

Essay 26

Group Assignment Brief

Assignment overview

This assignment invites students to apply the analytical frameworks discussed in class to a concrete R&I opportunity. The objective is not to produce an exhaustive consulting report, but a disciplined management memo that connects strategic rationale, market logic, financial attractiveness, risk assessment and decision quality.

Students are expected to mobilise course concepts selectively and appropriately, including strategic fit, innovation thesis, customer unmet need, market attractiveness, business logic, project valuation, risk assessment, KPIs and go / no-go decision making.

Main objective

Deliver an evidence-based go / no-go recommendation.

Important dates

Deadline: April 26th (COB). Presentation: April 28th.

Rules of the assignment

- Teams of 5 students
- Weight: 25% of the final grade
- Choose one scenario only
- Final report: maximum 12 pages, excluding appendices
- Presentation: 10 minutes plus 5 minutes of Q&A
- All answers must be in English
- State all assumptions, calculations and references clearly
- GenAI may be used, but all outputs must be critically validated by the group

Recommended structure of the memo

Section	Expected focus
1. Strategic fit	Assess the value proposition and the strategic logic of the opportunity.
2. Market logic	Define the beachhead market and assess the credibility of TAM, SAM and SOM.
3. Business logic	Explain where value is created and captured, and what conditions are required for adoption and scale.
4. Valuation, risk and KPIs	Calculate the main valuation metrics, identify the key risks, propose a simple scenario analysis and define the KPIs to track.
5. Recommendation	Conclude with a clear go / no-go recommendation, including any conditions for a staged investment.

Use of course concepts

Students should use course concepts with judgment rather than mechanically. Not every framework discussed in class needs to appear in the memo. Strong work will show discernment in selecting the concepts that are most relevant to the case.

What strong assignments will demonstrate

- Clarity of reasoning
- Appropriate use of course concepts
- Sound and transparent assumptions
- Consistency between analysis and recommendation
- Focus on the few drivers that matter most

Scenario 1 - The Fuel of the Future

You are part of the RD&I team of a large energy company. Biofuels matter for the energy transition, and used cooking oil (UCO) may become a valuable feedstock. The challenge is not only technical. It is also commercial and operational: can the company secure supply, build a viable business model and create a scalable advantage?

A university spin-off claims it can improve UCO collection and now seeks a partner to commercialise the solution. The team shares only limited information because part of the know-how is protected. Your task is to assess whether the opportunity deserves to move forward.

Required analysis

Section	Expected focus
1. Strategic fit	Define the innovation thesis and the value proposition. Assess whether the idea, technology and motivation are aligned, and whether the opportunity fits the company's innovation thesis and portfolio.
2. Market logic	Critically assess the proposed TAM, SAM and SOM for Portugal (30 / 18 / 9 kton per year). Explain what could change in Iberia. Identify the most plausible beachhead market and the key demand-side conditions for adoption.
3. Business logic	Explain where value is created and captured. Identify the likely sources of competitive advantage, required partnerships and the main conditions for scale. A full business model canvas is not required.
4. Valuation, risk and KPIs	Calculate NPV, IRR and payback period using the data provided. Briefly comment on the opportunity cost of capital. State assumptions clearly. Then choose an appropriate qualitative risk method, justify it, identify the main risk variables and propose a simple scenario analysis with mitigation actions. Finally, define the KPIs that should be tracked if the project moves forward, distinguishing learning, commercial and scale indicators.
5. Recommendation	Conclude with a clear go / no-go recommendation. If your answer is conditional, specify what evidence would still be needed before committing to full implementation.

Financial inputs. Investment required: EUR 1M over 3 years. Opportunity cost: assume an annual deposit rate of 5%. Discount rate: 8%. For payback, use a conservative approach based on SOM volumes and your justified margin assumptions.

Guidance. Keep the analysis disciplined. Justify assumptions, prioritise the key drivers, and avoid turning the assignment into a broad consulting report.

Scenario 2 - Digital Decor

You are part of an intrapreneurial team building a marketplace for home decor and furniture, with a strong focus on smaller Portuguese suppliers. There is market interest, but the platform still lacks a clear source of differentiation and repeatable economics.

A digital startup offers a 3D planning tool that lets users visualise furniture in their own homes. The proposal sounds attractive, but you need to determine whether it creates real differentiation and better economics, or whether it is simply an interesting feature.

Required analysis

Section	Expected focus
1. Strategic fit	Explain the value proposition of the 3D tool and assess whether it genuinely strengthens the marketplace strategy. Clarify the customer problem being solved and the source of differentiation.
2. Market logic	Redefine TAM, SAM and SOM for a Portuguese home decor marketplace centred on Portuguese suppliers. Compare the target market with and without the 3D tool. Identify the most plausible beachhead market and the key demand-side conditions for adoption.
3. Business logic	Explain how the tool could affect the key business drivers, such as conversion, average order value, returns, trust and supplier participation. Focus on the few that matter most.
4. Valuation, risk and KPIs	Calculate NPV, IRR and payback period using the data provided. Briefly comment on the opportunity cost of capital. State assumptions clearly. Then choose an appropriate risk method, justify it, identify the main scenario variables, propose mitigation actions and define the KPIs that should be tracked if the tool is implemented.
5. Recommendation	Conclude with a clear go / no-go recommendation. If your answer is conditional, specify what evidence would still be needed before committing to full implementation.

Financial inputs. Investment required: EUR 300k over 2 years. Opportunity cost: assume an annual deposit rate of 4%. Discount rate: 5%. For payback, use a conservative approach based on SOM logic and your justified margin assumptions.

Guidance. Be precise. The question is not whether the tool is interesting, but whether it improves the economics and resilience of the marketplace.