

engineering
games 2024

ENTREPRENEURSHIP HANDBOOK

33rd ENGINEERING GAMES
THINK OUTSIDE THE BOX

January 3rd to 7th 2024

Université de Sherbrooke

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Introduction

This year, for the fifth consecutive year, the entrepreneurial competition takes place at the Quebec Engineering Games. During this event, participants will have to find a substantial solution to a problem of their choice, while proving the commercial viability of their solution. The event is intended as a challenge to promote the qualities and assets of future Quebec engineers in emerging companies, while fostering collaboration between different engineering fields.

In this competition, participating teams will be asked to identify an economic sector that will enable the emergence of a new product that responds to a social or environmental issue or need. The future engineers will then have the task of putting together an economically viable business model, while ensuring that their new product is feasible by building a working prototype. This will culminate in a presentation to a jury at the Engineering Games in January 2024.

The following document presents the competition theme, the various deliverables to be submitted and their evaluation procedures, as well as the competition rules and specifications. This is the official document for the fifth edition of the 2024 Quebec Engineering Games entrepreneurial competition.



A word from your CO



Scan me!



Thinking Outside the Box

As future engineers, you will be called upon to solve tomorrow's problems. Thinking outside the box is one of the founding pillars of engineering. It's about breaking new ground, challenging established norms, and exploring new perspectives to solve the complex problems our society faces. In an ever-changing world, it's crucial that future engineers think innovatively, creatively, and boldly. By adopting an approach that defies convention and pushes boundaries, you'll be able to come up with original solutions and meet the technological, social, and environmental challenges that tomorrow's world will face. Thinking outside the box in engineering can thus help shape a better, more sustainable society for future generations.

For the 2024 edition, you're invited to think into the **BOIIITES**. Each team is free to choose an economic sector in which it wishes to have a positive impact by proposing an innovative solution that meets one or more [sustainable development goals](#). The challenge is to develop a solution to a problem chosen by the team, focusing on its positive impact.

The organizing committee has decided to encourage the creativity and passions of the participants by not restricting the choice of economic sector or type of business model. However, it is essential that the project is in the BOIIITES. In addition, it is important to stress that projects must be initiated from the receipt of the participants' handbook and cannot be the continuation of a pre-existing project or technical club. This approach will enable teams to develop original and innovative ideas while ensuring fairness in the competition. See Appendix D: Specifications and Regulations.

A motivating word from a great innovator of the 21st century:

Innovation is about taking risks, pushing boundaries and challenging the status quo. It's about daring to do things differently and envisioning a better future.

Helen Greiner – Co-founder of iRobot

Best
Opportunity
Innovation
Ingenuity
Impact
Technologic
Environnemental
Social



Deliverables & Milestones

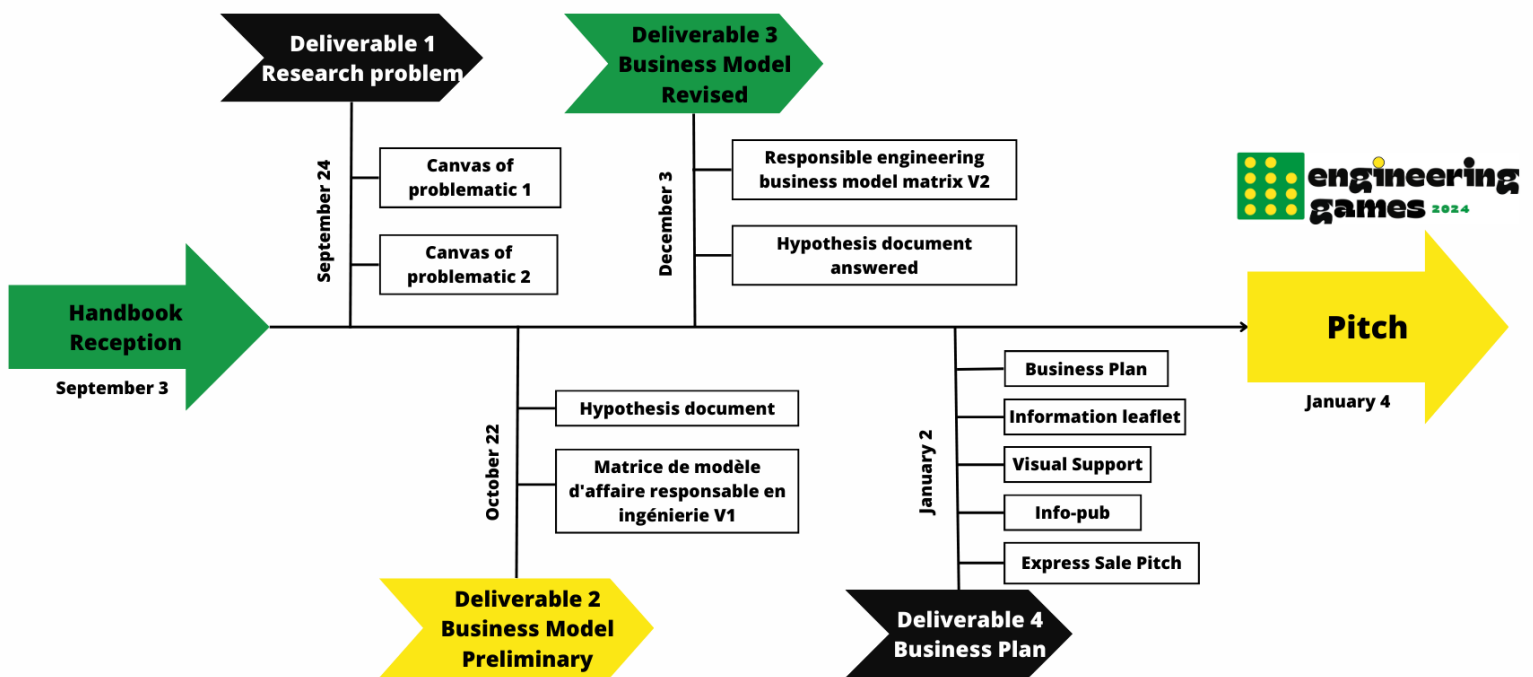


Figure 1 : Deliverables and Milestones

Deliverable 1: Problem identification

Aims to start exploring different issues, assessing their scope and identifying the stakeholders impacted, while looking for preliminary solutions.

Deliverable 2: Preliminary business model

Once the problem has been chosen, this deliverable is used to create a first preliminary version of a responsible engineering business matrix, and to establish a list of hypotheses to be validated.

Deliverable 3: The revised business model

This deliverable is the final version of the responsible engineering business matrix. It represents the result of all confirmed hypotheses and highlights the team's progress.



Deliverable 4: The business plan

This document is the professional version of the responsible business matrix, ready to be presented to investors. It elaborates on the various elements of the matrix and proposes a medium-term economic analysis, in addition to the technical documentation concerning the engineering innovation.

Pitch

The final presentation takes the form of a sales pitch to investors. You must try to convince the judges that your business model is in the **BOIIITES**.

The prototype

The prototype represents the tangible aspect of the product created. This element can be a complete prototype or simply a proof-of-concept, depending on the particularities of the product. It will be unveiled during the final presentation.

The information leaflet

The information sheet is a deliverable intended for the judges during the pitch and especially during the deliberations. It contains a pictorial summary of your presentation and business plan. Your goal is to stand out from the crowd and be memorable for the judges.

Info-pub

This short video explains your project in the style of a TV commercial. It will be used to present your project to all delegates. You need to advertise your company and convince them that your project will have a real impact on your audience.

Express sales pitch

This short video, produced by each person taking part in the presentation, is used to sell your project quickly and charismatically, without visual support.



Deliverable 1: Research Problem

The first deliverable is due **on September 24, 23:59**. The first step in the competition is to identify your project's problem. A team brainstorming session is recommended to generate ideas. The first deliverable will be the result of this process, in the form of an outline (see Appendix A : Deliverables). This will highlight all the elements needed to structure and define your entrepreneurial project: the problem, the entities involved, existing solutions, obstacles, etc.

The aim of this deliverable is to develop a structured, in-depth understanding of the problem you wish to solve, and to map the surrounding ecosystem. You'll need to fill in at least two frameworks based on your problem areas with the most potential.

The deliverable should cover the following points:

The problem: Describe the problem in one sentence clearly and concisely so that someone outside the project can understand it.

Stakeholders: Identify the people impacted by the problem. Describe their typical profile, their needs, including demographics and socio-economic status.

Existing solutions: Explain briefly what solutions exist on the market today, and highlight their advantages, as well as their shortcomings in relation to the needs of the people affected.

Potential solutions: Start by proposing several new potential solutions in a preliminary way. Are there several options? Are they varied and innovative? Demonstrate that you have explored a variety of possible solutions and that it is possible to solve the problem.

Resources: Describe the approximate technical and financial resources required to carry out your project.

Opportunity: Analyze the economic opportunity represented by this problem. Show that there is a market for solving this problem. This section can be supported by statistics on the economic market and the demographics of this part of the market.

Value proposition: Describe how your proposition differs from existing solutions. What needs do you address, and why are these needs important? The added value must be consistent with the problem, the people impacted and the existing solutions.

Scope: Describe the impact of this issue not only on those directly affected, but also on the environment, society and those indirectly impacted. Refer here to the [Sustainable Development Goals \(SDGs\)](#).

Obstacles: Identify the current obstacles that explain the lack of progress or the barriers that prevent progress in solving this problem. You need to demonstrate a thorough understanding of the problem and highlight the obstacles that future solutions may encounter.

Causes: Take your thinking a step further by describing the ecosystem surrounding the problem and the causes behind the lack of resolution. Go beyond the initial "why" and show that you have examined the problem in all its dimensions.



You'll be provided with an outline template to help you fill in the first deliverable. In addition, a team presentation including a photo of each member and a brief description of their skills and expertise will be required. Multi-member teams will have the opportunity to present themselves through both deliverables.

The marking grid is available in Appendix B: Correction Criteria and Evaluation Grids. It contains correction criteria to guide you in evaluating the deliverable. Finally, feedback will be provided to the teams to guide the rest of the competition.



Deliverable 2: Preliminary business model and assumptions

The second deliverable, due on **October 22 at 11:59 pm**, consists of establishing a preliminary business model and formulating hypotheses concerning its various aspects. This step allows you to create a first version of your business model and to highlight the elements that are still unknown, by making assumptions that will need to be confirmed or invalidated to ensure the progress of your business model. In short, this is your initial game plan, and will be refined as the project progresses.

For the business model, you'll need to complete the Responsible Engineering Business Model Matrix (see Appendix A : Deliverables). This matrix will guide you in establishing each essential element of a desirable, feasible and viable business model. The elements to be covered are as follows:

Desirability

Customer relations: How will you retain, grow, and reach your customer base? What channels will be used to establish customer relations? Why is a positive relationship important to your business model?

Target customers: Who are your potential and target customers? What are their characteristics (demographic, behavioral, socio-economic)? What are their needs, problems, frustrations, and expectations? What is the size and segmentation of your target market?

Indirect players: Other than your target audience, who are the indirect users or beneficiaries? What are their relationships with your company (partners, external or regulatory stakeholders, professional bodies)? How do they affect your company, and how can you minimize the negative impact on these indirect players?

Channels: What are your sales, marketing, and distribution channels? How do you reach your target customers? How are the channels you choose aligned with your value proposition and your target clientele?

Value proposition: What is your product/service and how does it stand out from the competition? How do you address the problems/needs of your customer segment? What are the features and specifications of your product or service that generate value?

Feasibility

Key resources: What material (infrastructure, equipment), human (skills, expertise), financial, technological, and intellectual resources are needed to carry out the key activities?

Key partners: Who are the partners (suppliers, technological and financial partners, distributors, etc.) essential to the realization of your business model? How do they help you carry out your key activities? What do you offer them in return? Are there any indirect stakeholders (governments, shareholders, pressure groups) who influence your company?

Company structure: What is your company's organizational structure? How is the decision-making chain established? How are profits redistributed/used?

Key activities: What are the main tasks (R&D, production, marketing, sales, supply chain, customer service, etc.) required to implement your business model? What is the order of priority of these tasks? How does your model integrate the product/service lifecycle, from extraction to end-of-life, into your activities?



Engineering innovation: How does your innovation relate to your value proposition? What needs/problems are you addressing? What are the key resources, stakeholders and activities required to develop your innovation? How can you demonstrate the effectiveness and feasibility of your innovation?

Viability

Negative impacts: What are the known and/or potential negative impacts of your business model?

- Economic (e.g., excessive concentration of profits, exploitation of workers or natural resources, reduced accessibility)?
- Social (e.g., job relocation, precarious/hazardous working conditions, negative impact on the local community)?
- Ecologically (e.g., intensive use of non-renewable resources or polluting sources, ecosystem degradation, waste generation, production of short-lived products)?

Positive impacts: What are the main social or environmental problems addressed by your business model? How does your business model align with sustainable development objectives?

What are the benefits?

- Economic (e.g., creation of local, sustainable, quality jobs, fair distribution of profits, stimulation of the local economy)?
- Social (e.g., promoting inclusiveness and diversity, active involvement in the local community)?
- Ecologically (e.g., prioritizing renewable energies, reducing atmospheric emissions and pollution, contributing to the preservation and regeneration of biodiversity)?

Revenues: How does your company generate income? What is the selling price of your product/service? How is this price determined? Do you have several sources of revenue (direct sales, subscriptions, commissions)? Which customer segments are you targeting, and how willing are they to pay for your offering? How do you plan to grow your revenues/profits in the future?

Expenses: What are your fixed costs (facility rental, salaries, equipment costs)? What are production costs (raw materials, manufacturing, and distribution costs, etc.)? Are there any R&D costs? What are the costs of marketing and promoting your product? What are your company's administrative and operational costs?

For this step, you'll need to provide a more concise version, but it's important to keep these lines of questioning in mind. A template of the matrix will be provided to help you fill it in.

The second part of the deliverable consists of filling in the hypothesis template. You'll need to formulate at least one hypothesis for each element. Only the hypotheses are required, as they will be used to study the market. Assumptions must be formulated in the form of questions to be answered before progress can be made with the business model.

The grading grid is available in Appendix B: Correction Criteria and Evaluation Grids.



Deliverable 3: Revised business model and answered hypothesis

The third deliverable, due on **December 3 at 11:59 pm**, consists of a revised and improved version of your business model. You will have to fill in the Responsible Engineering Business Model matrix again, incorporating in a more comprehensive way the information gathered from the assumptions made in Deliverable 2. In addition, the assumptions model will also need to be resubmitted with all the assumptions made and their corresponding responses.

The entrepreneurial process is not linear, but rather a process of continuous improvement based on iterations. Deliverable 3 is intended to reflect this reality. It is therefore perfectly normal for certain assumptions to be invalidated, leading to new assumptions being made and the need to make minor or major adjustments to your business model.

The sections to be completed in the matrix remain the same as for Deliverable 2, but this time they will be more in-depth. The assumptions document should trace the history of all assumptions made, including their answers and the methods used to answer them. In addition, it should include any new assumptions made as a result of the answers obtained. Response methods can take various forms, such as interviews, surveys, literature searches, proofs of concept, experiments, or market analysis, among others.

The marking grid is available in Appendix B: Correction Criteria and Evaluation Grids.



Deliverable 4 : The business plan

The fourth deliverable, due January 2 at 11:59 pm, is your company's business plan, including a three-year financial projection and technical documentation concerning your engineering innovation. This document represents your entire business model and strategy for developing your company. It should convince any investor that your company is economically viable, that you bring a desirable value proposition to your market, and that you rely on feasible technological innovation with the necessary resources at your disposal.

The business plan consists of 3 sections and appendices:

- 1- **Introduction of the compagny and team** (2 pages) :
 - Introduce each team member (photo, last name, first name and title) with a short description of their specialization.
 - Introduce the company (name, logo, mission, vision, objectives, values, etc.) with a short description. In addition, you can present external resources and current or future partners (optional).

- 2- **Product** (1 page) : Recall the problem and existing solutions, and describe your product and how it meets market needs. Demonstrate your company's desirability and feasibility.
 - **Problem:** Review the problem, explaining the problem(s) to be solved and/or the need(s) to be met, and briefly explain your value proposition.
 - **Current solutions:** List existing solutions on the market.
 - **Innovative product:** Explain the various aspects and functions of your product, emphasizing the distinctive and innovative nature of the project. You may include a photo or refer to the technical drawings in the appendix.
 - **Market:** Describe the potential market for your innovation and describe the target clientele. Include demographic statistics, market size, percentage of market reachable, or any other information that demonstrates the company's economic potential.

- 3- **Realization** (1 page) : Explain future steps and your action plan to demonstrate the viability of your business.
 - **Success/risk factors:** List the critical short- and medium-term elements that will determine your company's future. Put at least the three most critical success factors and the three most important risk factors in order of importance.
 - **Product development and marketing:** Explain the next steps for your company. What are the steps to a marketable product (R&D, certifications, subsidies, etc.)? What is your go-to-market strategy? How will you convert new customers and generate revenue?
 - **Summary of costs and financing:** Summarize the costs for the company's next steps and your means of financing in the short and medium term.
 - **BOIITES:** Conclude with a reminder of why your company is in the BOIITES.



4- Appendix 1 : Economic analysis (2 pages)

Make a financial projection of your business for the next three years. You need to establish a selling price for the product, as well as the company's break-even point based on expected revenues. The first step is to establish production costs (fixed and variable), administrative costs and marketing costs. Fixed costs include, but are not limited to, machinery and tools, buildings, and energy consumption (if applicable). Variable costs include parts (including transportation and manufacturing), labour and any other product-related items. Do not neglect to analyze the cost of sales in terms of sales staff time, implementation costs, delivery costs and so on. The appendix should include the following two elements:

- Costs and financing (January 1, 2024 to December 31, 2026): Take a detailed look at your company's expenses and sources of financing. Your report should include the following:
 - Operating costs: Current expenses to maintain operations (salaries, rent, etc.).
 - Production costs: Expenses related to manufacturing your product.
 - Sales costs: Expenses associated with promotion and marketing.
 - Development costs: Capital invested in research and development and product improvement.
 - Administrative costs: General expenses related to the management and administration of your business.
 - Financing sources: Identify where the capital needed to develop your business comes from (investors, founders, loans, and grants, etc.).
 - Financing structure: determine the breakdown of financing between equity and debt, as well as any repayment terms.

- Detailed income statement (January 1, 2024 to December 31, 2026): Allows you to present your company's revenues, expenses and profits or losses. Your report should include the following items:
 - Revenues: The company's sources of income.
 - Cost of sales: Expenses directly related to the production or supply of products or services sold.
 - Operating expenses: the company's general and administrative expenses.
 - Financial expenses: interest paid on debts or other financial costs.
 - Income tax: the amount of tax due on profits made by the startup.
 - Net profit or loss: the difference between revenues and expenses, indicating whether the startup has made a profit or incurred a loss over the given period.

Given the young nature of your company, it's only natural that certain amounts will need to be estimated. To make this projection, we suggest you use a financial analysis tool for small businesses, such as [Budgeto](#), [Previsio](#) or software such as Microsoft Excel.

5- Appendix 2: Technical documentation

- Provide all technical documentation **relevant** to the product and, more specifically, the technological innovation. For example: 3D model, technical manufacturing plan, electrical diagram, operating architecture, pseudo-code, etc. There is no page limit, but no text is allowed.



A sample template will be provided, but you are free to modify the layout to suit your needs. An extra page is allowed wherever you deem most relevant in the overall document. Please note that a penalty of points will be applied for each extra page. See Appendix D: Specifications and Regulations.

The correction grid is available in Appendix B: Correction Criteria and Evaluation Grids.



Presentation

By 11:59 pm on January 2, the day before arrival at the Games site, each team must have submitted its visual presentation, information sheet, infomercial, and express sales video. The file must bear the name of the delegation.

The final presentation takes the form of a sales pitch to a panel of judges lasting a maximum of 5-7 minutes. A maximum of 3 additional minutes will be allowed for a demonstration of the prototype. This is followed by a question period for the judges. In the context of this competition, the goal of the pitch should be to convince a business accelerator that your **product** has a place in the market AND that your **company** is viable enough to enter the market and obtain financing.

The following is a suggested generic format for the pitch. Each team is free to adapt it to its own business:

1. **Problem:** This section sets the context for the jury by presenting the industry and the chosen problem.
2. **Solution:** In this section, we present the product and how it solves the problem to the judges. This may be an opportune moment to demonstrate the prototype. Audiovisual support of the product in operation can also be added. It's important to emphasize the innovation involved.
3. **Market:** This involves presenting the target clientele. It is strongly recommended to refer to the results of the market test to show the depth of the analysis.
4. **Business plan:** This section presents the essential elements of your business plan and explains to the judges why your company is viable and resistant to various risks. It is therefore important to convince the judges that this is a business that will succeed. It's a good idea to include certain financial aspects, such as break-even point, cost of production, selling price and profit margin.

A second presentation will take place with the top 4 teams in front of all the delegations and a new panel of judges. This presentation will last a **maximum of 5 minutes**, followed by a short question period from the judges. Time will be set aside between the two presentations to make changes to your presentation based on feedback and the new time limit. It is important to include the product demonstration in the final presentation. The final podium will be determined by this final panel of judges.



Prototype

The purpose of the prototype presented to the judges is to confirm that the proposed solution is functional. It removes any doubt as to the product's feasibility and explicitly demonstrates technological innovation. The demonstration must show how the final product will function and be used.

By definition, the prototype has all the technical qualities and operating characteristics of the new product you are developing. However, it can also be an incomplete, non-definitive example of what the product might look like.

Depending on your plans, a prototype can take one of two forms:

1. **Proof of concept:** The sole purpose of a proof of concept is to answer any doubts about the technological risks of the solution. It must therefore demonstrate beyond any doubt that your product will be able to solve the problem. Proof-of-concept is therefore ideal for projects involving new technologies, which are the main source of risk for your company. A proof of concept should not require complex handling. Its presentation should also be accompanied by a plan giving an idea of the visual aspect of your final product.
2. **Physical prototype:** A presentation in the form of a physical prototype is intended to show a complex product that generates doubts about its effectiveness and functionality. A good prototype should be like your company's final product and demonstrate beyond doubt its effectiveness in solving the problem it addresses. While it doesn't need to look exactly like the product that will be put into service, it does need to prove that it is fully functional. It is therefore a complete physical solution that resolves technological doubts, as well as enabling judges to understand how the various components interact with each other. The prototype is suitable for complex projects that involve risks in terms of use and performance.

The physical product will be evaluated according to the presentation model chosen by the team. If the chosen model does not dispel the various doubts, a significant penalty may be applied.



Restrictions

1. A video cannot replace the prototype, even if it is too large. It can, however, serve as an accessory to your presentation.
2. The maximum dimensions of the prototype are (1.5 m X 1.5 m X 0.80 m). You'll need to make sure that the prototype can fit through a door frame and be moved by elevator.
3. If the dimensions of the final solution exceed the maximum dimensions, a scaled prototype can be submitted.
4. Prototypes must be handed in on arrival at the Engineering Games. No modifications will be permitted after submission. A debugging period will be allowed at the Games to check that the prototype is working properly before presentation.



Information sheet

To help the audience during the presentation, delegations are asked to print out a one-sided, letter-size sheet and hand it to the judges. This sheet summarizes your entire project and will be used primarily during the deliberations.

Please note that the sheet and its contents will not be directly evaluated, but its absence will be penalized. In addition, only this sheet may be given to the judges. All other forms of documentation are strictly prohibited.

Video infomercial

The video, no longer than 3 minutes, must be submitted with the final deliverables in MP4 format. Its purpose is to present your product in the form of a TV commercial. This video will be used during the competition to concisely present your project to other delegates. It should highlight your product and the innovation at the heart of your project. It's essential to explain in a charismatic and interesting way how your product stands out from the competition.

Express sales pitch

This takes the form of a video lasting no more than 1 minute and should be submitted with the final deliverables in MP4 format. Its purpose is to present your project in a concise and convincing way. The main objective is to capture the listener's attention within the first few seconds and to arouse enough interest to generate further conversation or a subsequent business opportunity. The sales pitch must be concise, clear, punchy and highlight the key elements of the product or service, such as the value proposition, innovation, competitive advantages, and target market. One video per presenter is required for the final unveiling.



Evaluations

The summary table below shows the percentage of points awarded for each deliverable and stage of the competition. All evaluation criteria for each deliverable are presented in Appendix B: Correction Criteria and Evaluation Grids.

Deliverable 1 : Research Problem	5%
Deliverable 2 : Business Model (preliminary)	5%
Deliverable 3 : Business Model (revised)	15%
Deliverable 4 : Le plan d'affaires	20%
Video infomercial and express sales pitch	5%
Information leaflet	5%
Pitch and prototype	45%

Deliverables will be corrected within a reasonable timeframe, to give all teams the chance to make corrections in subsequent sections. The objective is to deliver the evaluations on the Sunday following the deadline, i.e. within 7 days. However, these deadlines are subject to change due to force majeure or situations beyond our control.

A penalty of 5% per day on the value of the deliverable will be applied for late deliveries. In addition, any delay will result in an extension of the correction period by up to one week. In other words, since remittances are due on Sundays, the correction may be remitted up to the second Sunday after remittance.

To ensure fairness, all delegations will be evaluated by the same team of judges for a given deliverable. Presentation and product will be evaluated at the discretion of the official jury during deliberations following the pitch.



Team composition

To help teams structure themselves, we propose the following roles and positions in the company. Please note that these roles are only indicative and that each team is free to structure itself according to the needs and specificities of their product.

Product Designer

This person is responsible for the design and realization of the product. He or she is responsible for planning the prototype, its execution, and the preparation of a relevant demonstration to investors. This person will also be the point of contact when questions arise about the product itself, and the challenges associated with it.

Senior presenter

This person's role is to ensure the smooth running of the sales pitch by preparing its structure. During the presentation, their role is to introduce the team and ensure that communication flows smoothly between the audience and the team. He or she is usually the person who gives an overview of the company, before handing over to those with more in-depth expertise on the financial and technical aspects.

Business architect

This person is responsible for writing the business plan. By the same token, coherence, realism, and commercial innovation rest on their shoulders. He or she will also be the person required to know the financial framework to be able to easily justify the figures presented.

Beyond these roles, it is possible to enlist the help of any other person deemed relevant to the creation of the business. For each stage of the competition, except for the pitch, there is no limit on the number of participants. To respect the framework of the competition, any active and ongoing participation in the competition by a member not enrolled in an engineering program at your own university may result in disqualification.



Conclusion

It is with great pleasure and ambition that the organizing committee has developed this fifth edition of the Entrepreneurship Competition. Through the time you invest in this competition, you'll have the chance to showcase the strengths that an engineer can bring to a new business. You'll also have the chance to learn a little more about the various stages involved in setting up a company. It's sure to be an enriching experience for participants, spectators, and judges alike. The organizing committee and co-directors wish you the best of luck!



Appendix A : Deliverables

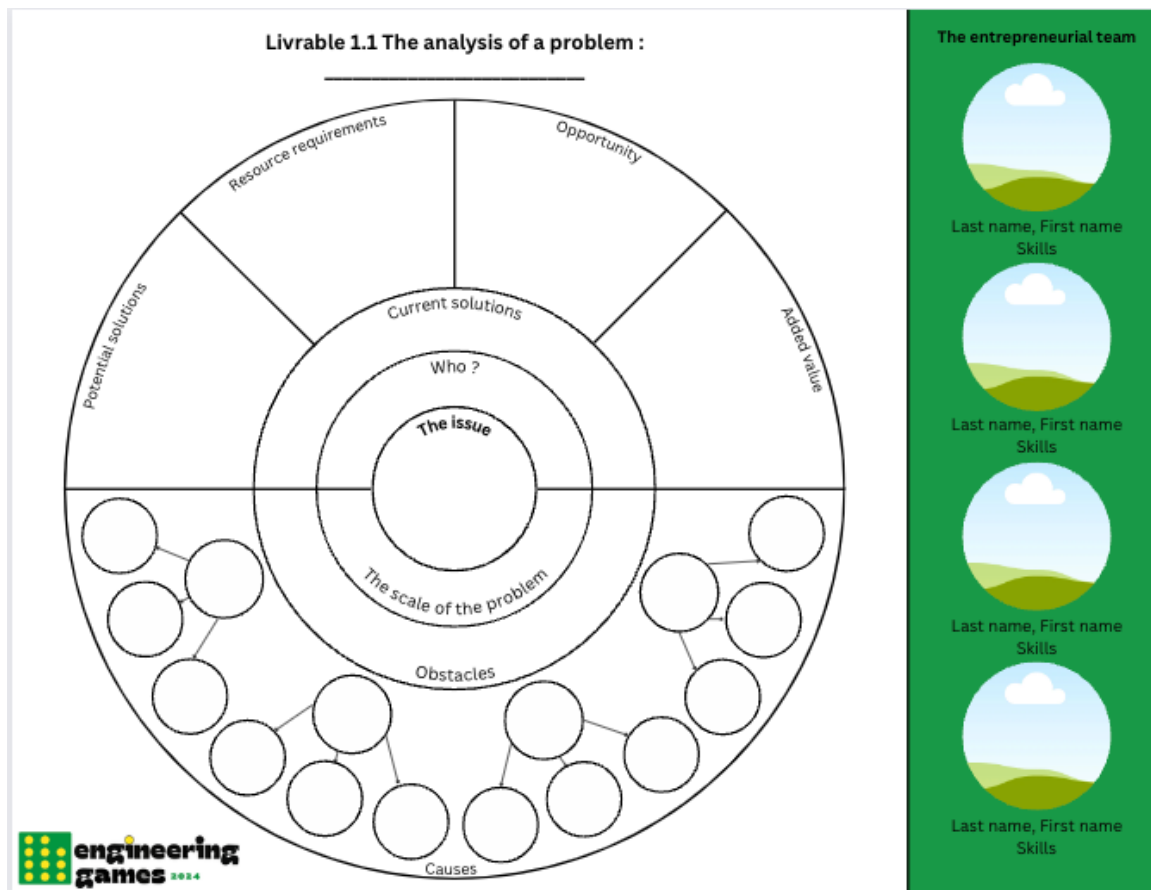


Figure 2 : Deliverable 1 – Search of Problem



RESPONSIBLE ENGINEERING BUSINESS MODEL MATRIX

Inspired by the responsible business model matrix created by Université Laval.

University name : _____

Date : _____

Version : _____

KEY RESOURCES	KEY ACTIVITY	ENGINEERING INNOVATION	NEGATIVE IMPACT	POSITIVE IMPACT
KEY PARTNERS	ENTREPRISE STRUCTURE	MISSION AND VALUES	EXPENSES	INCOMES
CLIENT RELATION	INDIRECT ACTORS	ADDED VALUE		
TARGET CUSTOMERS	SALES CHANNELS			

■ Desirability
■ Feasibility
■ Viability

Version 2023 2024



Figure 3 : Deliverable 2 et 3 – Responsible Engineering Business Model Matrix



Appendix B: Correction Criteria and Evaluation Grids

C1 Desirability: The solution meets market needs and stands out from the competition

This criterion assesses the extent to which the company and its product/service stand out from the competition by offering a unique and innovative value proposition that meets the needs and desires of the market. It considers the attractiveness and usefulness of the offer, as well as the relevance of the proposed solution to the problem. The team must demonstrate a thorough understanding of the competitive advantages of their offering and how it stands out from existing solutions on the market. The team must also show how their value proposition meets the needs and desires of the target market.

C2 Feasibility: The company is able to implement the proposed solution within a realistic timeframe.

This criterion evaluates the company's ability to implement the proposed solution in terms of technology, resources, and time. The team must demonstrate that it has a thorough understanding of the technical and logistical challenges associated with implementing its solution, as well as the skills required to overcome these challenges. It must also demonstrate that its solution is as feasible economically as it is technically and that it can be implemented on schedule.

C3 Viability: The business model is profitable in the long term and generates a positive impact

This criterion evaluates the viability of the company and its business model, as well as the impact generated. The team must demonstrate that it has a clear understanding of the costs and revenues associated with its business model, and its ability to maintain sustainable growth over the long term. The team must also demonstrate how its company can have a positive impact on society or the environment through its product/service, business model or operational practices. The team should explain how its social or environmental impact is significant and sustainable, and how it fits into its business model.

C4 Professionalism: The entrepreneurial team acts in a professional manner

This criterion evaluates the level of professionalism demonstrated by the team throughout the competition process. It encompasses several aspects, such as compliance with established criteria, the quality of submitted documents and the way they reflect the work carried out, as well as the team's entrepreneurial spirit. The team must demonstrate attention to detail and organization by providing clear, coherent, and well-structured documents. In addition, they must demonstrate their understanding of the competition's requirements by respecting deadlines and given guidelines. Documents and presentations must reflect the team's professionalism, highlighting the work carried out, the results obtained and the entrepreneurial vision behind the project.




Correction grid - Deliverable 1 			
C1 DESIRABILITY	Opportunity of the problem	The team has demonstrated the importance of the chosen issue by highlighting current solutions and its potential for significant impact. In addition, the team has clearly identified the stakeholders impacted by the issue.	/20
	Defining the problem	The team presented a clear and precise definition of the problem, enabling an understanding of its scope and the issues at stake. The obstacles and their causes are clearly thought out and relevant to an overall understanding of the problem.	/25
	Coherence of the proposal	The team put forward a convincing overall vision, demonstrating a value proposition that goes beyond existing solutions on the market. The proposal is consistent with the targeted problem and meets the needs of those directly impacted.	/20
C2 FEASIBILITY	Innovation in the solutions considered	The team came up with realistic solutions while demonstrating their innovative and creative elements. The team goes beyond conventional approaches to solve the problem.	/20
C4 PROFESSIONALISM	Document quality	The document is clean, concise and free of spelling, grammatical and syntactical errors. It complies with the instructions provided, and reflects quality work of an entrepreneurial nature.	/15

Figure 4: Correction grid - Deliverable 1




Correction grid - Deliverable 2 			
C1 DESIRABILITY	Business model desirability	The team precisely identified the target customer segment as well as the indirect players, and defined the sales, communication and customer relationship channels. The business model's value proposition is clear and convincing, offering real added value. The elements presented are consistent with each other and with the rest of the business model.	/18
	Hypothesis consistency	The assumptions identified by the team are precise, consistent with the business model, and provide relevant information.	/10
C1 FEASIBILITY	Business model feasibility	The team has clearly identified the various partners, resources and key activities required to realize the business model. The engineering innovation proposed responds adequately to the needs/issues identified and adds real value. The elements presented are consistent with each other and with the rest of the business model.	/18
	Hypothesis consistency	The assumptions identified by the team are precise, consistent with the business model, and provide relevant information.	/10
C3 VIABILITY	Business model viability	Positive and negative impacts are clearly identified, making it possible to measure the social, environmental and economic consequences of the business model. The revenue and expenditure structure is realistic and shows long-term viability.	/18
	Hypothesis consistency	The assumptions identified by the team are precise, consistent with the business model, and provide relevant information.	/10
C4 PROFESSIONALISM	Document quality	The document is clean, concise and free of spelling, grammatical and syntactical errors. It complies with the instructions provided, and reflects quality work of an entrepreneurial nature.	/16

Figure 5: Correction grid - Deliverable 2




Correction grid - Deliverable 3 			
C1 DESIRABILITY	Business model desirability	The team precisely identified the target customer segment as well as the indirect players, and defined the sales, communication and customer relationship channels. The business model's value proposition is clear and convincing, offering real added value. The elements presented are consistent with each other and with the rest of the business model.	/18
	Hypothesis consistency	Hypotheses have been verified and allow the business model matrix to be populated with relevant and accurate information. The validation process is well demonstrated, showing the team's iterative journey.	/10
C1 FEASIBILITY	Business model feasibility	The team has clearly identified the various partners, resources and key activities required to realize the business model. The engineering innovation proposed responds adequately to the needs/issues identified and adds real value. The elements presented are consistent with each other and with the rest of the business model.	/18
	Hypothesis consistency	Hypotheses have been verified and allow the business model matrix to be populated with relevant and accurate information. The validation process is well demonstrated, showing the team's iterative journey.	/10
C3 VIABILITY	Business model viability	Positive and negative impacts are clearly identified, making it possible to measure the social, environmental and economic consequences of the business model. The revenue and expenditure structure is realistic and shows long-term viability.	/18
	Hypothesis consistency	Hypotheses have been verified and allow the business model matrix to be populated with relevant and accurate information. The validation process is well demonstrated, showing the team's iterative journey.	/10
C4 PROFESSIONALISM	Document quality	The document is clean, concise and free of spelling, grammatical and syntactical errors. It complies with the instructions provided, and reflects quality work of an entrepreneurial nature.	/16

Figure 6 : Correction grid - Deliverable 3



Correction grid - Deliverable 4



C1 DESIRABILITY	Market description	The team clearly identified its target clientele, the potential for innovation in the market and succeeded in demonstrating the project's economic potential.	/15
	Existing solutions	All pre-existing solutions are identified, with their advantages and disadvantages highlighted. The team demonstrates its knowledge of the current state of the market and highlights the project's added value.	/5
	Product development and marketing	The team presents a clear, well-structured action plan over time, enabling it to expand its market and establish a relationship with customers through different channels. The next key activities are highlighted, clearly demonstrating the team's coherent vision for the development and evolution of its business.	/5
C1 FEASIBILITY	Product description	The project is based on an engineering product that stands out from the current competition due to its innovative nature. The description of the product and its use is clear, and all relevant technical documentation is appended.	/15
	Success and risk factors	The three factors of success and failure are clear, and their impact is well identified.	/10
C3 VIABILITY	Economic analysis and cost summary	The economic analysis is complete and realistic. It demonstrates the company's viability. Medium-term financial projections and income statement are complete.	/25
	Thematic BOIITES	The project is certainly in keeping with the competition theme.	/5
	Problem and need	The team clearly and precisely describes the problem or need to which the project responds.	/5
C4 PROFESSIONALISM	Document quality	The document is clean, concise and free of spelling, grammatical and syntactical errors. It complies with the instructions provided, and reflects quality work of an entrepreneurial nature. Company and team presentation is complete.	/15

Figure 7 : Correction grid - Deliverable 4



Appendix C : Important Dates

- September 3rd : Handbook delivery
- September 5th: Workshop 1 - Presentation of the competition booklet
- September 11th: Workshop 2 - Deliverable 1 and Brainstorming
- September 23rd: Créatek Brunch – Responsible Business Model
- September 24th, 11:59 PM: Submission of Deliverable 1
- October 9th: Workshop 3 - Deliverable 2 and 3 and hypotheses
- October 22nd, 11:59 PM: Submission of Deliverable 2
- November 5th-26th: Private question period (optional)
- November 14th: Créatek Presentation (*Comment faire un pitch*)
- December 3rd, 11:59 PM: Submission of Deliverable 3
- December 11th: Workshop 4 - Business Plan and Economic Analysis
- January 2nd, 11:59 PM: Submission of Deliverable 4, Visual Support, Express Sales Pitch, Information Leaflet, and Infomercial Video
- January 4th: Final Presentation (Pitch)
- January 6th: Finals



Appendix D: Specifications and Regulations

- Any late submission of deliverables will result in a penalty of 5% per day (24 hours) of delay.
- Each extra page for Deliverable 4 will result in a penalty of 20%.
- A project stemming from the continuity of an existing project or a technical group will incur a penalty of 50% on each deliverable. The organizing committee reserves the right to make judgments.
- All deliverable submissions must be made via the Teams channel designated for your university.
- Any questions regarding the deliverables or clarification of rules should be addressed via the Teams channel designated for your university. Responses to more general questions deemed relevant by the organizing committee will be communicated through the general channel.
- The organizing committee reserves the right to adapt certain sections of this booklet throughout the competition. Such modifications will be announced to the Entrepreneurship VPs of each delegation and will always be made with the aim of maintaining a fair and high-quality competition.



Appendix E : Organizing Committee

For all questions and comments regarding the entrepreneurship challenge, you can send a message to the Entrepreneurship Team at the following address:

Tristan Dupont - Vice-President, Entrepreneurship

Marie-Claire Hamel - CO - Director Entrepreneurship

Philippe Méthot - CO - Director Entrepreneurship

Édouard Villemure - CO - Director Entrepreneurship

directeur.entrepreneuriat@jeuxdegenie.qc.ca

For any or all questions and comments nonrelated to the challenge, do not hesitate to contact these members of the organizing committee at the following addresses:

Rima Al-Hayek - President

presidence@jeuxdegenie.qc.ca

Rose-Line Tougas - Vice-President, Partnerships

partenariats@jeuxdegenie.qc.ca

Happy Entrepreneurship season to all participants!

