DALHOUSIE UNIVERSITY

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Technology Innovation

Project Report: Omicron

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Group 11

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Section-1] United Nations Challenge Description

The market sector of Canada is highly dynamic and diversified. Niche vendors contribute to this diversity by selling their best products within a local range on a humongous scale. Their businesses are dominant within a radius and bring them considerable profit margins. However, they are facing uphill challenges in expanding their businesses beyond their niche range. Their publicity has preserved their businesses in their local range but cannot reach the customers outside their hub. This scenario has led to several questions: Can something be done to bring these local businesses to a global spotlight? Can they get a platform which allows them to show their products globally? Can we merge the niche markets into global units of businesses? All of these questions had connected with the **UN Sustainable Development goal -8: Decent Work and Economic Growth** which aims of increasing the per capita by collectively utilizing the businesses of nations. Thus, the selected challenge turned out as follows: **"Can we make niche entrepreneurs to break out of their radius and spread their businesses globally?"**

Section-2] Proposed Solution: Project Omicron

The above challenges led to the development of an idea of creating a web portal which can bring the niche businesses of Halifax to spotlight. We call it "Omicron": It is a web portal which provides these niche vendors an opportunity to advertise their products globally for their business expansion in return for a monthly subscription price. Omicron provides user authentication for customers as well as niche vendors. The portal will be free for customers and will charge a monthly subscription price to niche vendors. Moreover, customers of these vendors can rate stars and "subscribe" their favorite vendors so that new products are shown frequently to them. Vendors can advertise their products on the targeted portal through videos and posts. Thus, Omicron is a decent mixture of video streaming and social media specifically designed for niche markets for globalizing their businesses. The vendors will see the subscriber counts and comments over their products so that they can know

the demand and feedback of their subscribers. The portal will also allow them to anonymously report any offensive comment to the administrator. The administrator will examine the comment and delete it as per the regulations. Moreover, Omicron also provides a premium feature to vendors through which they can view analytics of their business relative to other businesses shown anonymously. Thus, Omicron connects global customers with niche markets creating a win-win situation for everyone.

Section-3] Lean Canvas

Lean Canvas

Designed for: Niche Entrepreneurs	**Designed by:** Group-11: Omicron		**Date:** 30th Nov, 2020	**Version:** 1.0

Problem	Solution	Unique Value Proposition	Unfair Advantage	Customer Segments
• Difficulty in business expansion • Difficulty in buying new land in expensive areas. • Difficulty in accessing the customers outside the niche range	[1] A web portal that provides these niche vendors an advertisement as well as help or their business expansion [2] Allow the vendors to promote certain products or their business.	Omicron is the first web portal combining video streaming, social media and advertisement features specifically for niche markets for connecting them to global customers. The web portal connects the customers with the niche vendors and generates a global image of niche vendors.	We are developing this product amidst COVID-19 pandemic due to which several niche businesses have lost their original publicity and dominance. Omicron's features are exactly what can help them see the light at the end of the pandemic tunnel.	Niche entrepreneurs and vendors who are facing difficulties in expanding their business outside their niche range. Thus, Mass market = Niche entrepreneurs Niche market = businessmen setting up their business for the first time Tourists/Customers who want to know about the best niche products within Halifax

Existing Alternatives	Key Metrics	High-Level Concept	Channels	Early Adopters
Currently, websites are only identifying the niche businesses but not helping them in their expansion. We did not find any suitable existing solutions to our challenge which further motivated our idea.	• Number of niche businesses globalized in every month • Number of new subscriptions every month • Number of interviews conducted and positive feedbacks	Our Idea = https://www.novascotiabusiness.com/ + Expansion ideas + Advertisements + New Customers engagement + Land sharing options + Business promotion + local delivery mechanisms	• Email notifications • Google Advertisements • Texting them about this idea • Meeting the nearby niche vendors in-person for pitching our idea • Web Portal's Contact Us page • Web portal's product delivery page	• Niche entrepreneurs having a well settled business within a local domain. • Local startups looking for business setup. • Customers interested for knowing about remote niche businesses. • Entrepreneurs looking for cheap infrastructure outside their niche range

Cost Structure

Cost Parameter	Cost (CAD)
Website Development & Maintenance	$48000/year per full time employee
Digital Marketing	$2000 every month
Development Support Intern	$2500/month per intern
Website Hosting	$500/month
Total	4 full time developers + 3 interns + 4 digital marketing interns ($32k/month)

Revenue Structure

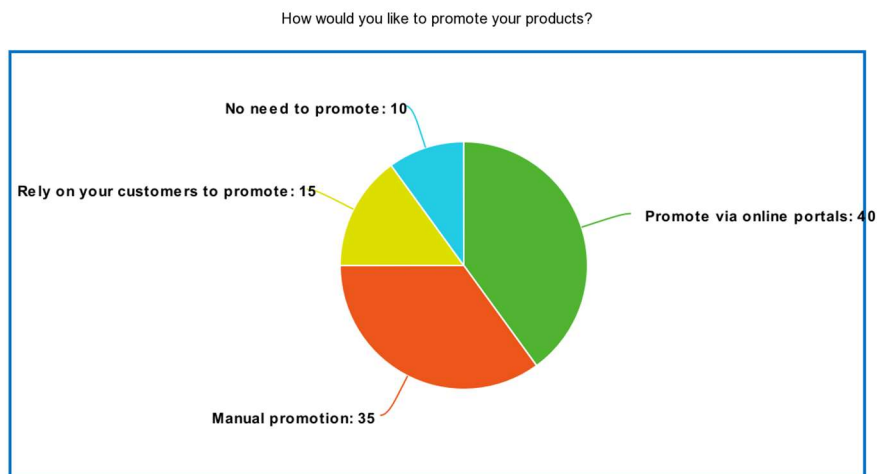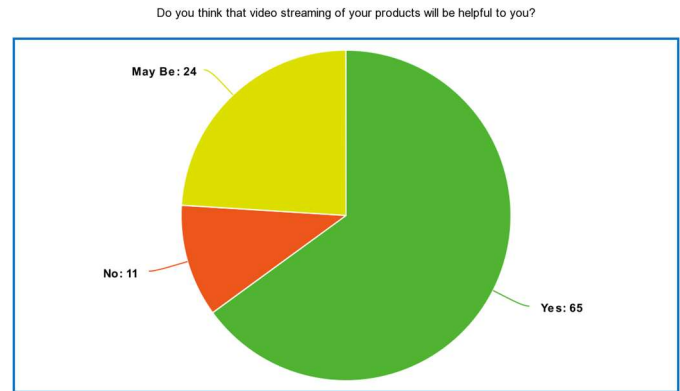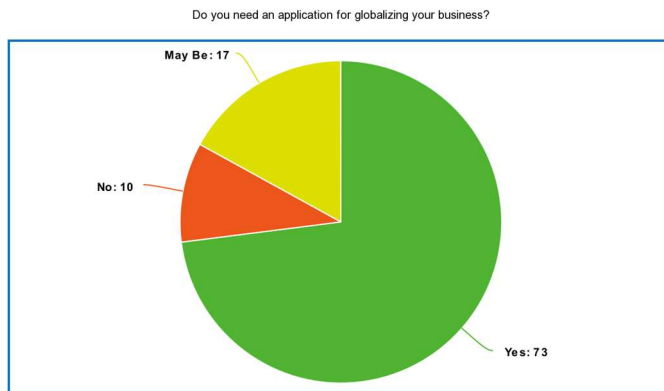**Revenue Source :** Monthly subscriptions and external Advertisements
Revenue Models : Subscription Revenue Model and Ad-Based Revenue Model

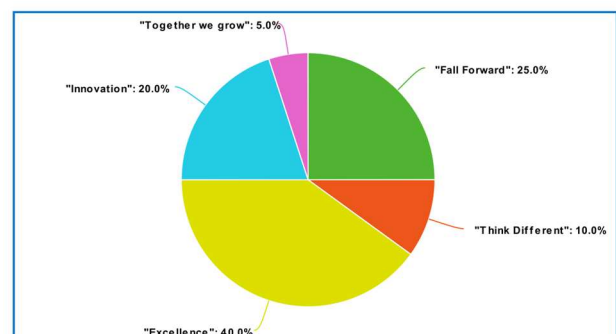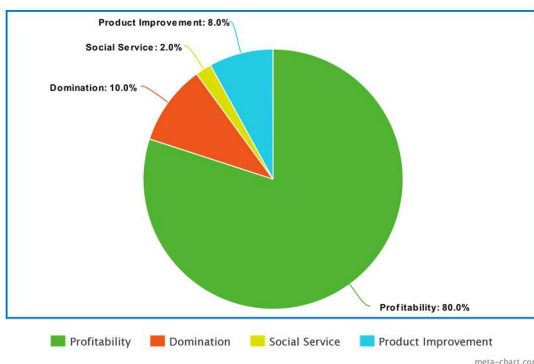| Revenue Paremeter	Revenue (CAD)
Classic Subscription	30 CAD/month
Premium Subscription	50 CAD/month
Auxilliary Advertisements	400 CAD / website slot- every month
Break Even Point	200 Classic subscriptions, 50 auxilliary advertisements, 30 premium subscriptions

Life Time Value : After globalising a niche business, the impression of this idea will be permanently positive on the targeted niche entrepreneurs. We will be trying to pull up their business and their success will be our success too!

Section-4] Customer Insights

We have interviewed 56 niche vendors within Halifax. Following responses were observed:

Do you need an application for globalizing your business?

May Be: 17
No: 10
Yes: 73

Do you think that video streaming of your products will be helpful to you?

May Be: 24
No: 11
Yes: 65

How would you like to promote your products?

No need to promote: 10
Rely on your customers to promote: 15
Promote via online portals: 40
Manual promotion: 35

Customer Segmentations based on business aims were observed as follows :

Product Improvement: 8.0%
Social Service: 2.0%
Domination: 10.0%
Profitability: 80.0%

Profitability   Domination   Social Service   Product Improvement

meta-chart.com

"Together we grow": 5.0%
"Innovation": 20.0%
"Fall Forward": 25.0%
"Think Different": 10.0%
"Excellence": 40.0%

Section-5] High-level functioning of Omicron

Following diagram explains the high-level functioning of Omicron :
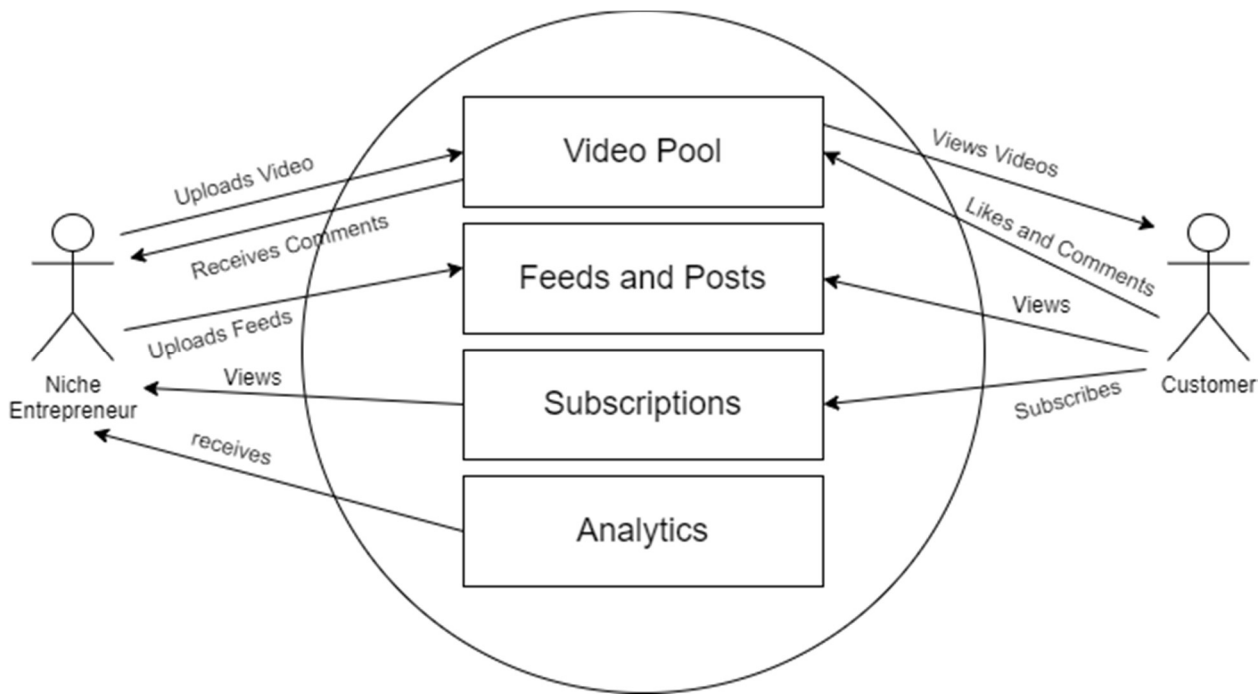
Feasibility of Omicron:

[1] Creates a "win-win" situation for us as well as niche businesses as their success ultimately means ours too!

[2] Creates a bond between remote customers and niche vendors and provides a "virtually infinite niche range" to niche businesses.

[3] Propels up the profit of niche businesses by familiarizing their products with remote customers.

[4] Generates constant revenue through subscription model and auxiliary advertisements.

[5] Scalable to every city and province.

[6] Improves the global state by strengthening the implementation of United Nations Sustainable Goal-8.

Section-6] Current Project Status and Next Steps

We are implementing this project using Gitlab as our project management system. We have created our individual branches for following the Git workflow pattern for avoiding code collisions and efficient development process.

We are also using ASANA dashboard for tracking the implementation progress. The web portal will be designed using the following technologies:

● **Javascript** : For frontend dynamics

● **HTML5, CSS3** : For designing the skeleton and basic front-end of portal

● **PHP** : For backend management

● **Heroku** : For hosting the web portal over the Internet

● **MySQL** : For storing data of vendors and customers along with business logic storage

Currently, we are done with 60% of features of this application and we are monitoring our business model in parallel as well. We are targeting to deploy the first version of Omicron over Heroku so that it becomes globally accessible for usage.

References

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[2] N. Churamani, P. Barros, E. Strahl and S. Wermter, "Learning Empathy-Driven Emotion Expressions using Affective Modulations," 2018 International Joint Conference on Neural Networks (IJCNN), Rio de Janeiro, 2018, pp. 1-8, doi: 10.1109/IJCNN.2018.8489158.

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