



UNIVERSITY OF CALGARY
HASKAYNE SCHOOL OF BUSINESS



UNIVERSITY OF CALGARY
FACULTY OF SCIENCE

ENTI 381 Introduction to Entrepreneurship
CPSC 405 Software Entrepreneurship
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Project Milestone One

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Old Team Name:

Monocle

New Team Name:

Insight

Team CPSC Members:

- 1) Jackie Luc
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Team ENTI Members:

- 1) Michael Vereb
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(1) Ideation

Problem

As the number of [students enrolled in Canadian post-secondary education increases](#) each year, there is an ever-increasing challenge to create meaningful interactions between students and their educators. Without meaningful interactions, students can become less engaged and are less likely to succeed. The average [graduation rate for undergraduate students in Canada](#) is 71.30%. Some of the [main reasons why students do not succeed](#) include the lack of quality time with educators, overwhelming stress as a result of lack of motivation or support and poor preparation for post-secondary education.

Some educators are unfortunately unaware of the changing and diverse learning styles of students and can fail to adjust their teaching methods to teach effectively. The number of students who feel comfortable engaging their educators and providing feedback is often slim. Oftentimes, the only instance when an educator receives some sort of feedback is through student course evaluations. However, students evaluating the course may see little to no value by providing meaningful feedback because it only benefits the next students that enroll in the course. Many [criticisms of student course evaluations](#) are that they are not taken seriously by students, are not applied consistently, and may be biased.

How technology can help solve the problem

With the social acceptance of integrating technology with learning, we can provide an online platform where students can provide meaningful feedback and educators can gain insight on the student's learning experience. This will enable educators to adjust and adapt their teaching methods in a timely manner that provides value to the students learning experience. This will also enable students to stay engaged by recognizing the impact and value they have on their learning. The solution is effective in providing meaningful insight and is easily accessible because it requires no additional hardware to be used by educators and students.

Pivots

Our initial solution started with weekly micro-surveys on the course, but we decided that this was inflexible, and wanted to enable the educators and students to decide the frequency in which they would like to receive and submit feedback, respectively. Our ultimate goal is to increase the frequency of meaningful feedback, instead of allowing for one (formal) opportunity to submit feedback at the end of the course.

Since our initial solution was fairly narrow in scope, we decided to add a feature that enables students to submit questions, issues, or concerns via the online platform that can be viewed and engaged by other students or the instructor. In a large class, it may be uncomfortable and difficult to interrupt the class and ask a question. If students have the

same concern, they can “upvote” the submission. If a certain threshold is met, the instructor can pause the lecture to address the concern or decide if they want to address the concern online (after class).

Another pivot was made in our marketing strategy. Initially, we aimed to sell our solutions to universities or institutions. After researching on an indirect competitor, we learned from their previous experience, it is a very difficult process to sell to institutions. They mentioned that *“selling in edtech is difficult because you have to go through universities or school boards with slow sales cycles. Top Hat’s realization that they could sell bottom-up instead of top-down – selling directly to professors with a strong value proposition but ultimately paid for by the student – that has set them apart.”* ([Financial Post - Article](#)) Instead, they decided to focus on selling to professors but paid for by the student because professors have more autonomy and control over their classrooms. We received feedback on this marketing strategy and was proposed a couple of other strategies we intend to explore. Some other marketing strategies we might pivot to include advertising or a freemium model with limited-day trials.

(2) Business plan components

Mission

At Insiight, our purpose is to breakdown student-educator communication walls through the use of technology. We are reinventing the classroom experience by facilitating feedback opportunities and creating meaningful, engaging learning environments. We support tomorrow’s leaders today.

Our Solution

Insiight solves the problem-filled classroom by implementing an online platform geared toward improving student-learning experiences. Students submit feedback in a “live feed” of a class session, whether that be the talking speed of the professor, the flickering light in the back, or even a topic that you did not understand. Students who relate to the submitted feedback may “upvote” and the feedback will be ranked based on the importance of the issue. We decided to make feedback from the live feed to be anonymous because some people do not feel comfortable being identified for asking questions or identifying problems. Weekly micro-surveys which are built into the platform will allow the educator to have an overview of how the students are feeling in their course on a regular basis. The educator can choose to address the results of the micro-surveys in the next class session. The educator can also directly respond and address any issues from their class sessions in the live feed. Our solution will be primarily web-based, and we will later expand to support native smartphone applications such as Android and iOS.

Business Analysis

A successful new business has three key components: a superb team, great opportunity, and the resources to start the business. At Insiight, we have a unique opportunity in terms of our individual and collaborative skills, and our market. Our platform enables us to capture the rapidly increasing number of students looking for a solution to the problem of feedback delivery in their classrooms. There is currently no product that solemnly collects feedback with the purpose of imposing a real, immediate, and meaningful change in the classroom. This opening in the market is ready to be realized by our product, which will fill this gap perfectly. We have decided to initially target students currently in university, [with approximately 2 million students enrolled in Canadian post-secondary](#) as of 2016, it shows that the market is thriving. Our scalable platform can not only be used in Canada but can also reach students from every educational institution around North America.

Insiight has an excellent management team consisting of an outstanding sales lead, superb technical founders, and a forward-thinking project manager. Our members have the technical skills to implement a web-based application that will solidify the product in our customer's mind. Two (2) out of the five (5) founding members have previous experience with software design and implementation. While another member has previous experience with marketing, sales and forming business partnerships. Our team also has a strong background in software development, which is brought to the table by three (3) of our five (5) members. Our team is truly passionate about solving student problems and we will work continuously to enhance their learning experiences.

Our resources to bring this product to market entail the in-house expertise to create the web-based application, along with the business knowledge to launch the product. Due to the founders having the skills to code the application using free and open source licensed software, there will be a little initial cost associated with creating the initial product. It is anticipated that costs will be incurred when the business is scaled up, where servers and data centers will be needed.

In addition, given that we are all current university students, we have access to the Hunter Hub, which supports student entrepreneurship by connecting student teams with mentors and providing a platform of exposure. Our CEO also plays an executive role in an organization focused on building entrepreneurs through events, resources, and connections. Furthermore, our product is initially focusing on university students and educators. With these resources, we have endless opportunity to gain feedback on our product within our campus community.

In conclusion, our team, opportunity, and resources all need to come together at the optimal time to ensure the business is successful. One of the three components missing or lacking behind would jeopardize the business' ability to succeed.

The following table analyzes our company's position using the opportunity checklist provided in Chapter 3 of the *Entrepreneurship, Canadian* edition textbook.

Business Area	Insight Position	Comments
Identifiable Customer	Clear "core" customer	Our primary customers are professors, with their adoption of this technology, we will be able to penetrate to the student customers.
Identifiable Demographics	Clearly defined and focused	University professors and students.
Identifiable Psychographics	Clearly defined and focused	Frustrated students that want to improve their learning experience. Professors that value meaningful feedback regarding their teaching methods.
Macro Market	Multiple and converging	We plan to develop a seamless, easy-to-use platform ensuring that no learning curve will be required to utilize it.
Target Market	Multiple and converging	We are looking at students 18-24 attending university, and professors open to try new tools to be early adopters of our platform.
Window of Opportunity	Opening	Needed at every institution to improve learning.
Market Structure	Emerging/Fragmented	The market has many, large companies within, although there are no clear monopolies. The companies have a similar goal as us, however they use different methods of engaging students during class.

Market Size	Core customer group is large	As previously mentioned, there are approximately 2 million post secondary student in Canada . Our business has the possibility to expand to the United States and Europe.
Market Demand	Greater than supply	Products are not offered to student to address their needs, hence leading to a large demand.
Market Growth Rate	20% or greater	University enrollment is rapidly growing in North America.
Price	Gross Margin >40%	Aiming to adopt a freemium model which will allow for greatest market penetration.
Frequency	Often and Repeated	Daily-to-weekly usage of platform.
Value	Fully reflected in price	Value is billed accordingly, class satisfaction is measurable with/without our platform.
Operating Expenses	Low and Variable	Overhead is fairly minimum due to lean startup structure
Net Income Margin	>10 %	Refer to profit margin paragraph below this section.
Volume	Very High	Our software product can be easily scaled by increasing the number of servers.
Distribution Chain	High Margin, high power	Easily distributable with sufficient marketing.
Number of Direct Competitors	Few	No other company is tackling the same problem

		as us. Although, we are sharing the same market.
Number of Indirect Competitors	Few	Refer to Indirect Competitors paragraph.
Number of Substitutes	Few	No substitutes, only similar goals of companies.
Stealth of Competitors	Unlikely	Very large companies in the space would disclose new and upcoming products.
Strength of Competitors	Weak	Due to not being completely comparable to our product and not offering the same service.
Relative Position	Strong	Strong position to take the market; solves a definite need.
Relative Power	Weak	Low amounts of capital to work with. Bootstrapping with resources from Hunter Hub may be necessary.
Gross Margin control in the value chain	Low	Can control once we finalize our monetization strategy.
Government Regulation	Low	No regulations against our platform.
Government Taxes	Low	Only sales taxes when billing customers.
Global Customers	Interested and accessible	Initial success in North America may lead to scaling into new continents.
Global Competitors	Non-existent or weak	There are no competitors working on a feedback platform for students.
Global Vendors	Eager	Ready to onboard our platform to help improve

		the way students learn!
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In the following two (2) paragraphs our weaknesses will be discussed in further detail.

Weakness: Indirect Competitors

Analyzing The Opportunity Checklist found on page 107 of the *Entrepreneur Canadian* edition textbook, Insiight rests under the better opportunity classification, although we do have a few weakness areas. Looking at our competitors we have companies such as Desire2Learn, RateMyProfessor, and TopHat fulfilling needs of students in indirect ways. Desire2Learn is an online portal allowing students to manage their classes and get in contact with other students through a mass-emailing format. The disadvantage of D2L is the consistency; students have to email all of the students in the class to find a solution to their problem, which is unsustainable for multiple issues throughout the semester. RateMyProfessor is a platform where students can provide feedback on their course experience. Students submit these reviews after the class is completed, making their feedback a past event. We are the only company developing real-time feedback for students to provide immediate benefits to students, as opposed to one feedback at the end of the course. TopHat specializes in leveraging student devices to interact with pre-made quizzes. TopHat fails to address issues with the content or with the class in general. TopHat's reveals the breakdown of correctly answered questions but provides no solution as they are just a simple content delivery software. We are a unique fit in the education industry because we tackle the headaches of these platforms and cater to students' natural needs. Our indirect competitors are well-established companies, some even with a stock ticker.


Weakness: Profit Margins

A weakness we can potentially face is our profit margins. We have yet to research the industries and the best ways of monetizing our platform. We are scoping the freemium and advertising business model. The freemium model would allow students to use our platform free of charge while bringing in advertisement revenue. For this to be sustainable, we need to find out which user would find value in paying for this. We are investigating paid models for educators and institutions. We have found challenges with marketing to the educators directly, where the willingness to pay or the ability to pay may be limited. Institution-wise, we realize the complexity of integration as well as the problematic sell to institutional board members.

In conclusion, the majority of our company is comfortably in the better opportunities column, although we have two current weaknesses that can be taken care of with a well-built platform as well as a clearly defined monetization strategy.

(3) Technical Report

Storyboard Report

Time				
				
User registration	Course Selection	Feedback System	Course Deletion	Reset Password
<p><u>Student registration</u></p> <p>As a student, I want to register on the website so that I can begin to provide my educators meaningful feedback.</p> <p>Time (estimate): 1h Worst case: 3h</p>	<p><u>Generating course codes</u></p> <p>As an educator, I want to be able to generate specific course codes so that students can enroll to provide feedback for my course.</p> <p>Time (estimate): 1h Worst case: 2h</p>	<p><u>Student submit feedback in live feed</u></p> <p>As a student, I want to submit feedback (can be anonymous) so that the educator is aware of my questions, issues, or concerns and can address them.</p> <p>Time (estimate): 10h Worst case: 15h</p>	<p><u>Student end course</u></p> <p>As a student, I want to be able to remove myself from a course for whatever reason so I don't receive unnecessary notifications.</p> <p>Time (estimate): 1h Worst case: 2h</p>	<p><u>Reset via email</u></p> <p>As a user, I want a code to be emailed to me if I forget my password so that I can reset it.</p> <p>Time (estimate): 2h Worst case: 4h</p>

<p><u>Educator registration</u></p> <p>As an educator, I want to register on the website so that I can begin to provide an opportunity to gather feedback.</p> <p>Time (estimate): 1h Worst case: 3h</p>	<p><u>Course selection</u></p> <p>As a student, I want to input course codes provided by my educators so that I can enroll to provide feedback to the course.</p> <p>Time (estimate): 1h Worst case: 3h</p>	<p><u>Educator review feedback in live feed</u></p> <p>As an educator, I want to view the feedback from my class so I can address any questions, issues, or concerns directly.</p> <p>Time (estimate): 5h Worst case: 10h</p>	<p><u>Educator end course</u></p> <p>As an educator, I want to be able to end a course after it's completed so that it is no longer active.</p> <p>Time (estimate): 1h Worst case: 2h</p>	<p><u>Reset via SMS</u></p> <p>As a user, I want a code sent to my cell number if I forget my password so that I can reset it.</p> <p>Time (estimate): 2h Worst case: 4h</p>
<p><u>Registration confirmation (Subtask)</u></p> <p>As a user, I need to confirm my email that I provided to the website in order to fully complete registration.</p> <p>Time (estimate): 1h Worst case: 2h</p>	<p><u>Course selection</u></p> <p>As an educator, I want to be able to invite and enroll a list of students to provide feedback for my course, so that students are prepared.</p> <p>Time (estimate): 2h Worst case: 4h</p>	<p><u>Student complete micro-survey</u></p> <p>As a student, I want to complete micro-surveys so that I can provide my feedback on the educators teaching methods.</p> <p>Time (estimate): 8h Worst case: 10h</p>		

		<p><u>Educator</u> <u>review micro-</u> <u>survey</u></p> <p>As an educator, I want to review the results of a class' micro-survey so that I can look for ways to improve my teaching methods.</p> <p>Time (estimate): 5h Worst case: 8h</p>		
		<p><u>Student</u> <u>“upvotes”</u> <u>feedback in live</u> <u>feed</u></p> <p>As a student, I want to “upvote” another student's question, issue, or concern so that the educator can be aware that more than one person is experiencing the same problem.</p> <p>Time (estimate): 10h Worst case: 15h</p>		

Defining the MVP

For our minimum viable product, we decided that we will be focusing on developing the following items:

Everyone

- public webpage
- mission and marketing info
- product description
- create account as a student or educator
- login to account
- contact us page

Educator Accounts

- be able to see who is enrolled in a given class section
- be able to add or remove people manually
- generate unique class code
- create a class section
- view specific questions, issues, or concerns in the live feed that exceed a threshold of “upvotes” (ie. 30% of a class), immediately on login
- be able to respond to specific questions, issues, or concerns directly in the live feed
- be able to view all submitted class feedback, filtered by class
- be able to review weekly micro-survey results

Student Accounts

- enroll in a class from a course code, provided by an educator
- see list of classes enrolled in
- be able to submit feedback in the live feed during a class session (can be anonymous)
- be able to view other students questions, issues, or concerns in the live feed during a class session with the ability to “upvote” it
- be able to view educator’s responses to students’ questions, issues, or concerns in the live feed
- be able to submit weekly micro-surveys and reasons behind their submissions
- be able to view results from weekly micro-surveys

Based on the user case studies and individual research, we believe that this is the minimum functionality that demonstrates the core value we can provide to our users. The two main ways for students to submit feedback is through micro-surveys and the live feed during class sessions. Educators can review these two forms of feedback and can respond to any feedback from the live feed of a class session. However, in order to access our solution, both students and educators are required to register and log in. This is the core functionality that will attract users to try our product for free to provide feedback.

(4) Team reflection

The talent triangle is composed of three (3) elements: business acumen, operational experience, and domain knowledge.

In our team, Michael specializes in the business acumen vertex of the talent triangle because of his business background and expertise in marketing, sales and forming key partnerships. As the CEO, he will make key business decisions that will ensure the growth and success of Insiight. Ioana covers the operational experience aspects because of her previous experience in software interface implementation and project management. Her role entails working with Logan to ensure product implementation and functionality while overlooking the delivery method of the software. In addition to operation experience, Logan provides support to domain knowledge through his vast work experience and diverse education. Omar is the computer scientist and will focus on the domain knowledge aspect of the triangle. He has consulted with a few university professors for feedback regarding the scope of the platform and its validity. He also spoke to a few students on how they'd prefer interacting with the website. In addition to domain knowledge, Omar can also contribute on the operational side, providing insight on design and user experience. Jackie has previous experience with software development, in particular, web design and development, and he will provide the expertise needed for the domain knowledge and operational experience. His business acumen as a result of his work experience enables him to align strategic goals with the software implementations.

Diverse talent in teams increases the likelihood of the business to succeed by driving innovation and ensuring business needs are met. A diversely skilled team is able to deliver a complete, refined solution due to having input from multiple viewpoints. Different thinking approaches can drive innovation, where team members are able to build off of each other's ideas, as mentioned in an article by [Sophie Deering](#). Likewise, a well-rounded team can ensure that the skills needed to meet the business needs (technical and non-technical) are available in-house, which can drive the business forward. In our scenario, we have three (3) computer science students working with two (2) business students to create a fully functioning business. Thus far, we have found that our diverse skills have enabled us to cover a wide range of technical and non-technical aspects of creating a business. For example, our team has expertise in web design, HTML, CSS, JS (front-end), Node.js (back-end), iOS, marketing, project management, permits/licensing, legal, copyright/trademarking, customer service and sales. Our skills were acquired through a variety of previous experiences such as real-world experience, coursework, co-op terms and interest in a particular area. Due to our various experiences, in the short time we have had, we were able to enhance the initial software idea by including more layers to the software solution.

A challenge our team may face is friction with overlapping areas of expertise. For example, if there is more than one person contributing to the domain knowledge vertex of the talent triangle, there may be some points of conflict on which direction pursue. To

overcome this, we plan to use this to our advantage by working as one and sharing our different perspectives to arrive at the best judgment together. As mentioned in our team charter, we will outline the pros and cons of each decision to be made and we will pursue the option that makes the most sense for the business. All members of this team agree that decisions made as a team, should not be taken personally and are made in the best interest of the business.

Another challenge we foresee is ensuring we are all communicating clearly and understanding the direction we are heading, especially since our team comes from both a technical and non-technical field. Blending these two aspects can be a challenge and we plan to deal with this by having an open line of communication, where all members are encouraged to voice their opinions. This is outlined in our team charter.