

2021+1 ENGINEERING GAMES



RETOUR AUX SOURCES
JEUX DE GÉNIE XXXI

ENTREPRENEURSHIP HANDBOOK

JANUARY 3RD TO 7TH, 2022

POLYTECHNIQUE MONTRÉAL

A huge thank you to the partners involved in the Engineering Games 2021+1 Entrepreneurship Challenge. Without you, it would simply be impossible to complete this project.

Entrepreneurship competition sponsors :



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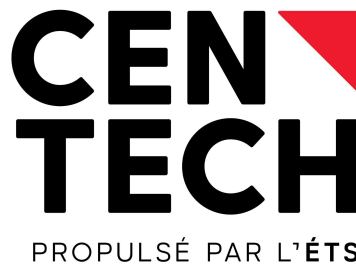


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Entrepreneurship 2021+1 Challenge

For the third consecutive year, the Organizing Committee of the Engineering Games presents to you the entrepreneurship competition. Throughout this challenge, the participants will have to find a concrete solution to an issue of their choice, all the while proving the commercial viability of their product. This event is a recent initiative of the organizing committees having in mind the promotion of the qualities of future Quebec engineers in emerging companies while promoting collaboration between different engineering disciplines.

In this competition, participants will be asked to identify an economic sector allowing the emergence of a new product that meets a predetermined company mission. The future engineers will then have the task of laying the groundwork to see if the company can be profitable in the sector while ensuring that their new product is feasible. In order to achieve that, they will have to manufacture a working prototype. The competition will culminate in a judged pitch at the Engineering Games. The jury will be able to attest to the creativity of the next generation.

The Organizing Committee reserves the right to adapt certain sections of this booklet throughout the competition. Such changes will be announced to the VP Entrepreneurship of each delegation and will always be made in order to maintain a high quality, healthy competition.



Water, Source of life

As a future engineer, you will be called upon to solve concrete and often complex technological problems. In this competition, an essential resource will have to be at the center of your solution, namely water. Water, which allowed for the emergence of life and is a main factor in maintaining it. Water, which is an important element of several industrial processes. A key resource too often neglected. Quebec has among the largest reserves of drinking water in the world and is also one of the largest consumers. It is said that with great power comes great responsibility. Many industries depend on this resource to ensure their operations, however a lot of questions can be asked regarding the usage. Is this industrial consumption optimized? Can it be limited?

For the 2021 edition of the engineering games, each university will have to build a company whose **central mission is to reduce water consumption**. Each team is free to choose in which sector of Quebec industry it wishes to have an impact. The challenge is to develop an eco-responsible solution that is also viable in today's market.

The goal is to identify an issue encountered by Quebec companies and to address it by proposing a technological innovation product. This competition is interested in companies based on a B2B (Business-to-Business) model, i.e. the direct customer is not an individual consumer but another company. Furthermore, in the interest of taking advantage of the participants' engineering education, the proposed product must be based on a technological innovation.

A motivational quote from a great entrepreneur:

“The scariest moment is always right before you start. After that, things can only get better.”

- Stephen King



Deliverables & Important Dates

SEPTEMBRE	OCTOBRE	NOVEMBRE	DÉCEMBRE	JANVIER
Cahier de Compétition 6 septembre, midi	Soumissions Initiales 3-4 pages 2 octobre, 23:59	Guide d'exploration max 6 pages 23 octobre, 23:59	Étude de Marché & Document de Design max 12 pages + annexes 27 novembre, 23:59	Plan d'affaires max 12 pages + annexes 2 janvier, 23:59
Présentation Pitch deck + prototype JDG				



Initial Submissions [5%]

This deliverable aims to give the judges a brief overview of the issues chosen by each team. It will enable them to give feedback on each idea in order to allow the delegations to make an informed choice.

Exploration Guide [5%]

This deliverable allows you to plan the market test, which is an essential step to support market research and product design. The objective is to validate that the teams are on the right track to successfully identify and characterize the needs of their market.

Market Research & Design Document [20%]

The section on market research clearly demonstrates that your product has its place in the industry and that it can have an impact on water consumption. This deliverable also specifies the different market segments and the players already operating within.

The design document section is dedicated to the presentation of the product and its technical specifications. It also allows for specific aspects of the design and the components to be crystallized. This will, in turn, enable a better vision of the interaction between the different parts and prove the feasibility thereof.

Business Plan [20%]

This is a deliverable that consolidates information from previous reports and adds elements to prove the economic viability of the product in the industry. It is therefore the centerpiece of the project to evaluate your business.

Prototype [20%]

The prototype represents the physical aspect of the created product. This element can be a complete prototype or simply a proof of concept, depending on the particularities of the product.

Présentation [25%]

The presentation consists of a slide show in a *pitch deck* format and a product demonstration. This presentation will be performed at the Engineering Games before a panel of judges which will be presented only at the time of the competition.

Information Leaflet [5%]

The information sheet is a deliverable for the judges during the pitch - and especially during the deliberations. It is a general summary of your presentation and business plan.

It is the responsibility of each team to adapt the deliverable and its content to their style and project.

Questions:

All questions should be sent to the Entrepreneurship Competition Director's email address and only by the VPs of Entrepreneurship at their respective universities. Responses will be sent via a weekly mailing list to maintain a spirit of fairness and transparency to all delegations. However, questions will be anonymous in order to maintain a competitive advantage.



Initial Submissions

This first deliverable aims to briefly present the selected problem and the product chosen by the team for the competition. Each delegation will have to submit **either 3 or 4 ideas**. Each idea must be presented on a **one-sided sheet**, without any appendix or image.

For each idea, the content must be divided into 4 parts: the addressed theme, the identified problem, the description of the solution, and the hypotheses to be validated.

1. The **theme** is a long title to the project. It is an introductory phrase that can be used to summarize the project.
2. The **issue** must be sufficiently clear and complete to leave no room for interpretation. One must be able to understand how it affects the client: their operations, their revenue streams, their expenses, etc. It must clearly identify the industry chosen by the team and it must provide enough research leads to allow the judges and evaluators to understand the issue in depth.
3. The **solution** section must clearly and concisely present the solution to the chosen problem and give a summary description of the product and business model.
4. In the last section, the **hypotheses** that support the proposed idea are described and must be validated during the market study to prove the place of the solution in the industry (i.e. presence of the issue in the industry, customer interest, etc.) In other words, what has been taken for granted to defend that the idea is valid? This section, in addition to listing the hypotheses, must rank them by order of importance and briefly describe the potential impact of their invalidation.

Each idea submitted must describe a different product in a different industry. **1 idea = 1 product = 1 industry**. Following the initial submissions, teams will receive feedback including recommendations on the solution, the chosen issue, and/or the business model.

The company's objective must be to commercialize an innovative technological product, i.e. a physical solution. Service companies and applications are not accepted in this competition.

Teams will be required to develop one of the ideas submitted in this deliverable. All submissions will remain eligible products for the team until the submission of the third deliverable, *the Market Research and Design Document*.

Regarding the use of patents, the organizing committee reserves the right to refuse any project that is a marketing of a research project or a little-used patent with or without the agreement of the holder. This rule is added in order to preserve a fair competition for universities that do not have research chairs working in the theme of the competition.

Between 3 and 4 pages (one idea per page)

Exploration Guide

The Exploration Guide deliverable is a guide for the Market Test, an important step in successful Market Research and Product Design. As such, it is a work in progress. The results will be presented in the next deliverable.

Each team will need to look at how they verify that the customer's need is indeed present and that the market is looking for a solution. This deliverable must contain 5 parts:

1. **Means of contact:** How will the information be collected? The expectation is that each team will use interviews with industry players. The survey method may be adequate in a B2B2C (Business-to-Business-to-Consumer) case, but not sufficient.
2. **Questions & reasoning:** This section should contain an exhaustive list of interview (and/or survey) questions, as well as the reasoning for the value added of each question. In other words, how the answers obtained will be used for the development of the business.

Example:

Question: How much would you be willing to pay for this product?

Reason: To be able to establish a realistic selling price.

Tips: 1- Ask open-ended questions that may lead to unexpected discoveries. 2- Develop the questions keeping in mind the requirements of *the Market Research and Design Document*.

3. **Expected results:** Potential answers to each of the questions are to be hypothesized. The objective of this section is to carry out a coherent work of reflection. The accuracy of the hypotheses will in no way be subject to evaluation.
4. **List of industry stakeholders:** This section should contain the name and brief description of the expertise related to the project of a minimum of 20 contacts in the chosen field that may be relevant to interview for this project. In the following deliverable, *Market Research & Design Document*, the expectation is that some of these players or their counterpart have been contacted by the team.

If a survey is considered as an option, the following questions must be answered in this section: To whom will the survey be distributed? Why this pool of resource people? How many people must respond for the results to be considered valid?

Generally speaking, the objective of market testing is to have a better understanding of the customer (their environment, their issues, how they are currently circumventing the problem, what gains they are looking for, etc.). The aim is to obtain a measure of the problem and the interest in the value proposition. It is here that the basic hypotheses must be validated (or invalidated).

A maximum 6 pages

Market Research & Design Document

Market Test - Result Analysis

This section should provide a summary analysis of the results of the market test in the appendix. The expectation is that **within 1 or 2 pages at most**, each team will summarize the main obtained results. All information collected that could have an impact on the company's offer and general direction should be presented. In addition, it is important to link up with the initial hypotheses presented in the initial submissions. Which ones were validated or invalidated?

Subsequent sections of this deliverable (*Market Research and Design Document*) **must** be consistent with the analysis of the market test results and use them as a reference. This first section should report the results, while subsequent sections should link the results to the company/product.

Market Research

The market research allows us to identify a clientele as well as obstacles specific to the field in order to better define the product as well as the marketing strategy. This analysis should ensure the existence of adequate product-market compatibility. The market study is divided into three major parts: the problem, the potential customers and the barriers to market entry.

1. The first part is a complete and in-depth description of the **problem**. It must be linked to an initial submission made by the team. This description should enable the evaluators to understand the issues and the proposed solution. It must also highlight the link between them.
2. In the second part, the team must present the different segments that make up the **potential clientele**. To do this, it is necessary to extract and present data to demonstrate the existence of the market. In addition, it is imperative to link back to the market test. This part will help to make a prediction of potential sales volume.
3. The third part is constituted by analysis of the **barriers to market entry**. This part should include 2 subsections:
 - a. An analysis of direct competitors (selling a similar product) and indirect competitors (producing a different solution that addresses the same problem). These competitors should be evaluated based on their expertise as well as their price. Also, it will be necessary to complete an overall analysis of their offer and their current market.
 - b. An analysis of any other aspect that may constitute a barrier for a new competitor to enter the market. It is necessary to take into account the budget and inertia considerations of your client. Could the acquisition of your product be a budgetary priority for your client? Is the added value of your product sufficient to bring your customer to change his habits? There may also be technological, financial, regulatory, or other obstacles specific to your company's situation.

Design Document

This section allows you to explain how your product responds to the problem. The design document is divided into three major parts: the functional description, the manufacturing steps and the components.

1. The first part is a **functional description** of the product. It is a complete guide to the product and the interactions between the different components of the system under consideration. It should provide evaluators with a wide range of information about the results expected from its use. Each functionality of the product must be justified by information obtained/validated by the market test.
2. The second part of the deliverable consists of exploring the **manufacturing steps** required to produce the solution. A description and a summary analysis must be attached to the report for each of them, even if some of them are subcontracted.
3. In the third part, a **part list** for the product must be listed. In other words, all the different components of the final product must be listed by name and number. This list allows you to list the critical elements that are in the company's supply chain during the subsequent deliverable.

Appendices

To conclude this deliverable, the following elements should be included in the appendix:

1. The **change sheet** (see *appendix C*) If changes affecting the previous deliverables have been made.
2. A screenshot of the **QFD matrix** (see *appendix B*). The template will be sent to the VP of Entrepreneurship of each university in Excel Format.
3. Technical drawings and three-dimensional rendering of the final aspect of the solution. All doubt regarding the functioning of the final solution has to be eliminated. The interactions between the different components have to be illustrated.
4. **Market Test** - Results (Continued from the previous deliverable, the *Exploration Guide*)
 - a. Industry players interviewed. For each stakeholder, a brief description of their expertise related to the project should be included as well as their potential biases. (In the case of a survey: demographics, number of respondents and biases).
 - b. Responses to interview/survey questions. This involves providing a complete transcript of the interviews conducted with each contact person. In the case of a survey, it is the responsibility of each team to choose an appropriate method of presenting the results (list, table, graph, etc.).

A maximum of 12 pages - excluding appendices

Business Plan

This document must contain the details necessary for the evaluation of a business by investors and competition evaluators. To do so, data related to several functions of a business must be included. This deliverable is divided into four parts: the product, the business model, the marketing strategy and the growth plan. It is strongly recommended to start with a draft of the Business Model Canvas that can be refined throughout the deliverable.

1. The **product feedback** section is a refined summary of the previous deliverable (Market Research & Design Document). This section recalls the problem, now identified, and then rediscovers the solution, now explored, simplified and improved. It will be important to present in the attached change sheet any improvements made to the product or any clarifications made following the submission of the preliminary reports.
2. The **business model** section is intended to demonstrate the viability of the company in the Quebec market. Teams will have to look at the company's operations and present the results of a financial analysis.
 - a. Having a complete list of product parts and manufacturing steps, it is possible to proceed with the execution of a **supply chain analysis** of the company's supply chain. Teams must present a list of suppliers, the source and cost of parts and services (subcontracted manufacturing steps) required. This list must present a price adjusted to the projected production volume and suppliers capable of meeting the demand. In addition, it is important to determine delivery and start-up times, parts that are at risk of being out of stock and alternative suppliers. In addition, each company will have to present an analysis of its distribution logistics: from the warehouse to the customer. It is essential to identify critical points in the supply and distribution chain.
 - b. Second, each team must present the company's **financial projections**. This subsection as a whole must 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 the production costs (fixed and variable), administrative costs and marketing costs. Fixed costs include, but are not limited to, materials and tooling, building and energy consumption. Variable costs include parts (including transportation and manufacturing), labor, and any other item related to the product. The analysis of the cost of sales should not be neglected with respect to the time consumed by sales personnel, the cost of implementation, delivery costs, etc.
 - c. The final section of the business model focuses on **business risks and mitigating factors**. Mitigating factors to be considered could take the form of related secondary services that the company will provide to enhance its revenues. In light of recent events, it is important to consider a case of border closures and whether your company's operations would be at risk as a result.

3. The third section of this deliverable is dedicated to **go-to-market strategy**, i.e. how your company is going to convert new customers. Even more than defining the company's marketing strategies, it is about answering the following questions: Who are you going to contact? How will you contact them? What are you going to tell them? In short, how are you going to contact your first customers and convince them to buy your product?
4. The fourth and final section of this deliverable is the **roadmap**. This section should demonstrate the company's potential for growth in both the short and long term. The expectation is that each team will explore the development possibilities relevant to their business. Here are a few options:
 - a. **Research and Development**: Describe the R&D plans for the evolution of the current product or the development of related products. Without having exact solutions, it is important to identify gaps in the initial product value proposition, in order to identify avenues for improving your company's offering.
 - b. **Commercial partnerships**: Potential partnerships should be identified and the business benefits of such an association should be discussed. It is also necessary to describe the potential benefits for the targeted potential partner(s).

Any other elements that may be a differentiating factor can be included.

Appendices

To conclude this deliverable, the following elements should be included in the appendix:

5. The **change sheet** (see *appendix C*) If changes affecting the previous deliverables have been made.
6. A completed **Business Model Canvas** (see *appendix A*).

A maximum of 12 pages - excluding appendices

Prototype

The prototype presented to the judges is intended to dispel any doubts about the viability of the product and to **explicitly demonstrate technological innovation**. The demonstration must show the functionality and use of the final product.

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 and not definitive copy of what the product may be.

The Prototype can take one of two forms depending on your projects:

1. **Proof of Concept:** A presentation in the form of a proof of concept is intended to address possible doubts about the technological risks of the solution. It must therefore demonstrate beyond doubt that your product will be able to solve the problem. A proof of concept is therefore suitable for projects involving new technologies that are the main source of risk for your company. A proof of concept should not require complex handling during use. The presentation of a proof of concept must also be accompanied by a plan to get an idea of the visual aspect of your final product.
2. **Prototype:** A presentation in the form of a prototype is intended to present a complex product that raises doubts about its effectiveness and functionality. A good prototype should therefore be similar to your company's final product and demonstrate beyond doubt that your product can be effective in solving the problem it addresses. Without needing to look exactly like the product that will be put into service, it will have to prove that it is fully functional. It is therefore a complete physical solution that resolves technological doubts and allows the judges to understand how the different components interact with each other. The prototype is therefore suitable for complex projects that have performance and usage risks.

The evaluation of the physical product will be carried out according to the presentation model chosen by the team. If the chosen model does not aid in dissipating the various risks, a significant penalty could be applied.

Access to the prototype will be provided to the judges at the time of your presentation and then at any time on presentation day.

RESTRICTIONS

- A video cannot replace the prototype, even if it is too large. It can, however, be used as a supplementary visual aid for your presentation.
- The maximum dimensions of the prototype are to be (1,5m X 1,5m X 0,80m). Mainly, the team should ensure that their prototype can pass through a door frame, and can be transported through an elevator.
- If the dimensions of the final solution exceed the maximum dimensions, a scaled down prototype can be presented.
- Prototypes must be handed in as soon as the team arrives at the Engineering Games. No modifications will be allowed after delivery. A set-up period will be granted during the games to verify the proper functioning of the prototype before the presentation.



Presentation

On the **2nd of January at 23h59, at the very latest**, namely 1 day before arriving at the engineering games, each team must hand in their slides in PDF format on the drive of the Organizing Committee. The file must bear the name of the delegation. The link to the drive will be shared with the entrepreneurship managers of each delegation at the appropriate time and place.

The presentation before the jury will have to be structured as a 5 to 7 minute pitch. A maximum of 2 additional minutes will be allocated to account for the product demo. In the context of this competition, the purpose of the pitch should be to convince a business gas pedal that your **product** has a place in the market AND that your **business** is viable.

Here is a generic presentation format, however, each team is free to be creative in their adaptation to the image of their own company:

1. **Problem:** The jury must be put in context by presenting the industry and the chosen problem.
2. **Product:** In this section one should present the product and its features to the judges. This may be an excellent moment to demonstrate the prototype.
3. **Market:** This is where the target market is presented. 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 business is viable and resilient to various risks. It is important to convince the judges that it is a venture that will succeed. It is suggested to include certain financial aspects, such as the break-even point, the cost of production as well as the price point and profit margin.

A second presentation will be made to all Engineering Games participants by a limited selection of teams chosen by the directors. Therefore, this is not a second presentation event, but a showcase of the best pitches, products and companies. In addition, this presentation will take place using the same PDF file as the presentation before the judges.

For the presentation in front of the judges, as well as for the second presentation, business attire will be required.

Information leaflet

In order to assist the audience during the presentation, a letter-size sheet, *one side only*, should be printed by the delegations and given to the judges during the presentation.

Teams must use the template sent to their university's VP of Entrepreneurship. It is possible to add content but be careful not to overload the page.

Please note that the sheet and its content will not be directly evaluated, but the absence of it will be penalized. In addition, only this sheet can be given to the judges. Any other form of documentation is strictly prohibited.



Evaluation

Initial submissions	5%
Exploration guide	5%
Market research & Design document	20%
Business plan	20%
Prototype	20%
Presentations	25%
Information leaflet	5%

The evaluation grid is present to give the delegations an idea of the value of the different deliverables of the competition. The individual evaluation of each deliverable cannot be detailed precisely for each criterion, considering that each product will be different and that each university is free to choose how to present their documents.

Correction of documents will be based on the quality of the content delivered. This will be evaluated regarding the **applied rigor** in executing the task, and the ability of the deliverable to convey **all information in a verifiable, clear, justified, and consistent manner**. Explicitly, ambiguities and poorly justified and/or unverifiable information will be penalized during correction. In particular, the absence of references for key information will be strongly penalized.

The evaluation of deliverables will be made within a reasonable timeframe in order to give universities the opportunity to make corrections in subsequent sections. The objective is to submit the evaluations on the second Sunday following the submission, i.e. within 8 days. However, these deadlines are subject to change due to force majeure or situations beyond our control.

A 5% daily penalty on the overall value of the deliverable will be applied for late submissions. In addition, any delay will result in an extension of the correction period of up to one week. In other words, since submissions are required on Saturdays, the correction can be postponed until the second Sunday after the submission.

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

Team Composition

In order to help the teams to structure themselves, we propose the next 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 in charge of the design and manufacturing of the product. In practice, this person becomes responsible for the planning of the prototype, the execution, as well as the preparation of a relevant demonstration in front of the judges. This person will also be the resource person when questions are asked about the product itself and the challenges related to its manufacturing.

Lead presenter

The role of this person is to ensure the smooth running of the sales pitch by preparing its structure. During the presentation, this person's role will be to introduce their team and to ensure that communication flows smoothly between the audience and the team. They are generally the person who broadly presents the company before deferring to the subject matter experts for the financial and technical aspects.

Business architect

This person is in charge of writing the business plan. Accordingly, consistency, realism, and business innovation rest on their shoulders. They will also be the person who must know the financial framework in order to easily justify the figures presented.

Beyond these roles, it is possible to use the help of any other person deemed relevant to the creation of the company. For each of the stages of this competition, with the exception of the pitch, there is no limit on the number of participants. In order to respect the framework of the competition, continued active participation in the competition by a member who is not registered in an engineering program at your own university may result in disqualification.












Conclusion

It is with great pleasure and loads of ambition that the Organizing Committee has developed this third edition of the entrepreneurship competition. Through the time you will be investing in this competition, you will have the chance to showcase the assets that an engineer can bring to a new company. You will also be able to learn a little more about the different stages of starting a business. Certainly, this experience will be rewarding for participants, spectators, and judges alike. The organizing committee and the co-directors wish you the best of luck!

We hope that the knowledge gained will be useful to you.



Appendix A : Business Model Canvas

The Business Model Canvas		Designed for:	Designed by:	Date:	Version:
Key Partners  Who are our key partners? Which key resources are we acquiring from partners? Which key activities do partners perform? Which key channels do partners perform? Which key segments are they serving? Which key revenue streams are they generating? Which key costs are they incurring? Which key risks are they facing?	Key Activities  What key activities do our Value Propositions require? What key resources do we need to perform these activities? Which key partners do we need to perform these activities? Which key channels do we need to perform these activities? Which key segments are we serving? Which key revenue streams are we generating? Which key costs are we incurring? Which key risks are we facing?	Value Propositions  What value do we deliver to the customer? Which one of our customer's problems are we solving for them? Which customer segments are we targeting? Which customer segments are we not targeting? Which customer segments are we not targeting? Which customer segments are we not targeting? Which customer segments are we not targeting? Which customer segments are we not targeting? Which customer segments are we not targeting?	Customer Relationships  What type of relationships does each of our customer segments expect us to establish? Which customer segments are we targeting? Which customer segments are we not targeting? Which customer segments are we not targeting? Which customer segments are we not targeting? Which customer segments are we not targeting? Which customer segments are we not targeting? Which customer segments are we not targeting?	Customer Segments  For whom are we creating value? Which customer segments are we targeting? Which customer segments are we not targeting? Which customer segments are we not targeting? Which customer segments are we not targeting? Which customer segments are we not targeting? Which customer segments are we not targeting? Which customer segments are we not targeting?	
Key Resources  What key resources do our Value Propositions require? Which key resources are most important? Which key resources are most important? Which key resources are most important? Which key resources are most important? Which key resources are most important? Which key resources are most important? Which key resources are most important?		Channels  Through which channels do our Customer Segments want to be reached? Which channels are most important? Which channels are most important? Which channels are most important? Which channels are most important? Which channels are most important? Which channels are most important? Which channels are most important?			
Cost Structure  What are the most important costs inherent in our business model? Which key resources are most expensive? Which key activities are most expensive? Which key channels are most expensive? Which key segments are most expensive? Which key revenue streams are most expensive? Which key risks are most expensive? Which key risks are most expensive?		Revenue Streams  For what value are our customers really willing to pay? For what do they currently pay? How are they currently paying? How much does each customer segment contribute to overall revenues? How much does each customer segment contribute to overall revenues? How much does each customer segment contribute to overall revenues? How much does each customer segment contribute to overall revenues?			

[https://en.wikipedia.org/wiki/Business_Model_Canvas#/media/File:Business_Model_Canvas.png]

Appendix B: Quality Function Deployment

**The excel sheet will be distributed to each university through their VP of Entrepreneurship*

Quality Function Deployment

Project Title: _____
 Project Leader: _____
 Date: _____

You need only to fill the white and blue cells.

Correlation: + -
 Positive No correlation Negative

Relationships: 9 3 1
 Strong Moderate Weak None

Desired direction of improvement (↑, ↓, ↔)
Functional Requirements (How)

Customer Requirements - (What)

1: low, 5: high

Customer importance rating	1	2	3	4	5	6	7	8	9
1									
2									
3									
4									
5									
6									
7									
8									
9									

Competitive evaluation (1: low, 5: high)

Weighted Score	Satisfaction rating	Competitor rating 1	Competitor rating 2	Competitor rating 3
0				
0				
0				
0				
0				
0				
0				
0				
0				

Technical importance score: 0 0 0 0 0

Importance %: 1 1 1 1 1

Priorities rank: 1 1 1 1 1

Current performance: Target Benchmark Difficulty Cost and time Priority to improve

1: very easy, 5: very difficult
 1: low, 5: high

Comments/Conclusion:

Continuous Improvement Toolkit . www.citoolkit.com

Guide:
 Fill in the "What's" the customer requirements and the importance rating per requirement.
 Fill the "How's" listing the processes or characteristics that are needed to meet the customer requirements.
 Fill in the matrix the impact that the "How's" has on each "What".
 Look at the bottom to see which "How" should be given highest priority.

Appendix C: Change Sheet

University:

Change	Document Section	Implications



Appendix D: Organizing Committee

If you have any questions or comments about the challenge, you can reach the Entrepreneurship team at the following address :

Eduard Paraschivescu - Entrepreneurship Director

Maude Valiquette - Entrepreneurship Director

directeur.entrepreneuriat@jeuxdegenie.qc.ca

If you have any questions or comments that are not related to the Entrepreneuriat Challenge, do not hesitate to contact the various members of the organization at the following addresses :

Camille Lalancette - President

presidence@jeuxdegenie.qc.ca

Catherine Dumas - Vice President, Sponsorships

partenariats@jeuxdegenie.qc.ca

Charles-Étienne Joseph - Vice-President, Competitions

competitions@jeuxdegenie.qc.ca

Happy Entrepreneurship season to all participants!

