



Discover AI Challenge

TEAM RNA
puffin



Microsoft



“ Hope,
despair,
courage,
fear ”



“ Equality, Empathy, Hope ”





Our Team



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Biomedical Engineering
&
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Management
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Marketing
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Problem Space

How might we help **300,000 annual Canada immigrants** overcome their challenges of transitioning to life in Canada?



100%

of Canada's net population growth will be through immigration by 2035



41%

of immigrants were most concerned about loneliness and difficulty finding friends



41%

of immigrants emphasized concerns of cultural shock and language barriers

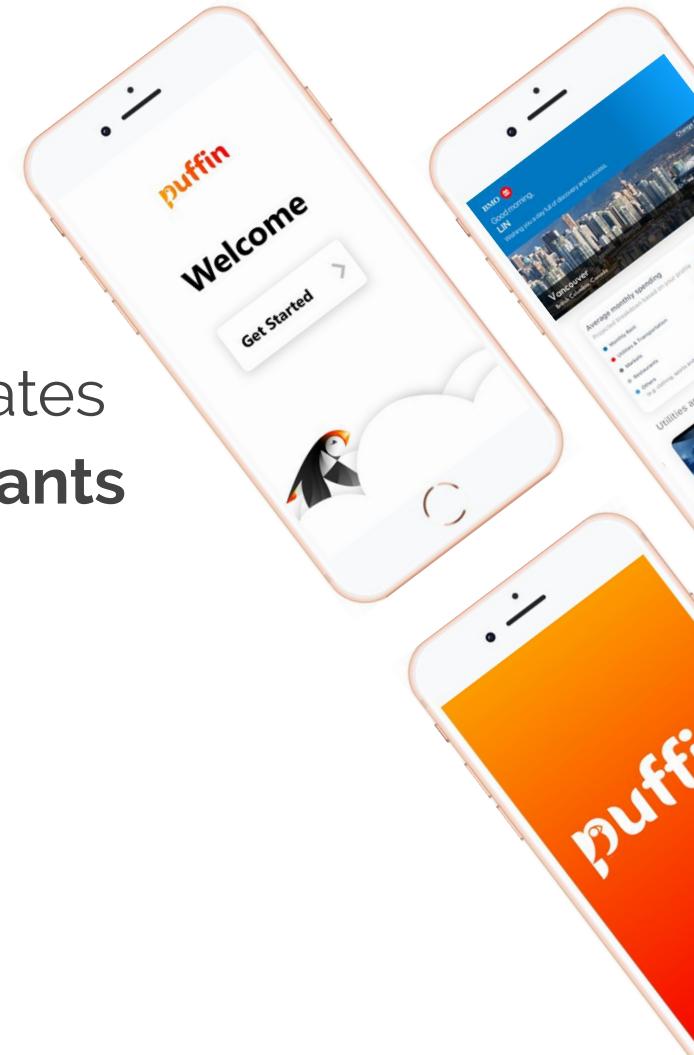
*Data derived from our survey with 33 responses and validated by secondary market research

*Source: <https://www.conferenceboard.ca/infographics/import-immigration.aspx>

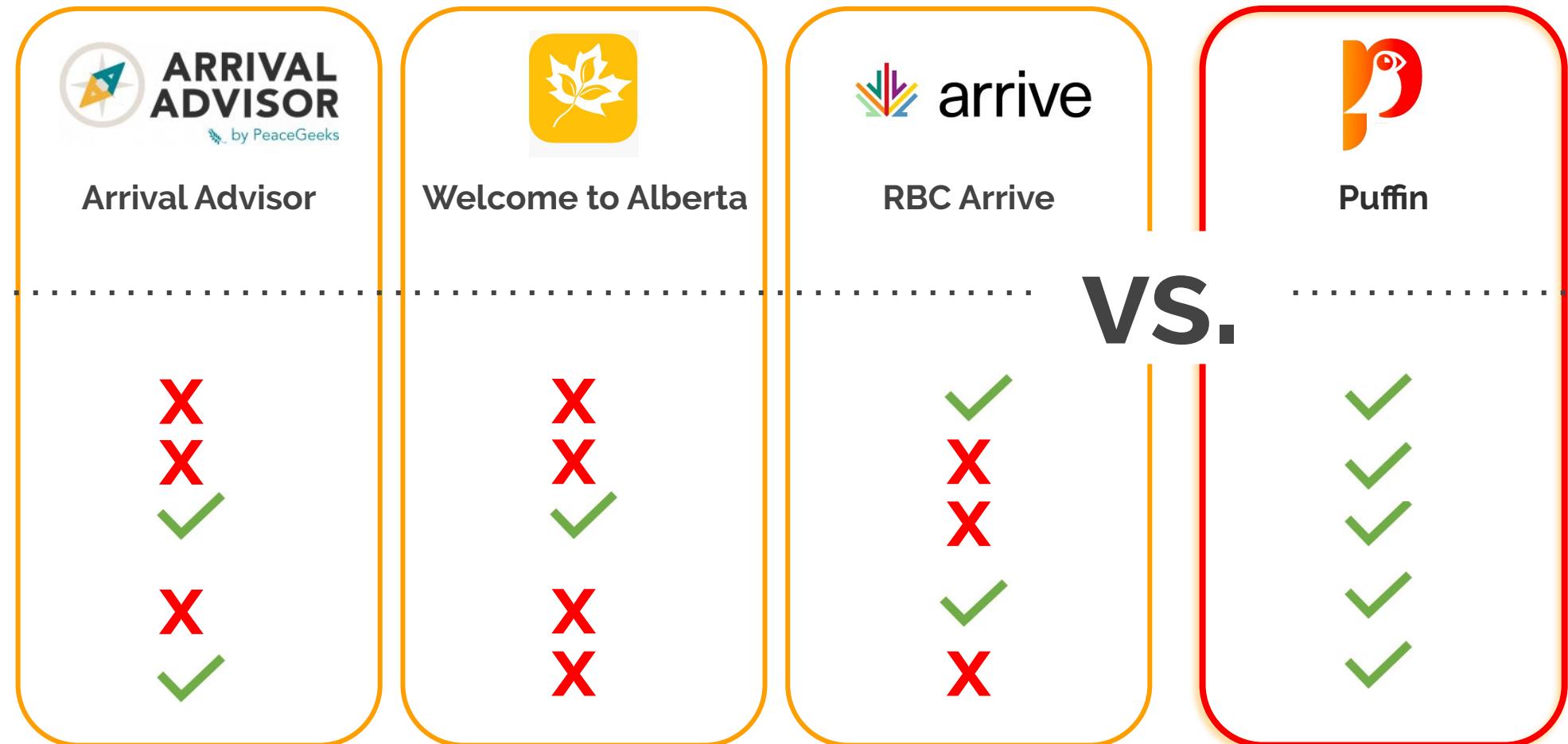


Our Solution: **puffin**

“ Puffin is an AI-enabled application that creates a seamless transitioning process for immigrants by providing tailored financial and cultural assistance. ”



Competitor Analysis



Competitive Advantage

“Created by Users - for Users”

User Feedback



79% of users find the recommendation services feature useful



45% of users were uncomfortable with letting an app access financial data without partnering with a bank



36% of users find the feature to connect app users useful

Key Features



Seamless product discovery process through **tailored onboarding services recommendations**



Banking integration to establish data security and branding



Community-centric platform through **My Neighborhood Program**

Meet Lin



Age: 35

Occupation: Housewife

Marital Status: Married with one 3-year-old

Location: Beijing, China

Archetype: Conservative, Family-Orientated

Behaviour

- Researches extensively on other Chinese immigrants' immigration experiences
- Celebrates traditional Chinese holidays; slow to adapt to new cultures



Frustrations

- Extensive searching to find information about services
- Lack of support from her friends and family in China



Pain points

- English language barrier
- Difficulties adjusting to Canadian customs and way of life



Motivations

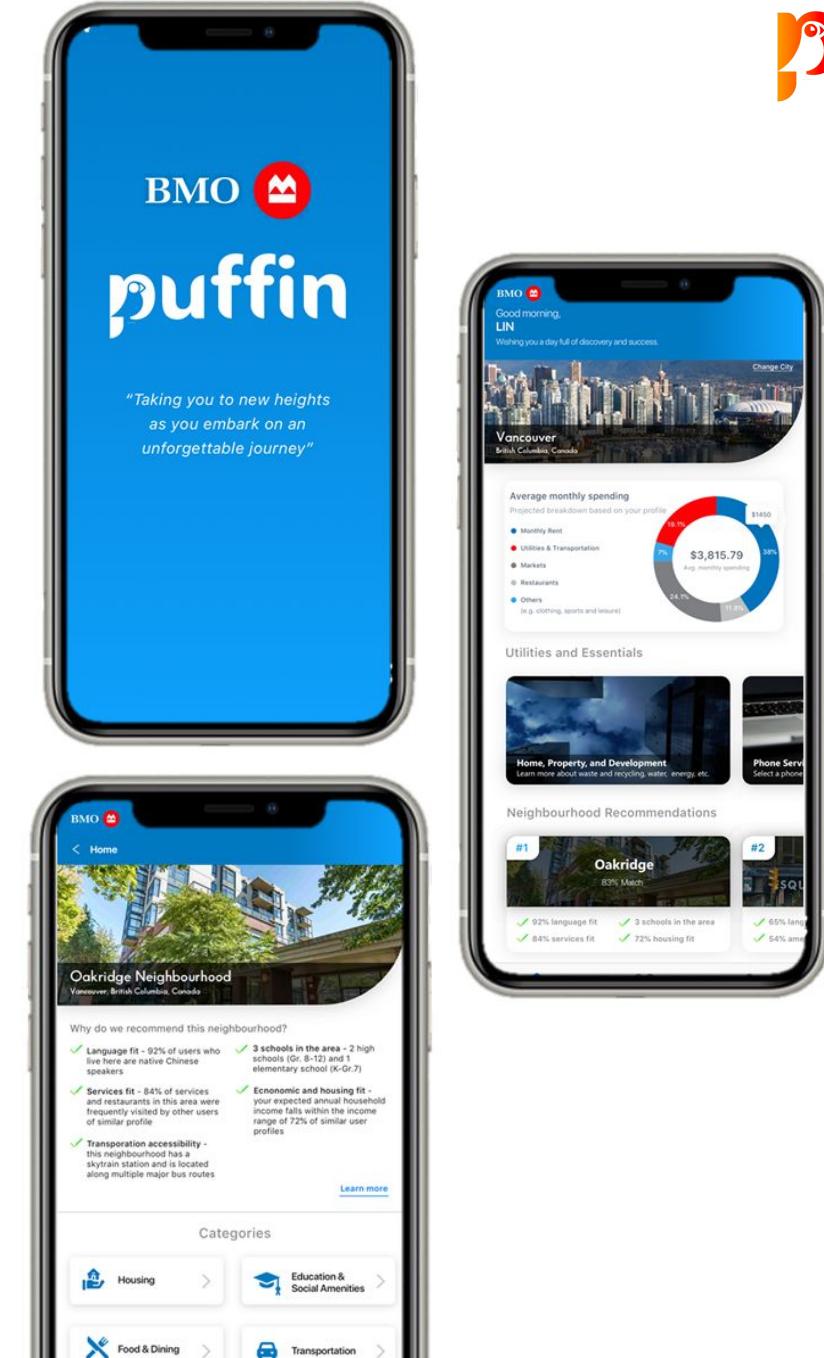
- Providing her children with a better education
- Purchasing a home in a safe neighbourhood in close proximity to top schools and community centers



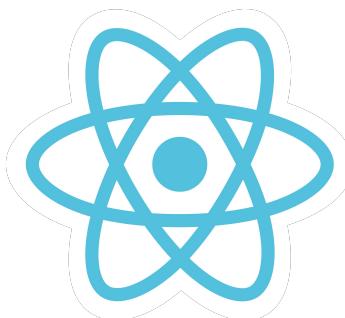


Prototype Demonstration

Case Study

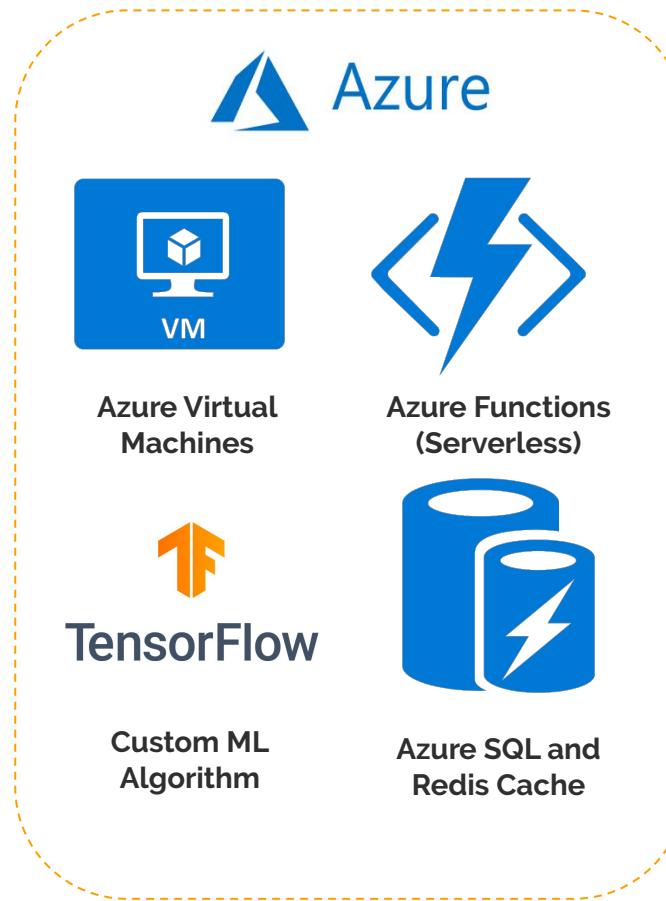


Technical Architecture



Phone Application
(React Native)

Login Details
Analysis results, guides and recommendations



Profile-focused search

Potentially useful groups

Login Details

Background Information

User Data

Available Financial Services/Offers (e.g.
insurance, loans)

Social media
Integration



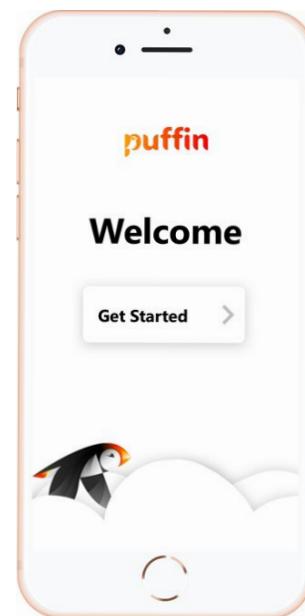
Open Banking /
Web-scraping
Integration



Business Model



Free



Users

Puffin

- 1 Integration fee with existing app
- 2 White-label license fee



Vancity

Meridian™

coastcapital.
SAVINGS

servus
credit union

Credit Unions



BMO



Banks

Financials



2-Year Initial
Start-up Cost

\$1M



Valuation

\$22M

**based on 140 Angel, Seed and Series A valuations of payment and retail banking solutions between 2015 - 2020 on CB Insights*



“ Moving does not have to be stressful, tiring or scary ”



Thank you!

puffin

“Taking you to new heights as you embark on an unforgettable journey”





Appendices

Discover AI Challenge

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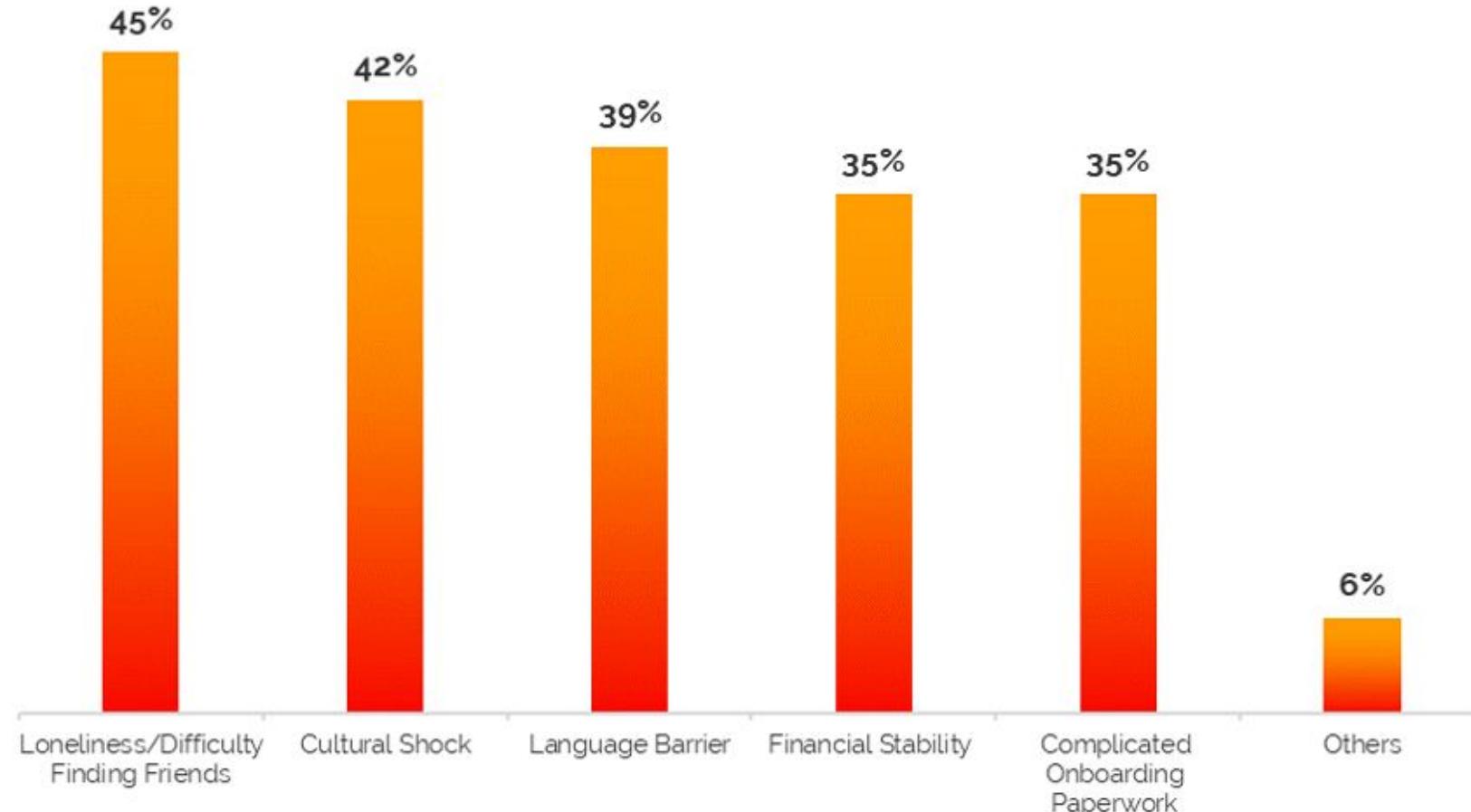


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Survey Response

Greatest Concerns with Moving Abroad?



Sample Size: 32

Secondary Research

How might we help **300,000 annual Canada immigrants** overcome their **financial and social challenges** of transitioning to life in Canada?



Financial Challenges



of new Canadian immigrants say that **daily financial constraints** of their new life is their greatest obstacle



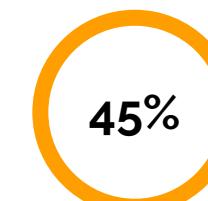
of a newcomer's **savings is used** during the **transition process** on average



of expats found **lengthy paperwork and administrative process** to be the biggest pain point of moving



Cultural Shock and Isolation



of expats have found **adapting to a new lifestyle** most challenging.



of newcomers to Canada said struggling to **adapt to new culture of values** as their greatest obstacle

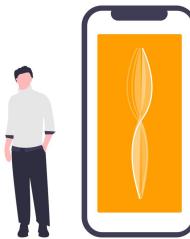


of potential immigrants said **making new friends** is their top concern

Key Takeaway: there is a sizable market opportunity to increase **financial and social prosperity** for immigrants



Our Solution



"puffin is an **AI-enabled application** that creates a **seamless transitioning process for immigrants** by providing **tailored financial and cultural assistance.**"

WHY Puffin?

01

Community-Centric Platform:
Our solution creates a platform for immigrants to **connect with communities similar to their cultural background**. This alleviates the struggle of adapting to a new country and making friends.

02

First Mover Advantage:
Existing solutions only act as information guides with general financial tips and cultural information. By leveraging **AI and banking data**, our solution is able to **tailor recommendations to users' financial needs, country of origin and cultural lifestyle**.

03

Open Banking Potential:
Once Open Banking becomes available, this solution can capitalize on the **disrupting trend of Open Banking within the Financial Services industry**. By giving users control of their data, we are able to create a solution that **reduces the stress and confusion of difficult onboarding** in a new country.

How Does It Work?

01

Prompts the user to **input their country of origin** and **define their cultural and lifestyle preferences** during the onboarding process



02

Provides general **product and services recommendations**, such as insurance, phone services and mortgages in Canada

03

Allows **instant and easy onboarding** for users to sign up for the recommended financial and industrial services **prior to moving to Canada**

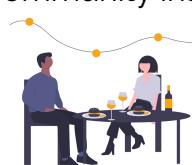
04

Connects to user's new banking account after moving to **retrieve background information and financial history** for analysis



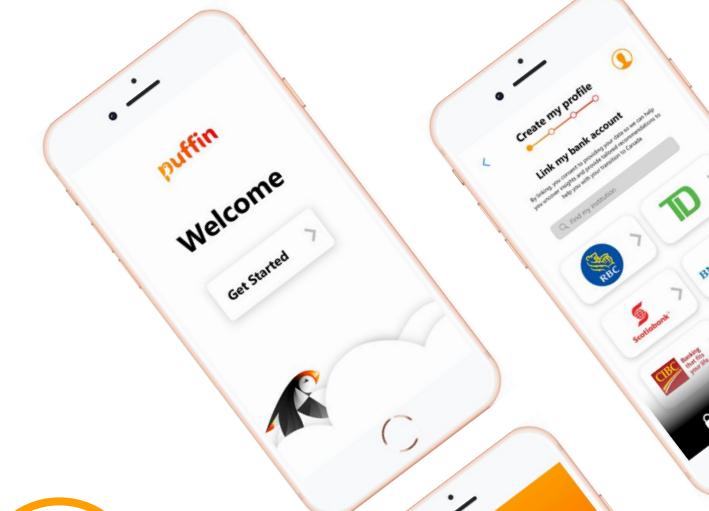
05

Creates **personalized recommendations on similar socio-cultural products and services** in Canada, such as dining locations, shopping centres, and community institutions



06

Connects users with communities alike their cultural background and/or preferred lifestyle in our **My New Neighbor Program**. Prompts the user to **get in touch with relevant community members** through social media before immigrating.





Target Market

Target Market

Demographics:

- Age: 25-44

Geographic:

- Outside of Canada

Market Size (per year):

- 172,000

Psychographic:

- Interested in moving to Canada to pursue a better life for themselves and their family

Behavioural:

- Seeks out communities of individuals with similar backgrounds/lifestyles
- Performs daily routines and sticks to a particular lifestyle

Lin has been looking forward to bringing her family with her to Canada; she decides that she is in a financially stable part of her life and initiates the immigration process

She conducts research on Chinese forums of previous immigration experiences. However, she doesn't find much information that is specifically tailored to where she is moving. She starts to feel overwhelmed by her seemingly limited options

User Journey

Lin further researches about the government, law, and way of life in Canada and feels concerned about adjusting to life in Canada. However, she goes online and discovers Puffin, which might help her situation.

Lin easily onboards. She sees that the app provides her with basic recommendations on financial products and utility services in Canada. The app offers her to access tailored recommendations to her situation after she signs on with one of Puffin's partner banks.

Meet Lin

Behaviour:

- Researches extensively on other Chinese immigrants' immigration experiences



Age: 28

Occupation: Accountant

Marital Status: Married

Location: Beijing, China

Archetype:

Family-Orientated

Pain Points:

- English language barrier
- Difficulties adjusting to Canadian customs and way of life

Frustrations:

- Extensive searching to find regional-specific answers
- Lack of support from her friends and family in China

Motivations:

- Providing her children with a better education
- Purchasing a home in a safe neighbourhood

After arriving at Canada, Lin signs with the Bank of Montreal and links her bank account to her Puffin app. Puffin then provides her with personalized recommendations based on similar BMO customers' financial data. Through the recommendations, she finds the ideal elementary for her children, housing that fits her economic needs, and most popular nearby Chinese stores and restaurants.



MVP Implementation



Workflow

01

MVP will be built for Android in either React Native or Android

02

User signs up using their existing Open Banking Account, and their background information is imported to our server hosted on Azure.

03

This information, along with their financial status and answers to a few onboarding questions is analyzed using AI to provide tailored product recommendations.

04

The user is also provided helpful guides and recommendations for comfortable cultural integration.

Timeline

Week 1:

- Setup Flask server with appropriate endpoints, begin mobile implementation in chosen platform
- Train the naive ML model.

Week 3:

- Extensive user testing, Implementing secondary features and iterating on frontend design.

Week 2:

- Test ML model, tune parameters as necessary.
- Integrate Open Banking API/Sandbox

Technical Feasibility

- [OpenBanking is coming to Canada](#)
- [Putting AI into Financial Services](#)
- [AI Driven Recommendations for Financial Services](#)



Social and Economic Benefits



Immigrants



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Financial Services



Services Partners



Economic Benefits



Social Benefits

- Reduces loneliness and social isolation among immigrants, which in return alleviates short and long-term social and emotional and psychological repercussions
- Improves diversity in Canada and increases quality of life for immigrants

- Alleviates the challenges with moving and culture shock through the community building aspect
- Connects to other immigrants with similar backgrounds through the platforms and makes new friends

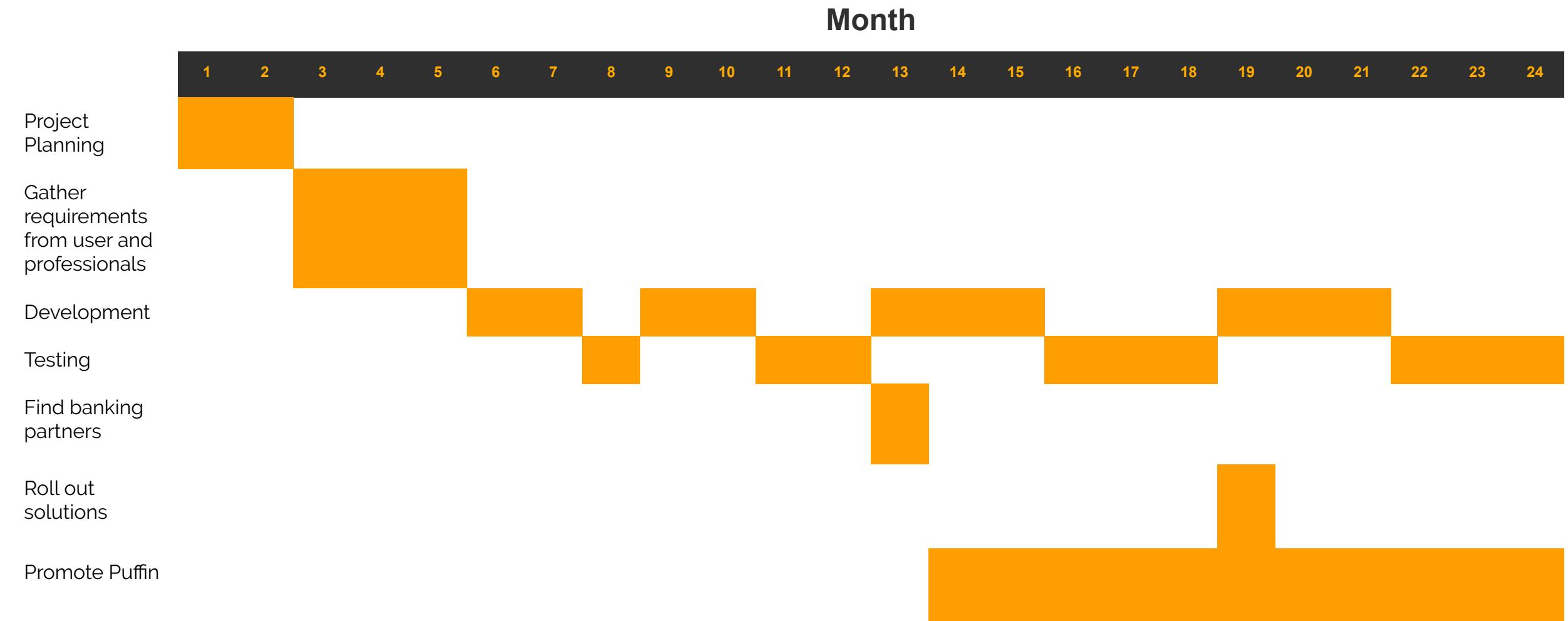
- Involves in supporting a minority group in Canada

- Involves in supporting a minority group in Canada

- Involves in supporting a minority group in Canada



Implementation Plan





Cost Estimations

	Quantity	Unit Cost	Annualized Cost	2-year Costs
<u>Salary</u>				
Data Scientist	1	\$117,750	\$117,750	\$235,500
Back-end Developer	1	\$110,000	\$110,000	\$220,000
Front-end Developer	1	\$100,000	\$100,000	\$200,000
UI/UX Designer	1	\$78,000	\$78,000	\$156,000
Salesperson	1	\$75,000	\$75,000	\$75,000
<u>Operations Costs</u>				
Azure Server Cost	1	\$17,904	\$17,904	\$35,808
Marketing	1	\$50,000	\$50,000	\$50,000
Legal (IP/Patent)	1	\$3,900	\$3,900	\$7,800
<u>Total</u>				\$1.03M



Estimated Revenue

Fee per User Model

	Current Market Share	# of New Immigrants	Puffin Users	Fee per User	Revenue
RBC	24%	72K	21K	\$40	\$860K
TD Bank	22%	66K	20K	\$40	\$792K
Scotiabank	15%	44K	13K	\$40	\$533K
CIBC	15%	44K	13K	\$40	\$529K
BMO	11%	34K	10K	\$40	\$407K

Assumptions

Total number of immigrants: 300K

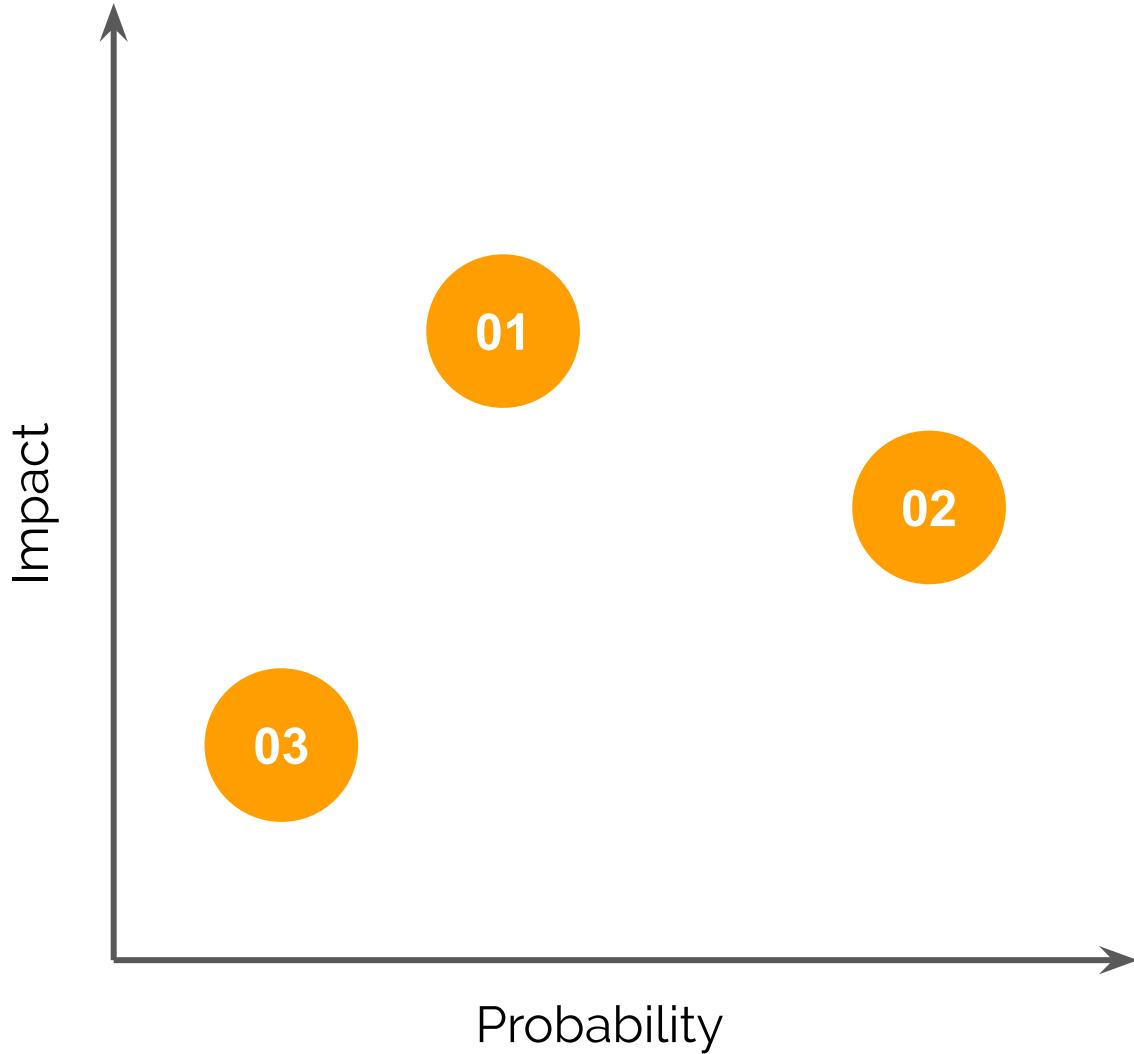
Adoption rate among immigrants: 30%

Customer acquisition cost for banks: \$200

Fee per user = $\$200 \times 20\%$



Risks and Mitigation



01

Banks' unwillingness to integrate

Our solution can still provide recommendations based on web scraping technology but certain tailored recommendations would be limited.

02

Low adoption by newcomers

The initial target segment of this app would be families immigrating to Canada. If there is low adoption, we would be targeting other segments such as international students and expats.

03

Delay in Open Banking availability in Canada

Even without Open Banking, Puffin can still operate using web scraping. The purpose of Open Banking is to improve user experience where users would not have manually input as much information during onboarding.