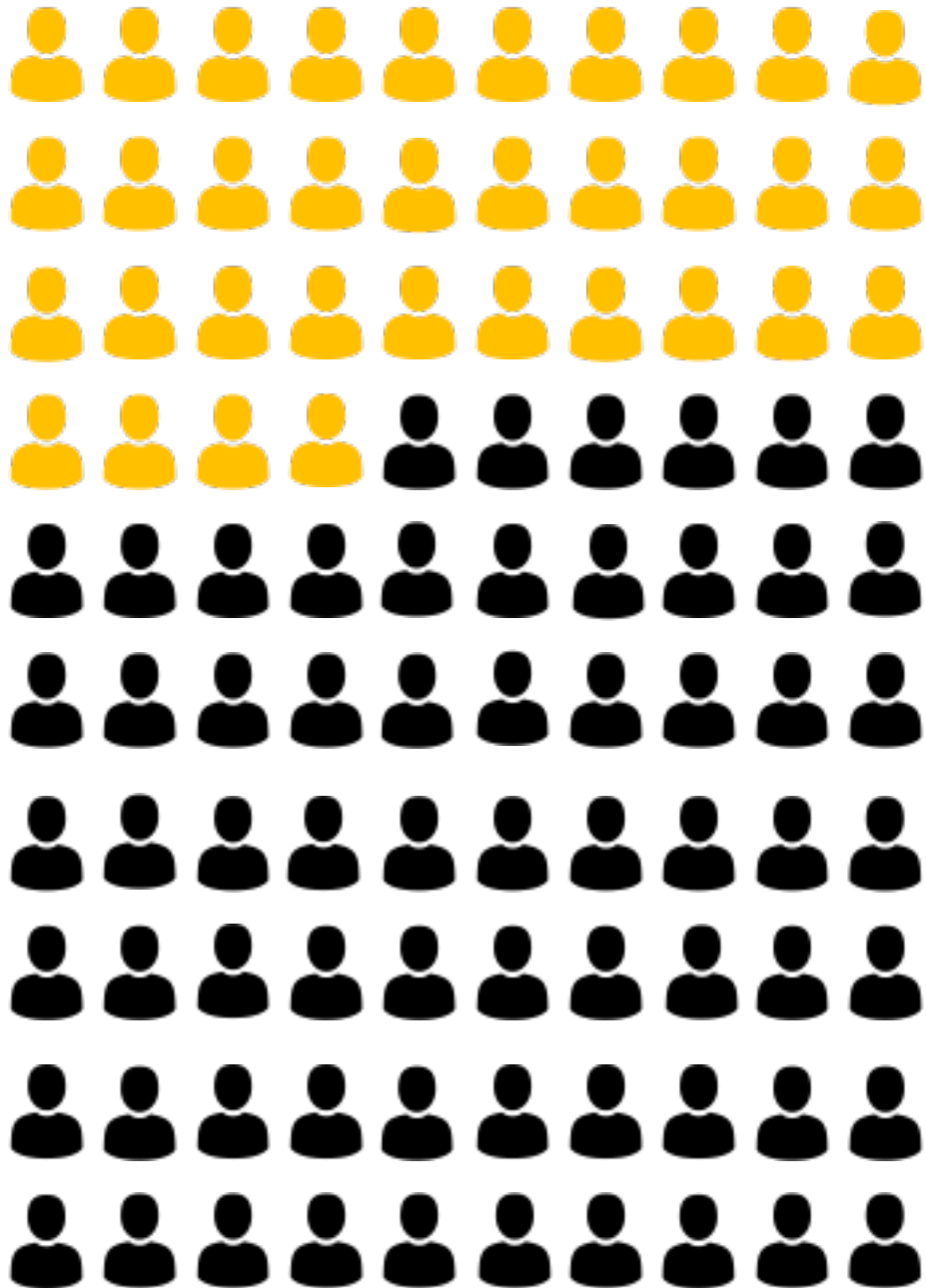


Lily Lunchpail

- Single mom of two
- Enjoys Yoga
- Buys daily [lotto] scratchers



1 in 3 Canadians

admit winning the lottery or
receiving a large inheritance
is part of their financial plan.^[1]

We all share the same problems.

1. Many people are **looking to make money**, but don't necessarily want to put in the effort.
2. **We don't save enough** money.
3. **Canadians love to gamble** (a recent study showed that low-income families spend 9% of their annual income on lotto tickets).^[2]



Jackpot!

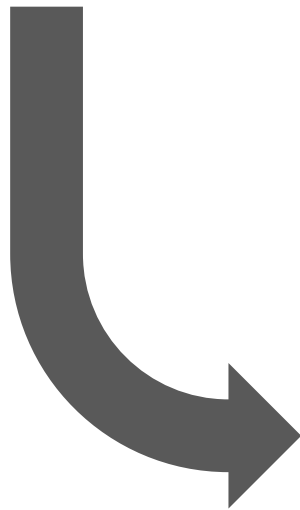
Save to win.

Save **smart.**

What if there was a way to potentially win a huge jackpot,
without having to risk losing any money at all?

Traditional **Lottery**

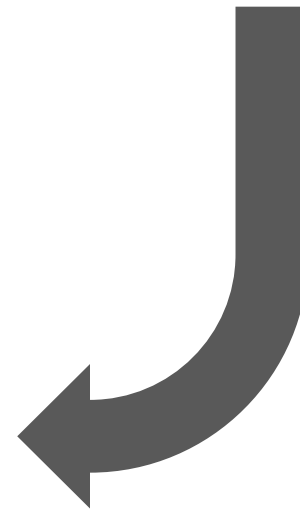
High potential gains
Negative expected return



Jackpot
Prize linked savings
account

Traditional **Savings**

Guaranteed returns
Gains are 'insignificant'





Questions?



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Appendices

1. Wealthsimple API – Endpoints
2. PLS - Conversion Plan
3. Market Sizing and Conversion
4. Savings – Zero Interest Savings & Nudge Theory

5. Critical Mass Calculations
6. Lottery Player Profiling
7. Feasibility / Regulatory Bodies
8. User Conversion/Retention Strategies
9. Behavioral Economics Papers

A1 – Wealthsimple API



API Endpoints:

AUTHENTICATION

ACCOUNTS

USERS

DEPOSITS

WITHDRAWS

A2 – Why Jackpot?



46%

of Americans **don't invest in the stock market**^[2]

69%

of Americans have **less than \$1K in total savings**^[2]

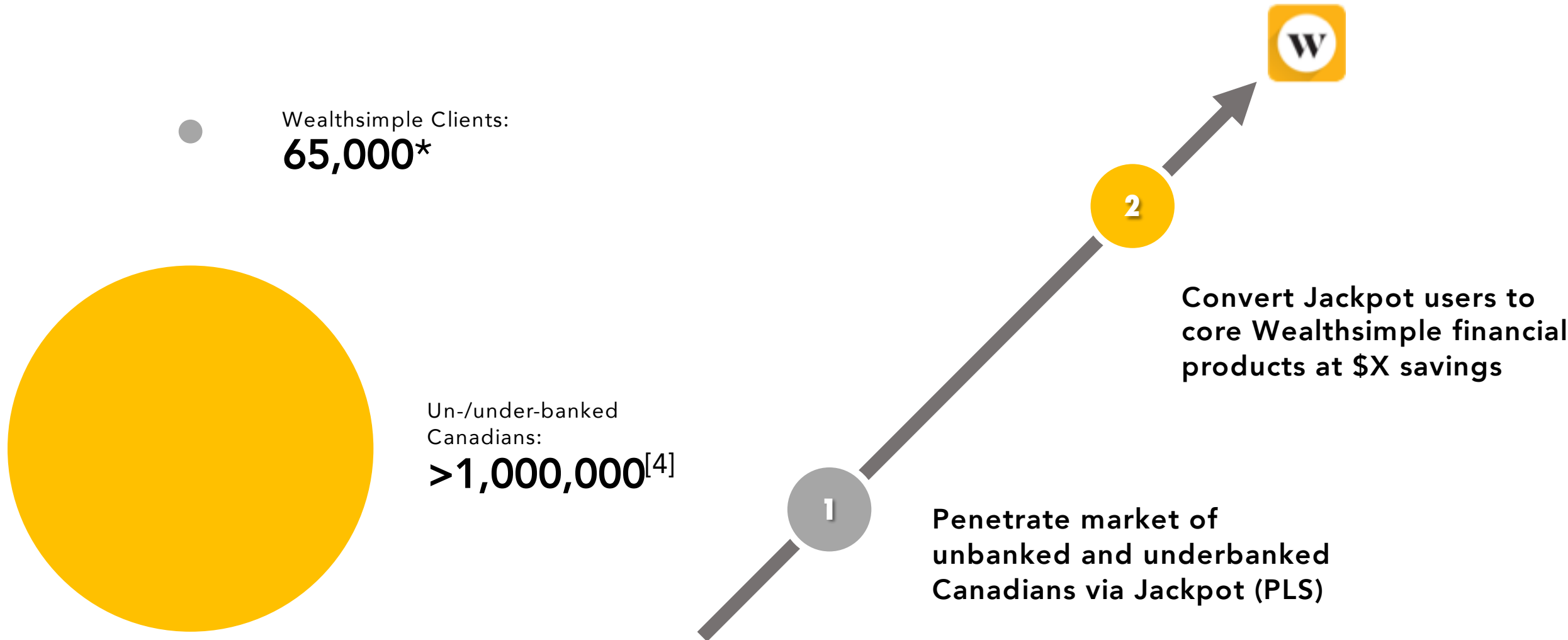
34%

of Americans have **no savings at all**^[2]

"If you can't save, you can't invest, so we need to get past this point first."

Fun fact: In 2016, Americans spent more on lottery tickets than they spent on movies, video games, music, sports tickets and books – combined.^[3]

A3 – User Conversion



* As of February 2018.

[<https://www.wealthsimple.com/en-ca/magazine/news-two-billion>]

A4 – Zero Interest Savings



One study found that a 0.01% probability of winning a large prize **results in savings 4% greater** than another savings option with an equivalent APY.^[5]

Researchers say the appeal of prize-linked savings accounts is strongest among men, self-reported lottery players, and **those with low account balances**.^[5]

Normally, savings accounts are among the hardest financial products to market ("It's a pure rate game," CFOs moan incessantly). But add all the spice, pizzazz and flair involved with a "Grand Prize Lottery," and all of a sudden it's **one of the easier products you could market**.^[5]

2008 Harvard Business School survey results provide a first look into demand for PLS in America. The results are promising on a few dimensions:^[6]

- First, among the low income population we studied, there was **substantial interest** in a savings product that provides **prizes as part of its return**.
- Second, this product **appeals to non-savers**, who do not save with traditional products.
- Third, the product **appeals to heavy lottery players**, and by virtue of this fact, has the **potential of turning their gambling activities into demand for savings**.

A5 – Critical Mass Calculation



Assumptions

- 1 million unbanked Canadians, and a 10% market penetration rate, meaning a 100K user base.
- An average savings account balance of \$4.1K. *
- A 2% APY rate on each Wealthsimple Jackpot account. **
- This amounts to roughly 700K 'prize pools' available for monthly draws, a \$8.2 MM 'pool' for annual draws, or ~350K bi-weekly 'pool'.
- This does not account for other demographics that are likely to partake in Jackpot services.

Example Winnings Schema (Monthly):

\$500,000 JACKPOT

**15 \$10,000
Prizes**

200 \$100 Prizes

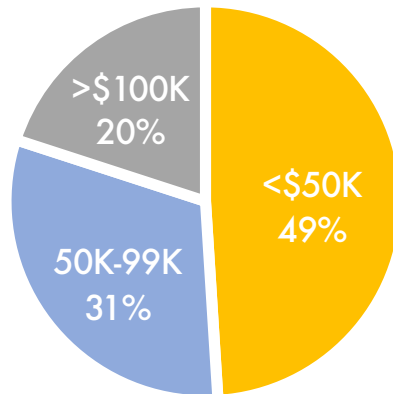
3000 \$10 Prizes

A6 – Lotto Player Profiling



A study published in the 2008 Journal of Behavioral Decision-Making found people who were convinced they were earning a low salary bought twice as many lottery tickets compared to others made to feel more affluent.

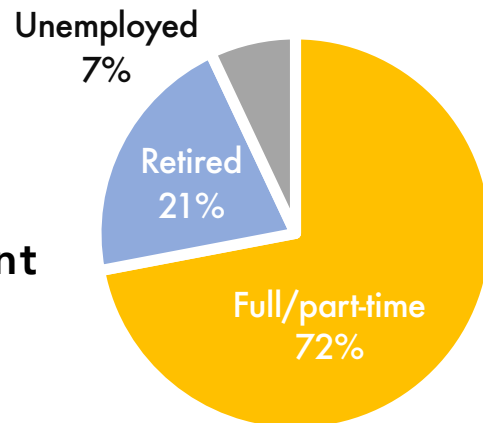
Lottery Players' Household Income Distribution [7]



"Skewness": the idea there's a big payday out there that corresponds to a tiny, possible odd.

The odds of winning Lotto Max can run as high as **one in 85 million**, so close to zero as to be indistinguishable.^[7]

Lottery Players' Employment Status [7]



FinancialEdge Community Credit Union in Bay City, Mich., has offered a prize-linked savings account program for six years, and **the average account balance has grown to about \$5,000 -- more than 10 times the median emergency savings in the United States.**^[8]

A7 – Regulatory Bodies



Canadian Legislation:

Canadian versions of PLS accounts are currently sparsely available through NGOs^[10]:



Sample List of Countries that offer PLS accounts:

Argentina, Brazil, Colombia, Germany, Indonesia, Iran, Japan, Mexico, Oman, Pakistan, Spain, South Africa, Sri Lanka, Turkey, United Arab Emirates and Venezuela

26 US states that have enacted legislation authorizing PLS accounts^[9]:

Arizona	Missouri
Arkansas	Montana
Connecticut	Nebraska
Delaware	New Jersey
Illinois	New York
Indiana	North Carolina
Kansas	Oregon
Louisiana	Rhode Island
Maine	South Carolina
Maryland	Texas
Massachusetts	Virginia
Michigan	Washington
Minnesota	

Additional legislation is currently pending in other states.

A8 – Conversion/Retention



Save-as-you-like

No minimum balance, no fees.

Requirement-based

Maintain a minimum \$25 monthly deposit or reach a monthly referral target. No fees.



PRIME

Establish healthy saving habits.
Enrich financial literacy.



CAPTURE

Introduce Wealthsimple products.
Convert savers to investors.



RETAIN

Establish WS as service-of-choice
as users get savvy.

A9 – Behavioral Economics



In the traditional study of economics, consumers are assumed to be rational actors who carefully consider available information, calculate probabilities of events, and weigh potential costs and benefits in choosing the self-determined best course of action.

PLS vs. Standard Savings Account

A 2015 study provides evidence that PLS products are more effective at inducing savings as compared to a standard interest bearing account.^[11]

Why don't people save?

It's easier not to. Inertia is strong, and putting money away requires overcoming what economists call present bias.^[12]

Nudge theory & reframing incentives

According to behavioral economists, is that we can just as easily be tricked into overcoming that psychology with “nudges” that reframe incentives.^[12]

Case Study: RiteCheck Nudge Experiment

A group of low-middle income consumers received access to a PLS account. For every dollar they saved, they got a lottery ticket for a \$50 pot doled out each month. Those people also got a verbal nudge, every time they came into a RiteCheck, about their savings account and the lottery.^[11]

“The idea is tying the lottery instinct to deposits. You harness a harmful instinct and figure out how to make it for good.”

– **Dean Karlan**, Professor of Economics, YaleU

“The process here in the U.S. is different than overseas. It's hard to get people's attention. People worry about privacy issues, there's a lack of trust in institutions.” Uganda gets 90 percent completion rates with surveys. IPA could barely sign 1,000 people up for RiteCheck savings accounts.



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