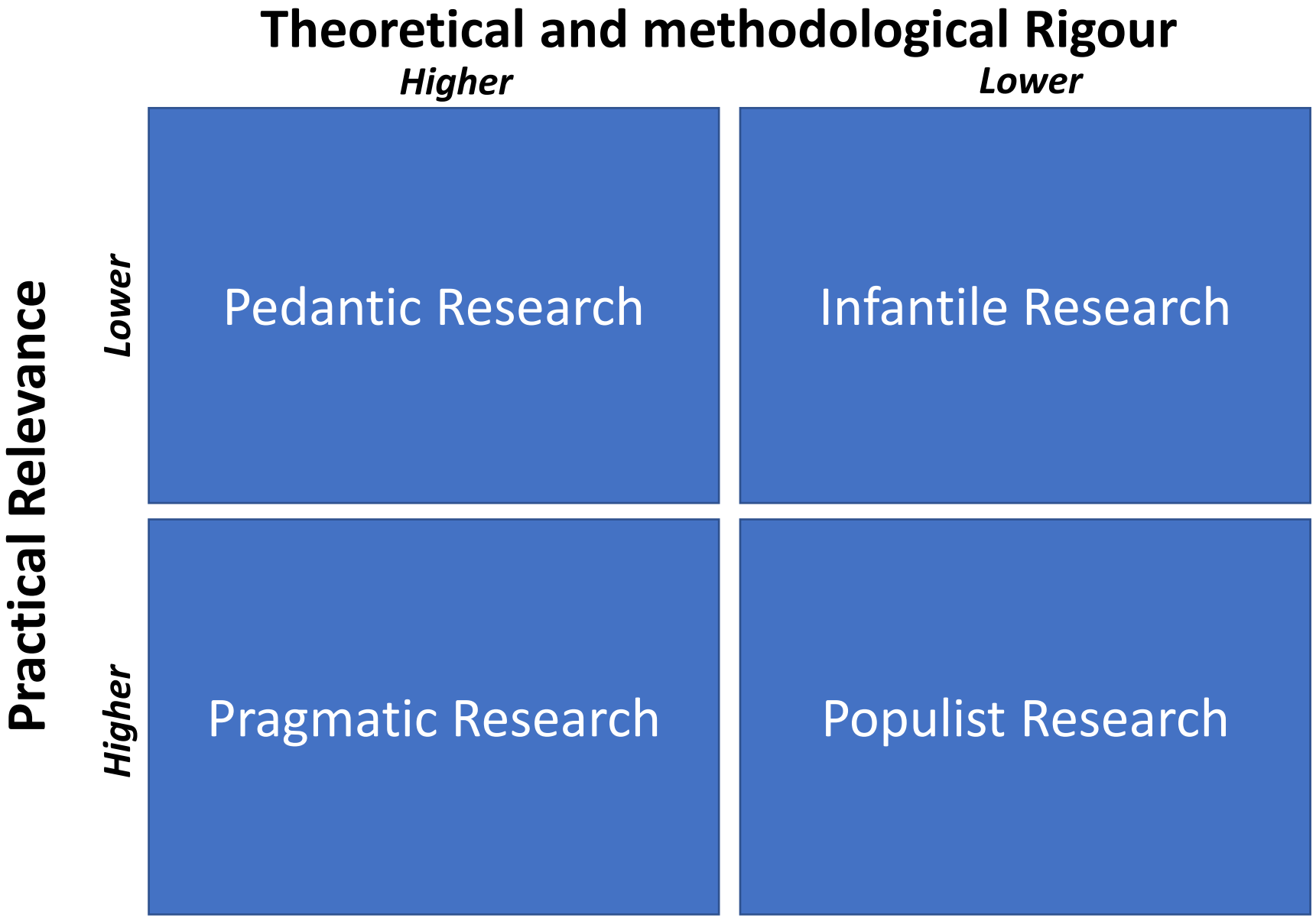
EXHIBIT 1.1 Some Commonly Researched Areas in Business

1. Employee behaviours such as performance, absenteeism and turnover
2. Employee attitudes such as job satisfaction, loyalty and organizational commitment
3. Supervisory performance, managerial leadership style and performance appraisal systems
4. Employee selection, recruitment, training and retention
5. Validation of performance appraisal systems
6. Human resource management choices and organizational strategy
7. Agile organizations
8. The dynamics of rating and rating errors in the judgment of human performance
9. Strategy formulation and implementation
10. Just-in-time systems, continuous-improvement strategies and production efficiencies
11. Updating policies and procedures in keeping with latest government regulations and organizational changes
12. Organizational outcomes such as increased sales, market share, profits, growth and effectiveness
13. Consumer decision-making
14. Customer relationship management
15. Consumer satisfaction, complaints, customer loyalty and word-of-mouth communication
16. Complaint handling
17. Delivering and performing service
18. Product life cycle, new product development and product innovation
19. Market segmentation, targeting and positioning
20. Product image, corporate image
21. Cost of capital, valuation of firms, dividend policies and investment decisions
22. Risk assessment, exchange rate fluctuations and foreign investment
23. Tax implications of reorganization of firms or acquisition of companies
24. Blockchain technology
25. Banking strategies
26. Behavioural finance: overconfidence, bounded rationality and home-bias
27. Executive compensation
28. Mergers and acquisitions
29. Portfolio and asset management
30. Financial reporting
31. Cash flow accounting
32. Accounting standards
33. Outsourcing of accounting

Task 1: Find your Group

- *Build a group for your research project*
- *2-3 students per group*
- *Rearrange and sit together*
- *If support is needed, please ask.*

Relevance vs Rigour in Business Research



Adapted from Pearson Education 2019, Hodgkinson et al. (2001)

(II) Introduction to Research Methods

What **Reality** can we Observe?

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What is reality?

Two School of Thought about Reality: **Positivism** **Interpretivism**

Two School of Thought about Reality

Positivism

- *Reality is objective*
- *It can be discovered and generalised by systematic, impersonal research methods (→ objective knowledge)*
- *The researcher needs to be a trained conductor of such research, while withholding his personal viewpoints and subjective biases scrupulously from the research process*

Interpretivism

→ *Reality is (inter)subjective*

→ *It cannot be described without including the subjective viewpoints of those persons being observed and those persons observing (→ subjective knowledge)*

→ *The researcher needs to be a critical interpreter of social events (and of himself as part of the research process)*

Inductive and Deductive Research

Scientific Representation of Reality

Intellectual models, theories and concepts about parts of reality

The Researcher…

Inductive research: Theory generation based on empirical research

Deductive research: Theory confirmation (falsification) and application (describing, explaining and prognosing reality)

…and his research methods.

Observable / measurable facts, events and changes

Empirical Reality (positivist, interpretivist)

Qualitative vs Quantitative Research Methods

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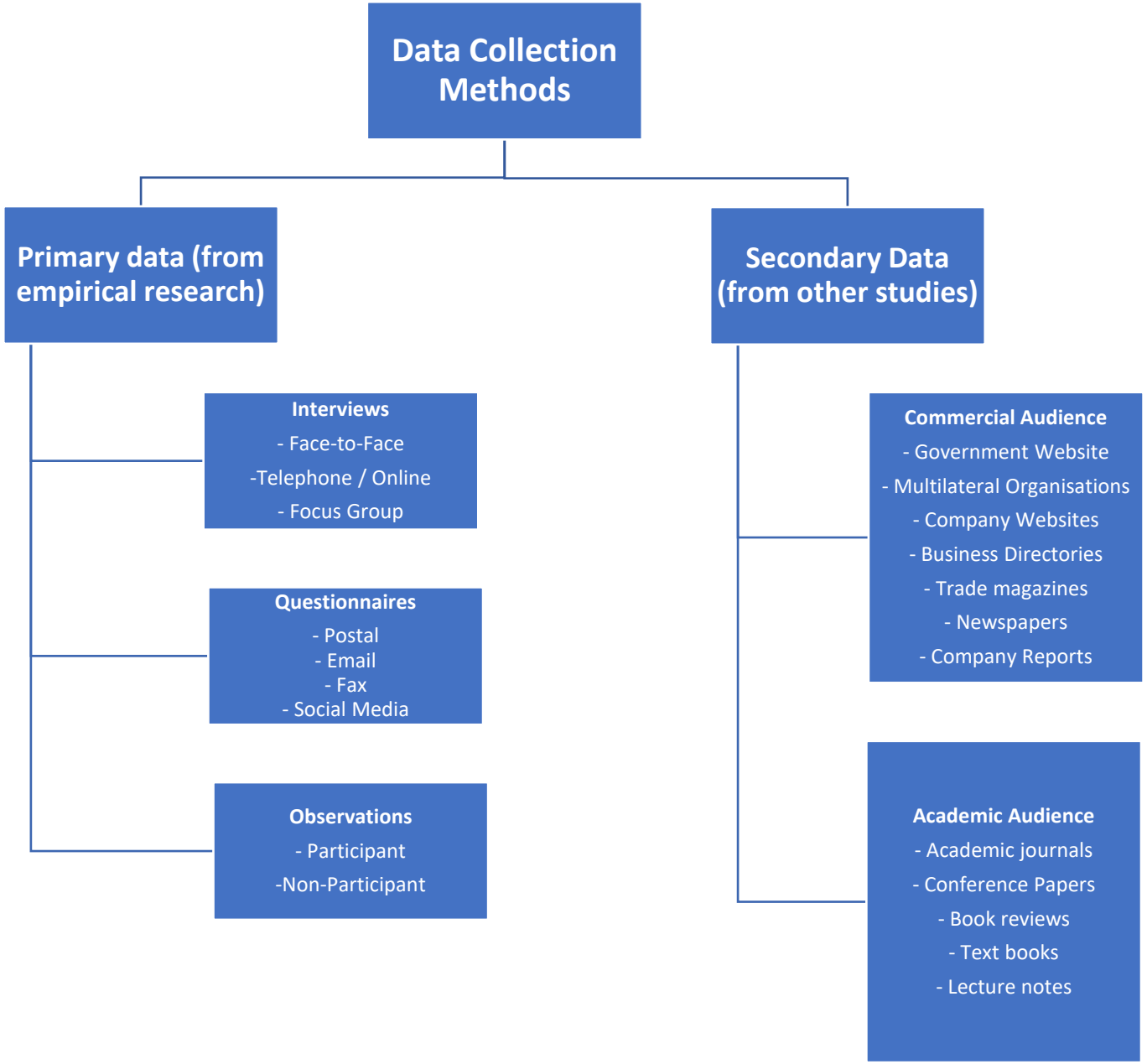
	Qualitative	Quantitative
Focus of Research	Quality (nature, essence)	Quantity (How many, how much)
Philosophical Roots	Interpretativism	Positivism
Associated Research Methods	Fieldwork, ethnography, grounded theory, expert interviews, etc.	Experiments, statistical analysis, surveys, etc.
Purpose of Research	Understanding, description, exploration, hypothesis development	Prediction, control, confirmation, hypothesis testing
Research Design Characteristics	Flexible, evolving, emergent	Pre-determined research process
Research Setting	Natural, familiar	Unfamiliar, artificial
Research Sample	Small, non-random, non-representative	Large, random, representative
Role of Researcher	Interpretation of qualitative data	Application of quantitative methods
Mode of Analysis	Inductive (by researcher)	Deductive (by statistical methods)
Findings	Comprehensive, complex	Precise, narrow

Adapted from Soring-Peters 2004

Data Collection Methods for Qualitative and Quantitative Research



Qualitative Research

- Generation of narrative data
- Research Questions: Why? What? How? Who?
- Question Type: Open question / Open for narrative answers
- Data Collection Methods: Especially interviews, observations, literature analysis

Quantitative Research:

- Generation of numerical data
- Research Questions: How many? Who? Where? How much?
  What is the impact of x on y?
- Question type: Closed questions, answered narrowed down for numerical representation
- Data Collection Methods: Especially Questionnaires (Surveys), Observations

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Different Types of Research - Different Research Problems

- **Exploratory Research:** Generation of insights into subject with only little foreknowledge. This research is mainly qualitative and aims at the generation of initial theories and hypotheses (focus on creating ***general insights***).

- **Descriptive Research:** Generation of accurate representations of current or past phenomena and situations. This research can be either qualitative or quantitative. It aims at the generation of comprehensive descriptions of factual situations (focus on ***what***).

- **Causal Research:** Generation of knowledge on underlying patterns and causal relationships that explain the occurrence of certain phenomena. This research requires usually the application of quantitative methods to generate final results. It aims at the development of causal explanations (focus on ***why***).

(Wilson 2014)

Research Problems

What is a research problem?

→ ***The initial problem that defines the scope of the thesis' content and discussions***
→ ***Defining the research problem fundamental — it is the anchor of your entire research project.***

How Can you Define A Research Problem?

→***Research Objective:*** *What is the scientific purpose of the study?*
→***Management Objective:*** *How does the research contribute to managerial decision-making?*
→***Research Questions:*** *Broken-down, specific research questions that structure the research project*

Management Objectives, Research Objectives, and Research Questions

	Research problem	
Management objective	**Research objective**	**Research questions**
To improve the customers' waiting experience, customer satisfaction and service evaluations.	The purpose of this study is twofold: (1) to identify the factors that influence the passengers' waiting experience and (2) to investigate the possible impact of waiting on customer satisfaction and service evaluations.	1. What are the factors that affect the perceived waiting experience of airline passengers and to what extent do these factors affect the perception of waiting times? 2. What are the affective consequences of waiting and how does affect mediate the relationship between waiting and service evaluations? 3. How do situational variables (such as filled time) influence customer reactions to the waiting experience?

(Sekaran and Bougie, 2020)