Opportunity Selection Report

Calming Blue

Computer Science 499.01

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Entrepreneurship 381

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University of Calgary

Business Idea

An game oriented application that would serve as an anxiety reduction tool, with the ability to connect with local mental health teams and professionals.

Team Profile

James Raleigh: A fourth year Computer Science student who has excelled in the leadership role. His greatest strengths lie in design, analysis and planning.

Kevin Fallwell: A fifth year Economics students who also prides hismelf on leadership skills and is highly skilled in marketing and research analysis

Robert Szustakowski: A sixth year student with a specialization in Operations Management. Groups projects have led to Robs ability to keep himself organized and properly manage his time. He is logistics-focused and operationally efficient. He also brings with him project management experience, business analysis and budget planning knowledge.

Emily Chow: A sixth year Computer Science mjaor whose successful projects have stemmed from her ability to use her time properly while being able to organize a team and its' dynamics. Her strength is creating products with a focus on security.

Nik Lam: A student knowledgeable in general programming who possesses interpersonal skills and prides himself on his commitment towards projects.

Omar Abdulbaki: A third year business student with a specialization in Entrepreneurship. Having preveiously taken ENTI 317 he is familiar with the entrepreneurial methodology, market analysis, and problem solving required to start a business.

Idea vs. Team (incl. Gaps)

This is a good business idea because it is something our team mutually finds applicable to real life. We find the idea to be something we can all stand behind passionately which is critical to the success of the project. Mental illness awareness is growing, but is still an issue regarding outreach and support for sufferers. Anxiety affects approximately 18% (thats 40 million) of the adult population in the United States. What is more concerning to us us that although Anxiety is treatable, only 37% recieve treatment. This means that there is a gap of approximately 63% of people suffering from anxiety who are unable to get help for whatever reason, and this is just in the United States alone. Being so, this is a huge market that has not been captured by other products or services already out there, so we see not only a business opportunity but a chance to help those in need. Many individuals do not feel they are able to approach others with their problem, so a tool that automatically connects or makes soft referrals may bridge this gap. Our application will serve as an intermediary between these potential patients and the services that can help them, along with some basic anxiety reduction tools by way of mood trackers and small games. Medical outreach will be necessary, using team strengths to connect with local mental health professionals and researchers.

Business Acumen: This is the area where our business students will excel in. With a plethora of experience in research and planning we will be able to get the most accurate information and ensure that we are stay on course to succeed should something go not as planned. Our work experience will result in excellent communication between the members of our team.

Operational Experience: Our variety of disciplines (Computer Science, Economics & Business) will provide both different perspectives and skills on any issue. Emily being responsible for planning and keeping the team on track will be key to the operational execution of weekly tasks. This will hold the rest of the team accountable as we will have deadlines from all of our upcoming projets. Should something go off track then this proper planning will allow us to recoupe and make adjustments to our schedule as neccessary. Proper communication between all members of our unit will be required in order to complete tasks efficiently and ensure they are of the highest quality. Operational experience is where we found the gap in our team in regards to our weakness with app development as non eof our members have such experience. To make up for this lack of experience, the team will have to be open to seeking out external sources of help as well as learning and teaching eachother as we move thorugh the project.

Domain Knowledge: Our team also has a weakness in this area. We are unfamiliar in how to accurately bridge the gap between software and mental illness effectively. It is because of this that we must use our available means in order to help us create an effective product. This means that we will be open to contact with computer science professors and psychology professors at the University of Calgary. We will also look to speak with any external healthcare professionals within our network. We will also be connected with those who experience anxiety in order to paint a better picture of their pain points and where other competitiors fail to identify with the consumer.

Team Member Responsibilities

*We split the project into 3 components and selected the members with the highest competencies in each respective component.

Research: The majority of the research will be split between James & Omar. By dividing this section of the work between one business student and one computer science student, we will achieve both a more diverse flow of information as well as a more constructive conversation regarding the contents on this information. The rest of the group will also play a part in this but only as a secondary responsibility.

Business Development: With experience in operational management and economics, Rob and Kevin are the most capable candidates. Their combined knowledge will allow for the most reasonable pricing strategies and business model for our product.

App Development: With a great deal of computer science experience, Nik, Emily and James will be able to create a user friendly interface for our product. Compared to the rest of the group, they are the most knowledgeable in bringing our product to life and will be able to accurately troubleshoot problems should they arise.

Individual Contributions

*The previous section, "Team Member Responsibilities" was created based on the individual skills we have highlighted here as well as the "Team Profile" section

James: Interface/Business development Nik: Programming/Business development

Rob: Logistics/Finance/Planning

Kevin: Marketing/Research/Leadership

Emily: Programming/Application design & Features planning/Musical compositions where

applicable

Omar: Research/Execution/Entrepreneurial methodology

Team Contract

***See attached

Key assumptions

1. There is a market for this product

Validation via market research done on the field. Using the lean canvas, we will identify the proper and most effective channels to use in order to reach our intended consumer base.

2. Customers willing to pay for this product/able to monetize

Validation via market research and related existing applications. These consumers are our early adopters and will ultimately allow us to get a foothold in the market.

3. Product effectiveness regarding mental health

Validation via market research on existing applications and their effect on the institutions where it was used.

4. Endorsable by professional foundations/associations

Validation via communication with professionals in the fields

Market

Currently, there is a wide and growing need for mental health apps delivered through what is considered to be the 'e-health market'. Within Canada and the United States, there is a large concern among mental health professionals that rising demand for specialized mental health services, there will be bottlenecks for patients to see practitioners and a dearth of providers. In Canada alone, conservative estimates have nearly 7 million potential users, and mental health is estimated by the Canadian government to need CAD \$5 billion in the next 10 years. In Alberta, for example, the University of Calgary received \$25.8 million dollars, over three years, from the provincial government. This does not also include the bevy of grants and nonprofit entities that exist, and growth can be funded by ensuring targeted marketing and applications towards these.

While there is funding for mental health, the effects of mobile applications and the effectiveness of e-health has been reviewed and found to have mixed results. Research shows that tools that are made in conjunction with mental health professionals provide the best results. Researchers have noted that there can be a 'Wild West' effect among applications, some claiming treatments that are beyond their scope. With this in mind, it is necessary to note the need to tap into the professional medical market. Indeed, we see this as a growth opportunity, as we can market our applications directly to professionals who will then advocate for their use on our behalf. The potential danger is that if we do not have proper sponsorship, we may face issues justifying the legitimacy of our application, and aborting growth. Given that there are currently hundreds of available app choices, seeking a tactical partnership would provide a market and growth edge.

Designing and launching for this market would seem open-ended, but the need for a targeted market and professional approval necessitates that care be taken before attempting to launch without proper research. It is evident that any developer wishing to tread into this area would need either consultation services provided by a mental health specialist, or be working under or for one.

Price, Distribution, Competition, and Key Success Factor

Price / Frequency / Value:

Price: Ideally, we should aim to have a 40% - 70% gross margin on the primary application which will be sold to post-secondary institutions (one of our target audiences). This allows for every sale to have a significant impact on our financial position and allow for further R&D to improve and expand the capabilities of the app and to then sell additional content for the application at a 60% - 90% margin.

Frequency: Sales of the primary application to post-secondary institutions would be repeated as often as possible so long as the clients view the application as a valuable tool, and so long as our team is able to support and maintain the application without compromising quality for our clients.

The frequency of sales of additional content for the application should be more frequent than sales of the core application, these sales will provide a higher margin for us, and provide more customizability for our clients, which will ideally lead to a higher desire for more add-ons as well as word of mouth promotion for our application to other post-secondary institutions.

Value: The value of the application will be realized primarily through the usage rates of students on campus, as such the primary application will achieve a high value proposition if engagement is high, if engagement is not as high as clients require then our add-ons will hopefully help with this and as such a customized experience for each client will help to fully realize the value of the application.

Operating Expenses: Our operating expenses should be quite low once the application has been successfully launched for a given client, transition costs when add-ons are purchased will cause a spike in operating expenses. If our application grows to a significant number of clients operating

expenses may increase as well otherwise we risk a decrease in the quality of the client experience.

Net Income Margin: Ideally, a net income margin of 10% - 25% would be required for the primary application and a margin of 20% - 45% for our add-on content would allow for a lucrative income for our development team and enable our team to research and further develop add-ons for the application.

Volume: Initial volume will be quite low as we want to target post-secondary institutions and establish a strong relationship with our clients to enable the sales of add-on content for the application. If the application sees high usage amongst students at post-secondary institutions the volume could potentially increase exponentially.

Distribution:

The application would have a significant margin and the power of the application may be anywhere between low – high depending on the usage rate of students at post-secondary institutions; power will increase with high usage rates.

Competition and Key Success Factor:

Competition: There is significant upswing in mental health awareness at this point in time, and it wouldn't be unreasonable to expect other developers to have similar ideas to ours. If competition arises we would have to ensure that our application provides the highest value to our clients as well as sufficient customizability to ensure it does not become obsolete.

Key Success Factor: The key success factor for the application will be the usage rate amongst students at the post-secondary institutions we sell the application to. If students are not engaging in the use of the application, the research and potential value within the application will not be realized.

Environments

Vendors: Our vendors for our app would include the Google Play store and the Apple App store. Unfortunately, even though they would be the most effective way to distribute our app, they do have a lot of influence over our product, and would seriously impact our product if either distributor decided not to carry our product. This does not put us at an advantage, but if our product is popular enough, then we would not have any issues.

Government: There are low taxes and regulation on our app because it is a small business. The Alberta small business tax rate is only 2%, and the Canadian rate is 17.5%. We would be able to take advantage of the small business deduction available. There would also be grant opportunities available from the government for venture because it is a small business, using technology, for people with potential mental health issues.

Global Environment: Our app would be directed towards university students who are most likely to use an app. The global environment shows that university students tend to struggle with mental health issues, especially stress, anxiety, and depression, with little convenient options.

There are some applications in the market that specifically look at mental health. The apps available look at meditation, or mental skills training. Mount Royal has a similar program to what we are looking to develop, but it lacks the convenience of being mobile and app based. Although we would not replace mental health services, there is sufficient opportunity to develop technology to complement services.

References

- Anxiety and Depression Association of America. (2017, August). Facts & Statistics. Retrieved October 7, 2017, from https://adaa.org/about-adaa/press-room/facts-statistics
- Centre for Addiction and Mental Health. (2016). Mental Illness and Addictions: Facts and Statistics. Retrieved October 3, 2017, from http://www.camh.ca/en/hospital/about_camh/newsroom/for_reporters/Pages/addictionme_ntalhealthstatistics.aspx
- Government of Canada. (2017, May 1). Statement by the Prime Minister of Canada on Mental Health Week. Retrieved October 1, 2017, from
 - $\underline{\text{http://pm.gc.ca/eng/news/2017/05/01/statement-prime-minister-canada-mental-health-week}}$
- Mental Health Commission of Canada (2016). "E-Mental Health in Canada" Members of the E-Mental Health Steering Committee. Retrieved October 2, 2017, from https://www.mentalhealthcommission.ca/sites/default/files/MHCC_E-Mental_Health-Briefing_Document_ENG_0.pdf
- The Star. (2016, October 27). Mental illness afflicts about 20% of Canadians, gets 7% of health funding. Retrieved October 1, 2017, from https://www.thestar.com/news/canada/2016/10/27/mental-illness-afflicts-about-20-of-%09canadians-gets-7-of-health-funding.html
- University of Calgary. (2017, June 22). Post-secondary institutions across the province receive mental health funding boost. Retrieved September 30, 2017, from https://www.ucalgary.ca/utoday/issue/2017-06-22/post-secondary-institutions-across-province-receive-mental-health-funding-boost
- Bakker, David, Nikolaos Kazantzis, Debra Rickwood, and Nikki Rickard. (2016, March 1).

 Mental Health Smartphone Apps: Review and Evidence-Based Recommendations for Future Developments. Retrieved October 9, 2017, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4795320/