

Final Group Project: AI's Impact on Mid and Top Management in SMEs

Objective:

This project aims to analyse how artificial intelligence is transforming decision-making, operations, and strategy at the mid and top management levels of small and mid-sized enterprises (SMEs). Students will explore both opportunities and challenges AI presents to these organisations, especially from a managerial perspective.

Project Structure (12 Weeks, ~50 person-hours per Group)

1. Research & Hypothesis Development (Weeks 1–2)

- Each group selects an SME (Portuguese or international) to study.
- Conduct secondary research on AI applications in SMEs and their impact on management roles.
- Formulate **two to three hypotheses** on how AI is changing management tasks (e.g., AI reducing strategic planning time, AI replacing certain middle-management roles).

2. Interviews & Data Collection (Weeks 3–4)

- Each group contacts **two professionals** from the same company (preferably managers or business owners) in real companies.
- Conduct **structured interviews** to gather insights on AI adoption, perceived risks, and benefits.
- Focus on real-life examples of AI affecting decision-making, job roles, and company strategies.

3. Assessment Presentation (Week 5) – 14/03/25

- Each group presents their research and initial findings to the class.
- Feedback will be provided, and groups may be required to adjust their approach before continuing.
- This ensures alignment with project goals and reduces the risk of poor final presentations.

4. Analysis & Validation (Weeks 6–7)

- Compare findings with initial hypotheses: Which were confirmed? Which were disproven?
- Identify **key themes and patterns** from interview responses.
- Highlight **major opportunities** (e.g., AI increasing efficiency, freeing managers for strategic work) and **threats** (e.g., AI-driven job displacement, over-reliance on automation).

5. Final Presentation & Report (Weeks 8–10) 12 and 13/05/25

- Groups prepare a **10–15-minute presentation** summarising findings.
- Submit a **short report (8–12 pages)** outlining research, interviews, analysis, and conclusions.
- Discuss implications: How should future managers prepare for an AI-driven workplace?

Deliverables

Presentation

The team needs to showcase their project to the class on **March 14th**. During this presentation Professors might give some feedback, and it will be up to the team to adjust for the next phases based on their comments.

Report

Your report should include a table of contents, an executive summary, and a section detailing the target organization. It should then outline the steps mentioned previously. Transcripts and notes from the interviews. The report must be written entirely in English. If any part is initially conducted in Portuguese or another language, such as interviews, it needs to be translated into English.

The main report must be submitted in PDF format on Moodle by **23:59 on May 16th** . As outlined in the syllabus, we cannot accept late submissions for any reason. Moodle will automatically enforce this deadline.

Questions?

Please come with preliminary questions to the class.

Possible Doubts from students

Considering your students' background, they might ask a mix of logistical, conceptual, and technical questions. Here are some potential questions they could ask, categorized for clarity:

1. Understanding the Project Scope

- What exactly is an SME? Can we choose a startup, or does it have to be a more traditional company?
- Can we focus on a large company's small business unit instead of a standalone SME?
- Does the company we choose have to already be using AI, or can we explore companies that haven't implemented AI yet?
- Can we choose a company from any country, or do we need to justify why we are looking outside Portugal?

2. Hypotheses and Research Stage

- How specific do our hypotheses need to be? Can you give us an example of a strong hypothesis?
- Where should we start our research? Are there any recommended sources on AI in SMEs?
- Can we change our hypotheses after conducting interviews if we realize they don't make sense?

3. Interviews & Data Collection

- How do we find managers or business owners willing to talk to us?
- What if we reach out to companies and don't get any responses?
- Can we interview more than two people?
- Are we allowed to conduct interviews online (Zoom, Teams) instead of in person?
- Can we interview AI consultants or researchers instead of business managers?
- Should we record the interviews, or is taking notes enough?

4. Mid-Semester Assessment Presentation

- What should be included in our presentation? Is there a specific format?
- Will we get graded on this presentation, or is it just for feedback?
- What happens if our research is incomplete by Week 5?

5. Analysis & Validation

- If our hypotheses are completely wrong, does that mean we did a bad job?
- How should we present our findings if we get conflicting answers from different interviewees?
- Can we include AI tools (like ChatGPT) in our analysis?

6. Final Presentation & Report

- What should the report structure look like? Can we see an example?
- Can we use charts, infographics, or AI-generated visuals in our report?
- Will the final presentation be open for questions from the audience?
- Will there be a Q&A session after the final presentation?
- Is there a specific citation format we should follow for our research sources?

7. Grading & Expectations

- How is this project graded? Is it mostly about research quality, presentation skills, or creativity?
- If a group member doesn't contribute, what should we do?
- Will we have any guidance or check-ins during the semester?

8. AI Ethics & Practical Concerns

- What if the companies we interview are hesitant to share information about AI?
- Should we also discuss the ethical concerns of AI replacing managerial roles?

- How do we ensure we're getting unbiased information from our interviewees?

These are some of the most likely questions they might ask, but students might also surprise you with unexpected angles! You could prepare a **short FAQ handout** or a slide addressing some of these common concerns to make the first class more engaging. 🚀