





Janice

21

Student

Accounting Major

Lives on campus



CATALYST CONSULTING

Mental Health Trends



Increasing mental health
funding



More students seeking
treatment



Unmatched demand



Barriers To Treatment



Opportunity cost of time



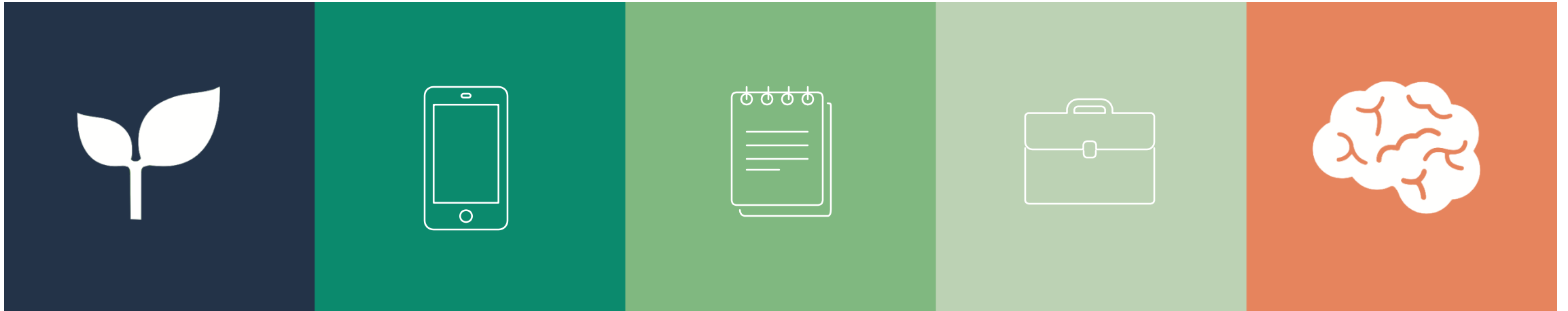
Negative attitudes from professionals



Long wait times & low-quality service



Student Demographic



Physical

Social

Academic

Occupational

Psychological

Summary

Analysis

Recommendation

Implementation



Student Demographic



Psychological

Summary

Analysis

Recommendation

Implementation



How can



help post-secondary students to **better manage** their mental health
needs and **promote** their mental wellness?

Executive Summary

How can TELUS Health help post-secondary students to better manage their mental health needs and promote mental wellness?

Challenge

Use VR Therapy to increase mental wellness accessibility, personalization and reduce stigma in an innovative way.

Summary

Leveraging the use of technology to more effectively treat mental health and reduce the associated stigma

Impact

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Project Dragon

Alternatives

Passive Symptom
Tracking

Virtual Reality
Therapy

Summary

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Implementation



Alternative #1



Passive Symptom Tracking

Why?

- Able to use technology to assess mental health
- Increases accessibility

Why not?

- Privacy issues
- Regulation
- Overselling



Alternative #2



Why?

- Able to reduce stigma in an innovative way
- Personalized service
- Increases accessibility
- Encourages young adults to talk about mental health in a different way

Why not?

- High R&D costs
- Technology might be difficult to learn



Alternative #2



Why?

- Able to reduce stigma in an innovative way
- Personalized service
- Increases accessibility
- Encourages young adults to talk about mental health in a different way

Why not?

- High R&D costs
- Technology might be difficult to learn



A black and white photograph of a person wearing a VR headset, looking to the left. The background is dark with out-of-focus light sources creating a bokeh effect. The text 'The CALM' is centered in a large, white, serif font, and 'Virtual Reality Therapy (VRT)' is centered below it in a smaller, white, sans-serif font.

The CALM

Virtual Reality Therapy (VRT)

Virtual Reality Therapy (VRT)

Patients receiving virtual reality therapy navigate through digitally created environments and complete specially designed tasks often tailored to treat a specific ailment

Applications

Stress

Anxiety

Depression

Advantages

Less intimidating

Personalized

Backed by data

Recommendation



Summary

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Implementation





Develop.

Develop

Phase 1



Creation of a VR therapy
software solution

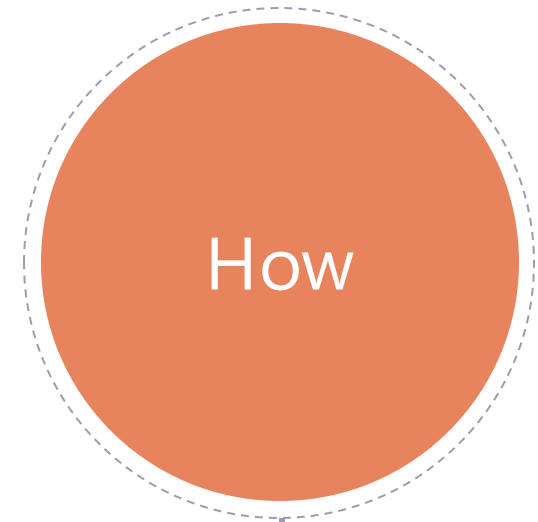
Creation of VR therapy
training course



Competitive advantage

CSR

Tax incentive



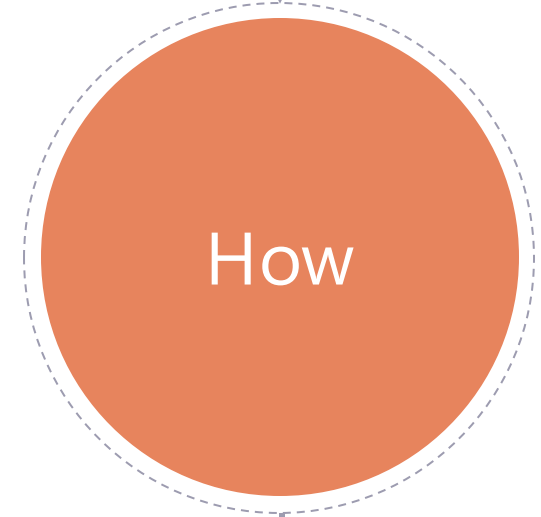
Develop

Phase 1

Use of health care professionals to assist in development of app and training program

Work with an app developer

Conduct clinical trials and adjust



Develop
Phase 1

Health Care Professional Consultant

\$125,000 +

\$210,000

\$335,000

VR App Development



Develop

Phase 1

Students: Free

Agreement with universities:

10% of mental health program budget

i.e. UBC - \$190,000





Target.

Target

Phase 2



WHY

- Students are more tech-savvy

HOW

- Establish presence in student-friendly social media platforms
 - Instagram, Facebook



A woman with curly hair is wearing a Samsung Gear VR headset. She is gesturing with her hands in front of her, as if interacting with a virtual environment. The background is a blurred indoor setting, possibly a living room with a bookshelf. The text "Make Mental Wellness a Reality" is overlaid on the image in a white, serif font.

"Make Mental Wellness a Reality"



Launch.

Launch

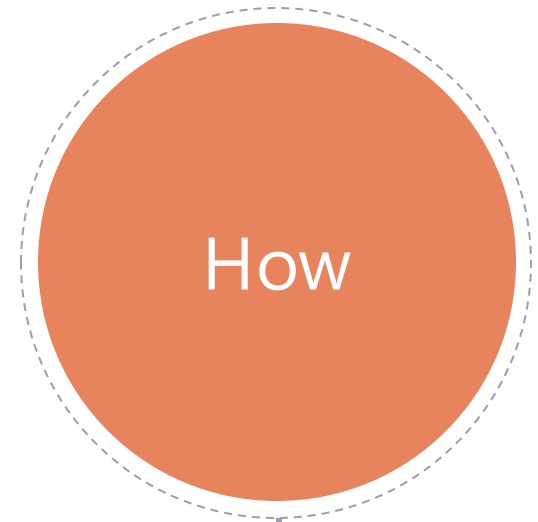
Phase 3



Launch small-scale VR
initiative



Gather feedback
Optimize and adjust



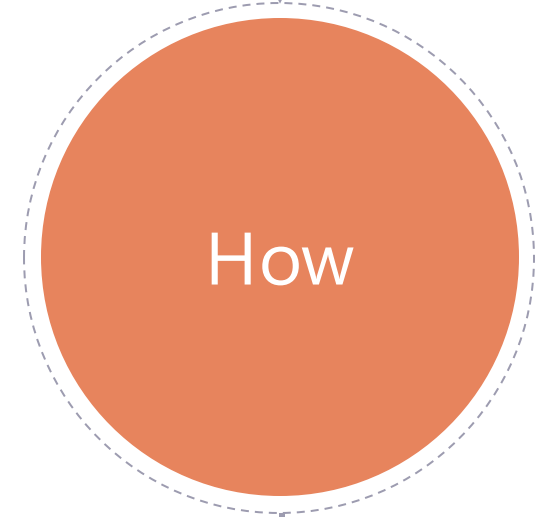
Launch

Phase 3

Initiate agreement with U of T

Integrate VR therapy with current counselling program

Begin training courses for program coordinators



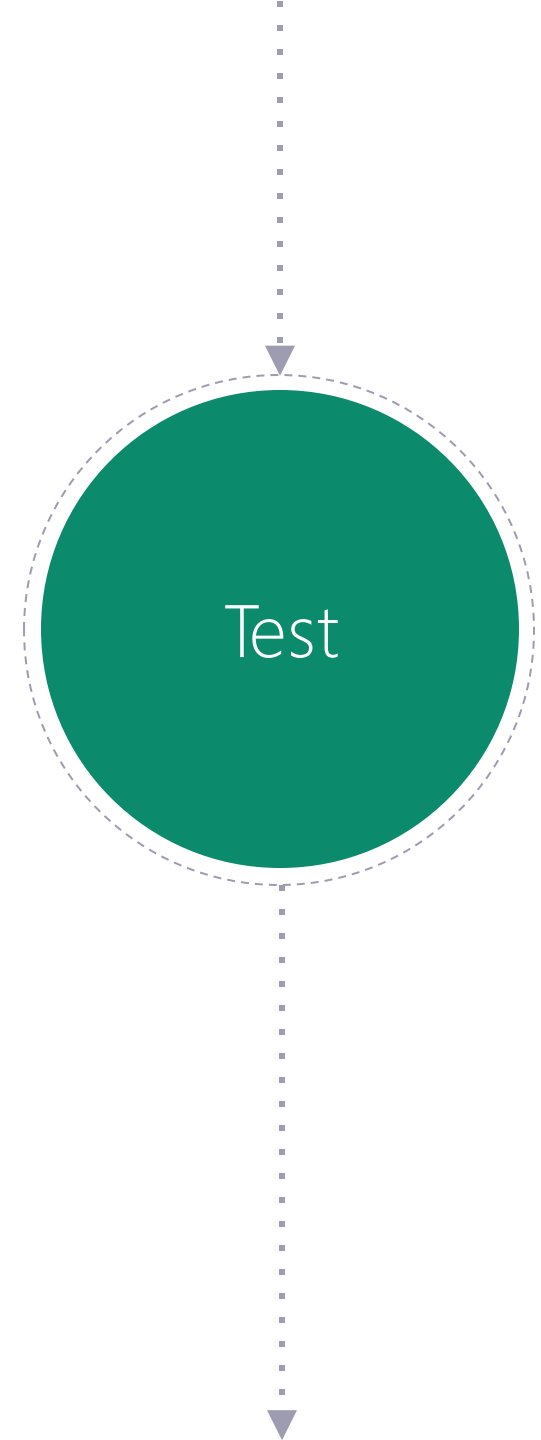
Launch

Phase 3

Temporary 3-month project

Feedback collection

Analysis of results



Goals / Performance Metrics

■ Feedback

■ Length of engagement

■ Retention

■ # of applicants



Summary

Analysis

Recommendation

Implementation



Timeline



Develop
Months 1-7

Target
Months 7-9



Launch
Months 9-12

Summary

Analysis

Recommendation

Implementation



Risk

Lack of Virtual
Reality Use on
campus



Trigger

Less than 20
appointments a
day



Mitigation

Further promotion
on campus



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Questions?



Story



Executive summary



Phase 1



Trends



Alternative 1



Phase 2



Barriers to treatment



Alternative 2



Phase 3



Student demographic



Impact



Timeline



Problem statement



VRT Explained



Risk



Industry Trends



Long-term applications



Tax deductible



Criteria



Financials



Financial assumptions



Timeline



Social Media Prices



VR Stats



PESTLE



Feedback form



Industry Trends (Appendix)

	2013	2016	Change
Felt things were hopeless	51.00%	59.60%	8.60%
Felt overwhelmed by all you had to do	89.20%	89.50%	0.30%
Exhausted (Not from physical activity)	86.60%	88.20%	1.60%
Very Lonely	62.00%	66.60%	4.60%
Very Sad	68.60%	73.70%	5.10%
So depressed that it was difficult to function	34.20%	44.40%	10.20%
Overwhelming anxiety	54.50%	64.50%	10.00%
Overwhelming anger	41.00%	47.30%	6.30%
Seriously considered suicide	8.60%	13.00%	4.40%
Attempted suicide	1.30%	2.10%	0.80%
Intentionally injured yourself	5.60%	8.70%	3.10%

NCHA Responses

Industry Trends (Appendix)

UBC increased mental health counselling funding from \$1 million in 2010 to \$1.9 million in 2016

Ryerson increased funding from \$1.4 million in 2014 to \$1.7 million in 2016

Long-Term Applications

Providing VR therapy tools to private health institutions

Being able to treat:

- Phobias
- PTSD
- Other mental illnesses

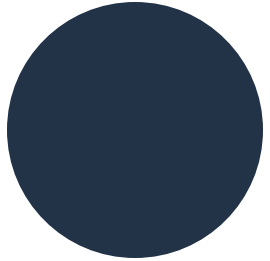
Claiming SR&ED tax incentives

The Scientific Research and Experimental Development (SR&ED) Program is a federal tax incentive program designed to encourage Canadian businesses of all sizes and in all sectors to conduct research and development (R&D) in Canada. The program is administered by the Canada Revenue Agency (CRA), which delivers SR&ED tax incentives in a timely, consistent and predictable manner, while encouraging businesses to prepare their claims in compliance with Canada's tax laws and the CRA's policies and procedures.

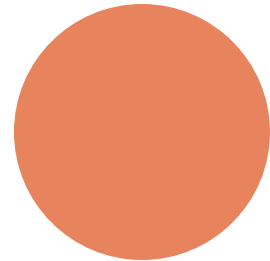
The CRA is committed to administering the program with fiscal integrity and to ensuring that businesses are aware of the program and can access it as easily as possible. It is important that businesses receive their entitlements under the program and that the CRA applies the legislation correctly, consistently, and fairly so that claimants receive the full amount to which they are entitled.

The following information will be helpful for first-time claimants.

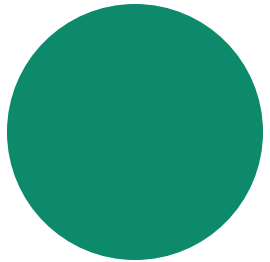
Criteria



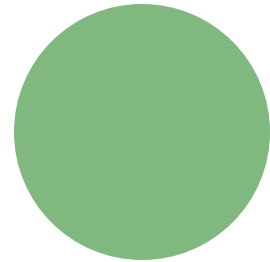
Accessibility



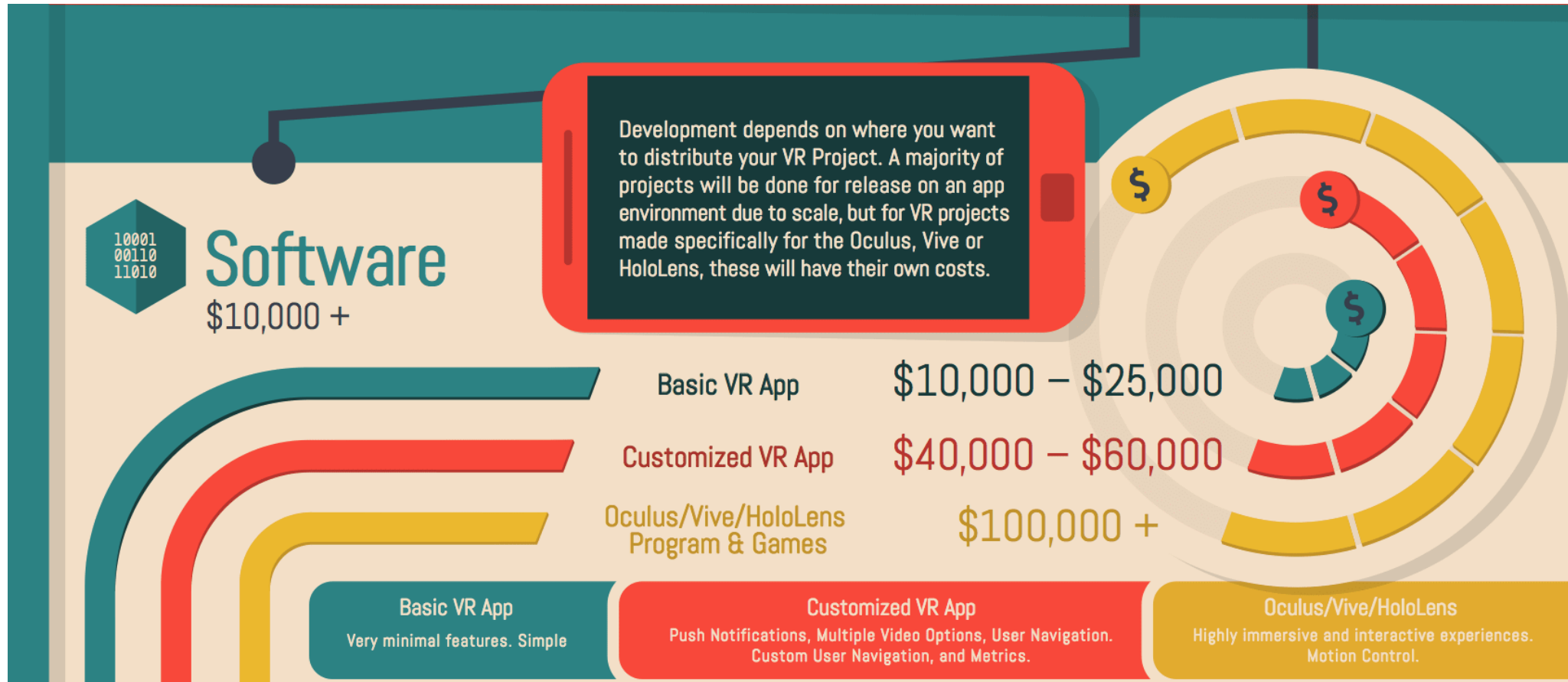
Innovative



Personalized



Reduction of stigma





Content



Headsets



Software



Distribution



Content

\$10,000–\$25,000+



Camera quality affects price



Editing (i.e., stitching together video is the big part of the editing process)



Cost can go up with interactivity



360 Camera



Computer Graphics



High-End Photorealistic Camera

\$10,000+

\$15,000+

\$25,000+



Headsets

\$12.99–\$3,000

Hardware Needed

\$0 - \$3,000



Cardboard & Gear are mobile experiences (i.e., all you need is your phone)



Oculus & Vive are tethered to a PC (i.e., stationary you need the high-end PC)



Interactivity (e.g., hand gestures,) with Oculus, Vive, and HoloLens



HoloLens is a PC within the headset

Cardboard

\$12.99

iPhone or Android Phone



Samsung Gear

\$99

Samsung Galaxy Android Phone



Oculus

\$599

High-end VR-ready PC
\$999-\$3,000



Vive

\$799

High-end VR-ready PC
\$999-\$3,000



HoloLens

\$3,000

Built-in



Considerations:



Most users already have their own smartphone that can easily stream or download VR content.

VR content that is too large for a smartphone to handle will be an issue.



Mass adoption for high-end systems will be slower due to price.

High-end PCs are an investment but serious VR early-adopters will purchase early on.

Financial Assumptions

Health care professionals:

- Family physicians - \$300/hour, 3 doctors, allocating 200 hours (\$180,000)
- Therapists - \$50/hour, 3 therapists, allocating 200 hours (\$30,000)

3. Timeline for Rolling Out to Universities

Year 1: (Population over 30,000)

University of Alberta

Athabasca University

Simon Fraser

University of British Columbia

Ryerson University

University of Ottawa

University of Toronto

University of Waterloo

University of Western Ontario

York University

Concordia University

McGill University

Universite de Montreal

Universite de Laval

Year 2: (Population of 25,000-30,000)

Mount Royal University

University of Calgary

University of Manitoba

Carleton University

McMaster University

2. Pricing for advertisements:

Type of Advertisement	Price
Instagram Ads	\$8.50 per 1,000 impressions
Snapchat Ads	\$4.00 per 1,000 impressions
Facebook Ads	\$13.35 per 1,000 impressions
Mental Health Posters	\$0.89 per 11" by 17" coloured poster
Mass Student Emails	Free

Virtual Reality Exposure Therapy for Post-Traumatic Stress Disorder and Other Anxiety Disorders

These studies have proven to be true by the results that virtual reality therapy programs have had on reducing PTSD symptoms. In a clinical test exposing Iraq veterans to VR therapy, 75 percent of the participants experienced at least a 50 percent reduction of their PTSD symptoms, with the average totals of PTSD and anxiety symptoms, respectively, showing decreases of 50.4 and 36 percent [10].

shopping mall, and tunnel. Using 50% reduction in panic frequency as the criterion for clinical improvement, 100% of in vivo participants and 90% of VRE participants met criteria at the end of treatment (wait list, 28.6%). At 12-month follow-up, 90% in vivo and 91.6% VRE participants met the criteria for panic-free status.

*Emory University School of
Medicine Study*

8. PESTEL Analysis

P olitical Factors	E conomic Factors	S ocial Factors	T echnological Factors	E nvironmental Factors	L egislative Factors
- Government of Canada funds public healthcare system which includes primary	- Canada is currently a market economy - Canadian economy is in the	- Increasing trend in online purchases - Rise in concern for corporate social responsibility for companies - Popularity of	- Technology is becoming more and more apart of everyday lives, used for many different	- Canadian weather: cold and snowy in the winter, warm and sunny in the summer (less students will	- Student volunteers run the VR simulations, they do not need to be paid

and secondary services - Government funding excludes supplementary services which includes mental health services, visionary care, dental support, medical equipment, and physiotherapy - Legislation for the Canadian public healthcare system will likely remain constant in future years	expansion stage of business cycle - GDP has been growing at a rate of 3.1% as of 2017 - Current inflation rate in Canada: 1.55% - Current unemployment rate in Canada: 7%	customization has increased - Gender roles diminishing - 1.2% annual population growth in Canada - 9.2% of the Canadian population consists of 18-24 year olds (most of our target market falls into this age category)	functions - Consumers are caring more about their health. They purchase products and participate in activities that will help them to achieve good health mentally and physically.	participate in VR in the summer because they will not be attending school and will likely want to spend their time outdoors) - Pollution index Canada: 27.72 (low) - Air quality Canada: 80.88 (very high)	- Volunteers still must be treated fairly and must not work for more than 8 hours per day - Participants must sign a waiver before they begin their VR simulation
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The Calm Evaluation Form

1) What is your overall assessment of The Calm? (1 = insufficient - 5 = excellent)

1

2

3

4

5

2) What aspects did you find most interesting or useful?

•

•

•

3) Did you receive the help you wish?

Yes

No

If no, why?

4) How do you think The Calm could have been made more effective?

Further comments or suggestions |
