Discovering Synergies between Design and Financial Literacy

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Abstract

Money. Key to most of our everyday requirements and desires. Something which drives our basic needs. Seeming almost innate in its very existence and yet superficial in its actual value, one cannot escape its existence. Despite all its forms, representations, utilities, and volatilities, money and finance are undeniably a key aspect to our lives in the 21st century.

So, what is money? Is it a piece of paper? Or a piece of metal? Does its physicality even matter? Isn't it amusing to think that such core components of our lives almost go unnoticed, or are ideally 'delegated' to someone who knows it better? Thus, is there a gap that needs to be filled? Are we financially literate?

This paper looks to explore the different manifestations of the Canadian financial system, from the lens of the participants who might be the most vulnerable.

Using inclusive design methodologies, the idea is to identify the range of pain-points associated with finance from co-designers who have first hand experience. These co-designers were mostly young newcomers to Canada who are trying to find their way within a new ecosystem, without any formal financial education.

The paper also aims to examine the vehicles that enable financial literacy and tries to understand the gaps associated with them. The main purpose is to find ways in which visual design can further solidify or simplify these concepts for the people in need. These visual design outputs are expressed in the form of infographics with minimal supporting text, aimed towards mitigating the implications of terminologies and jargon.

The ultimate goal is towards identifying and prototyping solutions for the diverse range of needs among the participants, rather than arriving at a statistical majority. This looks to tie into the Government of Canada's National Financial Literacy Strategy 2021-2026, which aims towards enabling a financially resilient future.

Keywords: finance, money, literacy, Canada.

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Dedication

To all the 'not so sure I know enough about finance' individuals, looking for a flicker of light at the end of the tunnel! It may not get easy, but it definitely gets simpler.

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Introduction

As an immigrant in Canada, the last three years (2021 to 2024) have led me to understand the value and importance of finance in everyday life. Despite not being from a background in finance, it inevitably becomes part of one's adult life. Whether it be towards budgeting for daily expenditure, navigating money within bank accounts or filing income tax. And being a newcomer from a developing country, monetary restrictions make you want to do these yourself, rather than hire someone!

Fortunately, my keen interest in personal finance and stock market investing motivated me to self-learn solutions through various resources. However, the moment anyone begins to find a solution to a challenge they are facing is when they encounter the monstrosity of excessive contradictory information everywhere! Everyone claims to be an expert and speaks like one, but is it all believable?

Finance, unlike most other fields of information, is extra-sensitive, because it involves money, which for generations has been one of the most 'fear-inducing' assets (Rakoczy, 2023). And that automatically generates a whiff of caution in the air. Most often, there are more questions than answers.

The Canadian financial system (like most others around the world) is strung by a series of intertwined elements working in synchrony (National Bank, 2022). However, as a new entry-level user of the system, it does take some getting used to. This paper is to attempt to understand the gaps that ensue in the process of learning about finance, i.e., the gaps that emerge within vehicles that enable financial literacy.

Figure 1 (facing page)- An unsaid rule of immigration-understanding finances.

seems too complicated

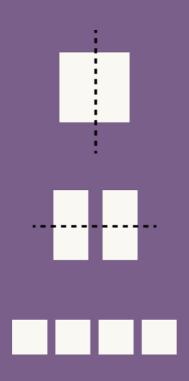
Background

Being a graphic designer, I have always sought towards finding the simplest and clearest means of communication through anything I design. I look towards establishing a clarity of thought, uniqueness of representation and notion of making the underlying message memorable.

Therefore, when I was contemplating the topic for my Major Research Project, I recalled my experiences over the last three years of trying to find effortless ways to first learn financial concepts, and then explain them to my friends and acquaintances. From what I recalled, all these individuals were well-educated, talented and capable enough to fathom basic financial concepts. And yet, there was an emergent gap between them understanding financial terminologies and implementing it on an everyday basis. This led me to the next question, when do we learn about finances? Is it actively taught within the education system, or do we organically just pick it up from lived experience? There is an inherent detachment from any new financial concept due to its complexity and heaviness. This establishes a tendency to know only what is needed (Khan, Rothwell, Cherney, & Sussman, 2016). Why must this be something that can be 'figured out when the time comes'?

This is when I sought to use the power of visual communication to address this ensuing challenge. This presents a wonderful opportunity for designers like me to discover effective methods to explain everyday occurring concepts. My journey through this inclusive design program has also taught me the importance of approaching design from a lens that goes beyond consideration of the 'average individual,' who happened to be most of the people who I was engaging with.

Figure 2 (facing page)- Is finance really complicated?



Approach

This design based MRP can be split into two parts-first being towards exploring the different meanings and emotions associated with money and finance in context of the Canadian ecosystem. This will be followed by amplifying the crucial role that inclusive design plays in tackling this challenge. Further, the methods of research and analysis will be broken down as a prelude to the design outcomes.

The second part of the research mostly represents the design decisions that emerged as outcomes of the interactions I had with the participants involved in the research. This will be in the form of infographics supported by textual explanations.

Figure 3 (facing page)-Breaking down into simpler, smaller chunks. I hope to eventually make this project a part of the Government of Canada's ongoing efforts as part of the National Financial Literacy Strategy 2021-2026. Or simply, these can exist as recommendations to any organization working towards financial literacy.

You get on a subway ride and you need to pay for a ticket.

You run a business and need to claim insurance for some damage. Its the first day of the month & your rent is due.

The company you work for has decided to pay you a bonus for your good performance over the year. It is the end of April and you must file your income tax.

You want invest in the stock market.

You really love a restaurant and order food from them over the phone.

You save up to buy gifts for your sibling.

You have run out of groceries and must make a run to the supermarket.

You are getting a scholarship from your university for good academic

You borrow money.

performance.

You get a 15% discount for shopping above a specific amount at a store.

You are moving places & rent a van to accommodate your valuables.

You design a logo for a close friend in exchange for a small fee.

A new TV show with your favorite actor is streaming on an online platform you do not have subscription to.

Background

In Everyday Life

Picture the following scenarios-

Many of us might find ourselves encountering at least one of the scenarios mentioned on the page alongside. Some may be able to relate to multiple such occurrences in their lives. Whatever field we might associate ourselves with, be it design, medicine, marketing, supply chain, education and so on, there is one common element that binds us all together. May be a very indirect connection but we interact with it in some form or the other- and that connection is money!

Finance is inherently part of our lives in multiple ways, through various manifestations. It is the binding element that acts as the central means of transaction, a medium without which modern economics might not function (Oner & Asmundson, n.d.). Hence it becomes important to question whether we are ever formally taught about such a recurring phenomenon? Or do we just learn it as we go? Is one way better than the other or are we really falling behind and ignoring some user's needs?

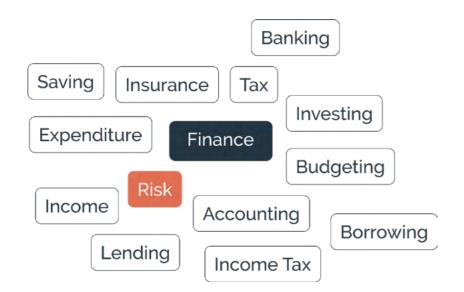


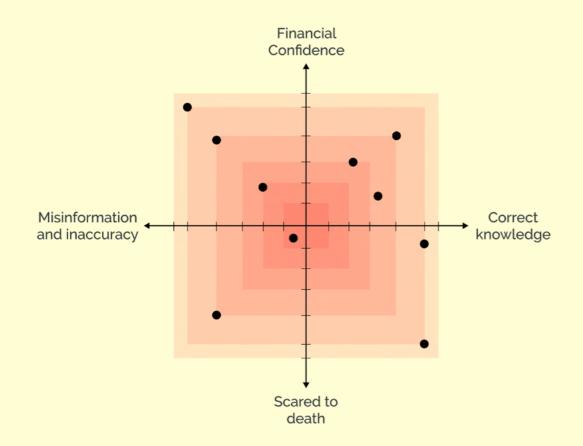
Figure 4 (facing page)-Finance is accompanied by a notion of risk.

The Fear of Finance

Money and finance in general are fear inducing phenomenon (Betteridge-Moes, 2023). Because everything materialistic in this world is tied back to money. Most commodities and services, barring the air we breathe, are subject to a financial implication of some form or the other. Hence, there is an inherent fear with any new concepts associated with finance (Han, 2017).

Historically, the world of finance is such a vast ocean that it has been filled with sub-categories and within them one can find heaps of jargon and terminology. Such is its functioning that anyone who gets uncomfortable with 'technical language' has a tough time digesting or even remotely understanding the implications of certain financial concepts.

The counter argument to this is why not directly deal with an expert? Why must one take matters into their own hands? Statements like 'if you are unwell, you might as well go to a doctor rather than try self-treatment and inflict more harm' are often cited. This might be true to an extent. But one must consider circumstance and context. Yes, fiscal management often requires one to seek expert help, but it is such a recurring phenomenon that it cannot be ignored.

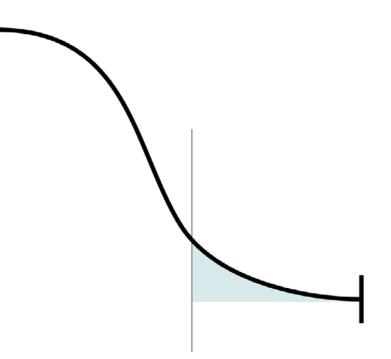


The Fear of Finance, continued.....

The risk of completely relying on someone else managing your money is far greater. More than anything, it might be more prudent to understand the lifecycle of your own money (Consumer Financial Protection Bureau, n.d.). It helps establish expectations, enables effective decision making, set goals and helps drive lifestyle.

Living in the age of misinformation, it is extremely easy to get sucked into the notion of finance as a fear inducing concept (Betteridge-Moes, 2023). Call it the 'marketing strategy' of financial institutions or the nature of the concept, it automatically creates an air of caution (Rosser, n.d.). Thereby, the people at the bottom end are always left helpless and misinformed. Hiring a financial expert may not be affordable for most individuals. And is it not the responsibility of the local governments to ensure clarity of the financial system? Is that not a basic right of every individual?

Figure 5 (facing page)-The quadrant of financial decision making. In Figure X, there is an attempt to highlight that financial literacy is a combination of multiple factors, both external and internal. These factors in turn, govern one's approach towards finance in general.



From the Inclusive Lens

Inclusive design is a method that considers the full range of human diversity, accounting for other forms of human difference by considering the 'edge case' (Inclusive Design Research Centre, n.d.). It is about ensuring that everyone within the system has the basic understanding and functional capability, without leaving anyone behind. Inclusive design also advocates for flexibility and compatibility of systems with the changing times and needs (Inclusive Design Research Centre, n.d.).

The Canadian financial system has existed in its present forms for several years, and yet has its differences from other parts of the world. Hence, acclimatizing to this new financial system may be highly stressful and cumbersome for someone new. Moreover, for someone who comes into the country, the time they are expected to familiarize themselves with the system's workings is short. These individuals most often rely on basic Internet research or clarifications from other individuals to address their doubts and concerns.

From the Inclusive Lens (continued)...

There are many resources out there, but one often gets overwhelmed because of this. Thus, having limited knowledge and a sense of familiarity seems suitable for most, which might prove to be a dangerous situation to be in for the long run. Added to that, present financial systems transfer the responsibility of understanding into the hands of users.

In this fast-moving age, the financial system constantly updates itself with modern technology and policies according to the changing times, making it prudent for one to be aware of their financial data.

Thereby, applying an inclusive lens to the concept of financial literacy puts the responsibility of communication in the hands of the designer. Financial literacy is no longer a 'good to have' but has become a basic need in this present time.

ge 1 aae Therefore, the underlying intention is to inform the nonexpert, rather than instruct. It is about creating a sense of empowerment which enables one to understand and navigate the financial system.

Figure 6- (facing page and above)- Moving away from the average.

Limitations

This research is design-based and tries to analyze the pain points described by participants interacted with for this study. Attempts have been made towards including a diverse set of individuals who are newcomers to Canada, facing financial literacy barriers, to help gather rich data. However, this research by no means claims to cover all grounds. There may be certain groups of people even beyond with additional valuable insights.

For purposes of recruitment for this research, knowledge of the English language was considered as a parameter, which are also in play as part in the design outcomes. There may also be certain concepts which may be crucial but may have been missed. Further, I do not possess a background in finance and am learning a few concepts along with my own research. I have tried to provide accurate representations as best as possible, but there might be oversight or ignorance. I fully acknowledge these limitations and hope to expand on them if this research goes beyond the time-line of this MRP.

Figure 7 (facing page)-A pause, that can potentially go on.

"What is even the motivation to teach finance? Is it to make money off someone's immediate need, or is it to enable knowledge creation about a recurring factor in everyday life?" -P10

Who is this really for?

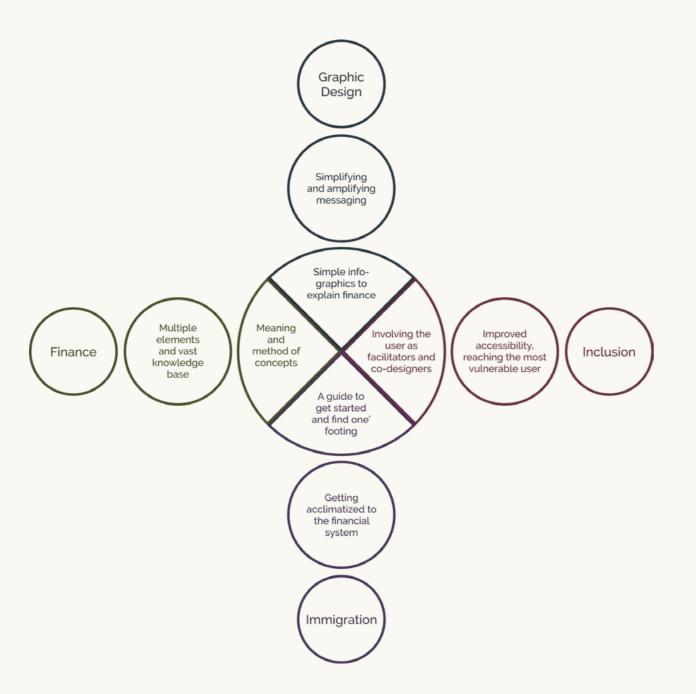
This study is intended for those who are on the journey towards trying to understand their money a little better. It is for those who are new into the Canadian system, trying to navigate their way one step at a time. It is for those who have been challenged by the growing difficulties that this inflated economy brings.

It is for those who are fresh into the professional world, out of school and trying to stand on their own feet. Because of the very nature of money and its relationship in adult life and that most of us might have found ourselves in at least one of these scenarios- this study is for all of us!

Also present further in the research are some of the direct quotes by participants, as illustrated above. The intention was to provide a direct insight into the views expressed by them and add an element of authenticity while maintaining anonymity. The participant names have been labelled as P(short for participant) along with a number, example P10 signifies Participant 10.



Figure 8 (facing page)-Who is but the form following the function of what.



"Is there a resource you can resort to immediately, if all your memory was wiped out and you are starting afresh within Canada? I think not.

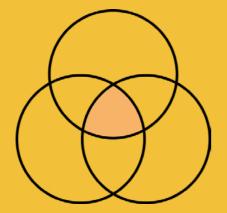
That is the situation most students face as soon as they set foot in the country. Everything starts from step one."- P5

Goal of the research

To trace the pain-points associated with finances in general among people, learn from their experience and put forth simplistic visual design solutions that may address these gaps.

The overarching idea is to plant the seed in the minds of users about financial literacy, so that they are empowered with the knowledge and credible resources as and when they need them. This is intended to be brought about by using methods of inclusive design to directly trace and represent the user's pain-points.

Figure 9 (facing page)-The culmination of design, immigration, inclusion & finance. As all the design decisions emerge from the challenges expressed by the users, this venture hopes to blossom into a resource that can generate a sense of trust among anyone new to the Canadian financial system.



Methods of research

Auto-ethnography

This research contains an element of auto-ethnography as certain personal observations and experiences contribute to the wider understanding of the topic. As an immigrant in Canada, I too faced and overcame certain challenges which helped contribute to the framework of participant interactions and questioning.

Informal Interviews

The main chunk of data was gathered by recruiting participants for interviews. These interviews were semi-formal in nature, where part of it had structured questions, but allowed room for further inspection into particular sub-topics where needed. This process has been expanded further in the next chapter.

Grounded Theory

There is adaptation of this approach as the study attempts to uncover meanings from the interaction with participants. Finance is a sensitive topic and can garner a range of emotional responses among people. Also, participants come from various geographical backgrounds, age groups, genders and professions, thereby bringing their own prior experience into their responses. Therefore, it was essential to ground the data based on the participants' own interpretations and their explanations.

Figure 10 (facing page)- The integration of research methods.

The Data Collection Process



Preliminary Research

The initial intention for the research was guided by personal experience and struggle with adjusting to the new financial system in Canada. Additionally, several news articles and surveys online point towards the average Canadian not being financially literate (Canadian Imperial Bank of Commerce, 2023). There have also been past considerations on whether financial literacy drives economic wellness. Moreover, the rising interest rate cycle in the last few years has forced people to find new avenues to keep up with the growing costs (Woods, 2023).

Being an immigrant, there is little to no time that one can take to get adjusted to the system. The number of non-permanent residents (people residing in Canada for education or temporary work i.e., on student or work visas) stood at a whopping 2,511,437. Each year the Canadian government welcomes around 496,000 new immigrants from other countries (Statistics Canada, 2023). This means there are close to 3 million people (give or take) acclimatizing themselves to this economic system at any given point. And for such individuals, it often becomes a situation of chasing the ball, rather than being ahead of it. I happened to see the struggle continue among other colleagues of mine who came into Canada after I did. As a newcomer into the country, there is an inherent lack of trust in unknown sources, hence depleting the value of the resources on the internet among some peers.

Figure 11 (facing page)- Bringing clarity to the process.

Participant Considerations

As mentioned, the attempt was to reach out to international post-secondary students who have come into Canada in the last few years.

However, it was also important to take a more holistic view of other groups of people as well. Hence, to achieve this, invites were also sent out to Canadian locals, who have been part of this system since birth. This might help understand the challenges from within the system as well.

The only primary consideration in recruitment was the understanding of written and spoken English. This in turn also influences the design outputs.

Hence, the most vulnerable or edgecase consideration was an international immigrant student who had little to no experience in navigating the financial system. Such individuals are often navigating through various stages of their life, gradually moving from a state of dependency to being self-reliant.



13 participants

A diverse combination of immigrants, Canadian locals, students, professionals were interviewed.

22-48 years old

Overall age range recorded among participants.

5 countries

Participants had experience from financial systems in Pakistan, Finland, USA, India and Canada.

30-50 minutes

Open-ended questions led to discussions of varied length regarding the subject.

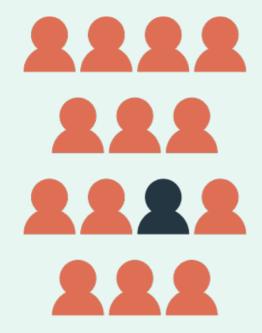
Figure 12 (facing page)- Decoding the participant backgrounds

Participant Backgrounds

The participants interviewed were from a range of backgrounds to account for the various strata of users. An attempt has been made to keep the set as diverse as possible,

The participants were a combination of immigrants and locals, some students at the post-secondary level, some professionals with varied experience from their home country as well as in Canada, some locals who have lived their entire life within Canada.

A total of 13 people were interviewed. Background wise, participants consisted of professionals from areas like game design, architecture, product design, education, biomedical studies, entrepreneurs, hospitality, accounting and finance and information technology. Geographical range consisted of Canada, United States, Finland, India and Pakistan. The age range of participants was between 22 to 48 years old. There was a mix of genders among respondents. Each conversation lasted between 30-50 minutes.



Methods

Interview process

The main aim of conducting the interviews was to understand the pain-points of the participants associated with finance and how they learn it. The interviews were in the form of semi-formal interactions over an online meeting. The duration of each of these conversations ranged from 30-50 minutes. There were a set of questions which were curated and further follow-up questions were asked based on the participant's responses.

Utmost care was taken to ensure a comfortable and open environment for the participants to discuss the topic at hand. This was crucial as the topic of money may be sensitive to some pertaining to past experiences or personal background.

Figure 13 (facing page)-Thirteen participants plus one researcher. The participants were also informed of their right of refusal to answer or divulge any specific details if they do not wish to. Along with that, attention was given to not delve into any topic that the participant might find stressful.

Methods-Interview process, continued.....

The range of questions which were addressed were-

Professional and Educational background.

Financial experience.

Past interactions with monetary systems.

Understanding and outlook towards money.

Lifecycle of money and desired financial goals.

Importance of financial literacy.

I am interested in financial systems and concepts.

Learning mechanisms associated with the above.

As a result of the discussions that followed, further questions emerged which contributed to the design considerations overall-

What are the first challenges that one faces in finance?

By when do these doubts need to be addressed and in what order?

Is there a particular segment within the financial system that is potently challenging?

What measures are already in place and why are they falling short?

Does one method of learning supersede the other?

More than knowing what to do, is it not more essential to know how something works?

Can data be broken down into basic concepts? Once those are understood, it might become easier to then learn the mediums of operation beyond.

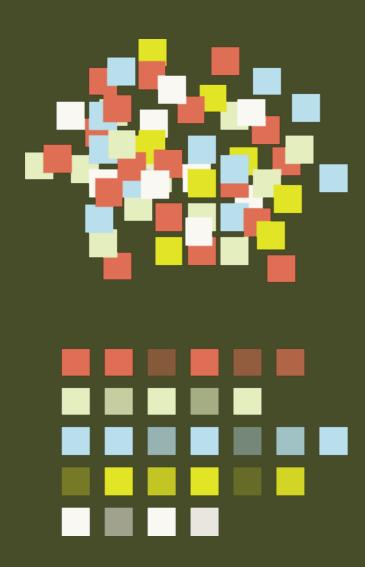
Methods-Interview process, continued.....

These conversations helped lay the foundation and helped structure the design outcomes. All the data points generated were analyzed by means of a thematic analysis.

Attempts were made to identify the range of painpoints among participants rather than look for statistical majorities.

Further, the underlying direction that emerged was to identify these themes as pillars of knowledge that one will encounter during their acclimatization to the Canadian financial system.

The four pillars that emerged were banking, taxation, budgeting & investing (in no order).



Methods, continued.....

Thematic Analysis

Post reading the data, it seemed prudent to conduct a thematic analysis to further break it down. Thematic analysis is a method for analyzing qualitative data that involves reading a data set and identifying suitable patterns to derive themes (Vaismoradi, Jones, Turunen, & Snelgrove, 2016).

It was important to not conduct this breakdown statistically as this research does not look to build on the majority case but is more geared towards identifying the full spectrum of knowledge gaps.

Figure 14 (facing page)-Simplifying data through thematic analysis. The aim is to address or identify the preferred means of gaining understanding and then using vocabulary and expression that the participants are familiar with. The goal is to delineate the spectrum of design requirements.







Infographic Design

As a visual communicator, I sought towards designing the outputs in the form of infographics, which attempt to simplify the textual overload of the concepts discussed. These visuals are a sincere attempt at uncovering the simple meaning associated with financial terminology, relying on simple textual support in the English language. Using infographics also enables a future scope of translation into other languages, furthering the impact towards more users.

Figure 15 (facing page)-Infographic design to simplify data.

Upon asking the participants their preference, the range of responses derived were as follows-

"It is encouraging to think that financial concepts can be simplified into shapes and forms with a few simple words, rather than having to rely on technical know-how."-P9

"As financial concepts are ideally 'everyday occurring concepts' it is only right that their explanation is also done in a manner which can be understood and modified in the simplest way possible." -P7

"Infographics will surely help simplify certain terms, but text is also needed as support. Because of its historic representation, I feel data represented by text must be accurate." - P3







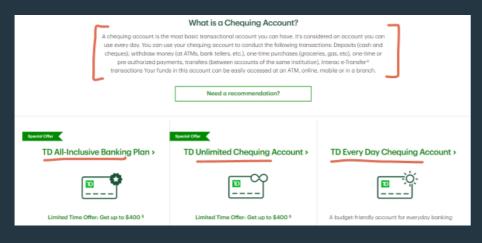


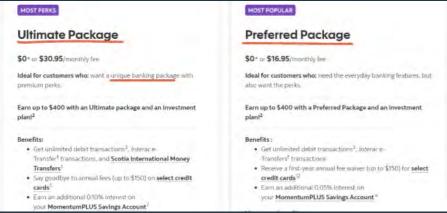
Design Outputs

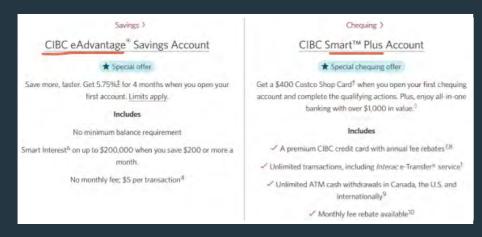
The design outputs hereon have emerged from the conversations with participants involved in the research and represent their pain-points. As part of the research, further study was conducted to find existing manifestations of the concepts of the four identified pillars of banking, taxation, budgeting and investing. This helped identify the reasoning behind the identified challenges within the four themes, which were brought forth by the participants.

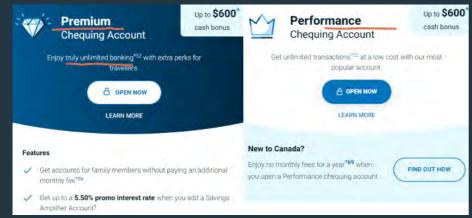
As briefly mentioned earlier, this study looks towards the edge case, of someone who has near zero or very limited knowledge about the Canadian financial system. Hence, the infographics are a representation of the journey that one might undertake during their transition into the Canadian financial system. As acknowledged earlier, there might be further steps or considerations to this approach, but efforts have been made to present authentic and accurate representations of the financial concepts.

Figure 16 (facing page)-Arriving at the four pillars or themes. After the first stage of iterations, feedback was sought from the participants, which also helped further refine the outputs, and are presented hereon-









Banking Basics

The first step that any newcomer takes upon their arrival in Canada is opening a bank account. The Canadian banking system is robust with solid fundamentals and policies that are uniform across institutions (Morningstar DBRS, 2023).

A bank is considered a haven to secure money, enabling deposits, withdrawal, transactions, and other services beyond. However, it has been noticed that banks operate on a philosophy of scarcity, rather than one of seamless clarity of information. While the services provided across banks are the same, there is a lack of simplicity in what one requires at a base level.

Figure 17 (facing page, from top to bottom)- A series of promotion filled banking web pages of TD Bank, Scotiabank, CIBC and Bank of Montreal Overall gaps- The banking system is considered very jargon-heavy and not friendly enough for a first-time user. Banking websites operate on a basis of 'limited availability of best deals' and promote a sense of scarcity, which is often considered overwhelming (as illustrated in the images alongside)

"The banks operate based on 'creating scarcity' rather than reassurance and trust. This is a big issue for a newcomer as everything presents itself as 'the last chance to strike the best deal ever!" - P11.

"Coming from a country which does not use 'chequing and savings accounts' in general, my first assumption was that having one or the other is enough"- P4.

Bank Accounts

The two basic accounts that one needs in Canada is a Savings and Chequing Account. Despite them being read as two 'separate' accounts, they come under a singular account belonging to you. The basic distinction between the two are its utility and the movement of money. Savings accounts (as the name goes) are utilized to save cash and earn interest over time (Toronto Dominion Bank, n.d.). A chequing account is used to conduct daily transactions, send, and receive money and is linked to a debit card (Financial Consumer Agency of Canada, n.d.).

Representation- Every banking institution website suitably points towards textual definitions of each of these accounts. What becomes known are words like 'premium, exclusive, maximum, unlimited, preferred' and so on. There is an overwhelming amount of information regarding the product offerings of each institution, which is also considered too technical.

Emergent gaps- Barring a few institutions, there is no existence of data that points that a Chequing and Savings account are the basic parts of a single bank account. Also, there is a lack of explanation of how money moves into, out of and between these accounts. This is especially important as there are financial implications if money moves in the wrong direction in a savings account.

Design Considerations-

- 1. Distinction between Savings & Chequing Account.
- 2. Movement of money within bank accounts.

CHEQUING
ACCOUNT

For expenditure and transactions in general

SAVINGS
ACCOUNT

To keep your money safe and earn an interest over time

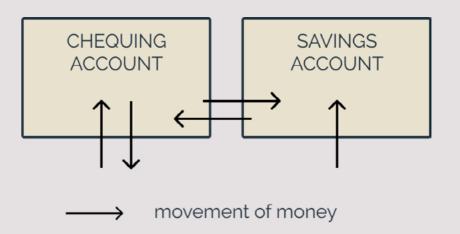


Figure 18 (facing page, top)- The basic division of a bank account into chequing and savings.

Figure 19 (facing page, bottom)- Movement of money within chequing and savings accounts.

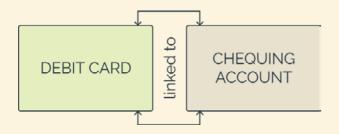


Figure 20- Debit card linked to a chequing account.

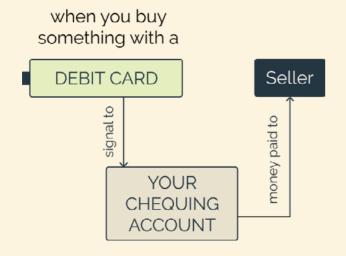


Figure 21- A debit card transaction.

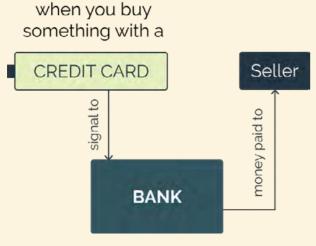


Figure 22- A credit card transaction, part 1.

Transactions

Digital payments have become extremely common in the last few years. Card payments in 2023 accounted for more than 70% of transactions among Canadians (Payments Canada, 2023). These transactions are done through Credit and Debit Cards.

A debit card is a transaction card that is linked to your Chequing account. This card can be used for payment of goods and services (Government of Canada, 2022).

A credit card is an instrument that lets you borrow money from a bank for your purchases. You are expected to repay the bank at the end of every cycle, which is usually a period of 30 days (Canadian Imperial Bank of Commerce, n.d.).

Representation- As these cards make up for most of the value proposition that banks hold, every website is filled with 'introductory' or 'promotional offers' luring customers to avail themselves of credit and debit cards at the respective institution. Terminologies are utilized freely with the assumption of the user knowing about it beforehand.

Emergent Gaps- The biggest gap among all the platforms is the actual lack of explanation of processes at a grass-root level. While every website publishes definitions of debit and credit cards lashing out terms like 'overdraft' and 'credit limits' with suitable textual explanations, there is barely any semblance of how these are functioning. What happens when one pays by a credit card or debit card? How are they different from each other? How does a credit card payment affect credit limit and credit scores? While some of these will surely be understood with time, some participants were still unaware of the basic working of their transaction cards and their implications.

Design Considerations-

- 1. Debit card connected directly to a chequing account.
- 2. How does a debit card transaction work?
- 3. How does a credit card transaction work?

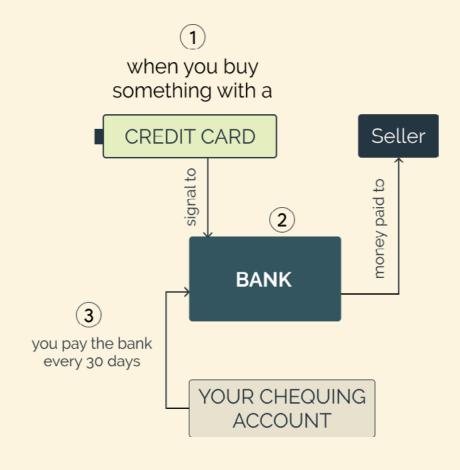


Figure 23- A credit card transaction, part 2

The System of Credit

At a base level, it is important to realize that a credit card must be used prudently. It is an instrument which allows you to borrow money 'tax-free' from the bank for a period of a month (Hoffman & Thomas, 2024). At the end of the month, the bank issues a bill consisting of the payments that the bank made on your behalf, which you are now expected to repay the bank.

How this helps over time is that it establishes your 'credibility' in repaying the money you owe- which translates to a 'Credit Score' (explained further on the next page). However, one cannot borrow an unlimited amount of money. There is a limited amount which can be borrowed as credit, which translates into what is known as a 'credit limit'. The only important thing to remember is that one should not borrow excess or make delayed repayments to the bank. This will result in monetary penalties.

The illustrations alongside highlight the transaction from a credit card in 3 simple steps. Below, there is also an attempt to explain the concept of a credit limit.

Design considerations-

1. Credit card and the cycle of money.

"Why don't the banks explain debit and credit systems as if they were talking to a 5-year-old? Might just make it simple enough to understand it, rather than relying on heavy jargon"- C8.

A credit score is impacted by

Payment Used vs Credit Public Inquiries available History History Records over time Inquiries that do not impact (~35%) (~30%) (~15%) (~10%) (~10%) the score, for example, you set up a new phone line Any loans or How much credit How long your The number of investments do you actually credit accounts times one's use over a period of time, i.e. do you frequency of have existed bankruptcy or credit file has Hard hit and how many other collection been accessed Repeated checks by number of accounts. ever exceed th limits etc. accounts do you have. issues that a bank has had. institutions to gauge financial distress

Figure 24- Factors that impact credit scores.



The System of Credit, continued....

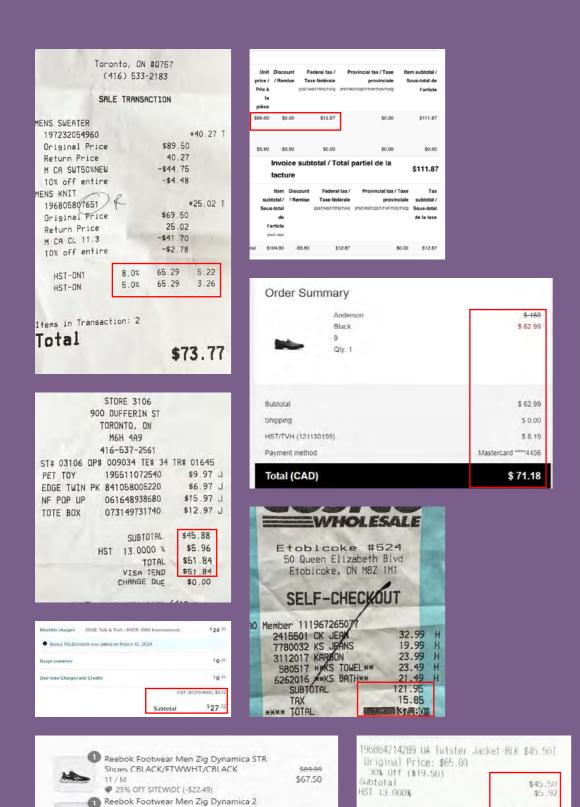
A credit score is one of the most important factors that impact one's financial standing. But what is a credit score? Simply put, it is a three-digit number that shows how well one manages money. This is important to show someone your ability to pay back the money you owe (Government of Canada, 2023). It determines one's capability to secure a mortgage, buy a car, rent an apartment and so on.

Representation- Credit limits are often considered as indefinite loans and a key to unlocking spending potential. Many banks and credit card companies attach rewards and cashbacks based on the number of transactions that often lures one towards incessant spending, leaving them in huge debt. The importance of credit limits or disciplined timely payments is often overlooked. Banks often only advertise products which promote their agenda rather than the absolute necessity of the consumer.

Emergent gaps- Credit as an instrument is extremely useful towards financial freedom. Enough resources are available to enlighten one on the variety of credit cards available, but important elements like how a credit score is calculated is often overlooked (like payment history, public records, inquiries etc) (Equifax Canada, n.d.). Moreover, participants expressed a need to understand concepts like credit limit in the simplest way possible, rather than rely on the jargon of banking websites.

Design considerations-

- 1. A simple illustration of the factors that affect credit scores.
- 2. Credit limit (in the form of a simple speedometer. .



Total

\$67.50

\$135.00

Free

\$17.56

\$152.56

\$51.42

Shoes CBLACK/CBLACK/RBKG03

● 25% OFF SITEWIDE (-\$22.49)

Subtotal

Shipping

Total

Talking Taxation

One of the most recurring elements that one encounters through the Canadian financial system is taxation. Taxation nearly accounts for 40% of average income in Canada today! If we equate that with number of days, one works 5 months towards paying the Government before they can start earning for themselves (Fuss & Munro, 2024).

As an immigrant, taxation as an integral part of payment is a new concept that one must get used to. This applies to spending and earning as well. Hence it becomes important to understand the implications behind each of these elements.

Moreover, the tax rates are not similar across provinces. For instance, the sales tax rate (in the form of Goods & Service Tax or GST and Harmonized Service Tax or HST) in Ontario is 13%, British Columbia is 12%, Manitoba is 12%, New Brunswick is 15%, Yukon is 5% and so on (Retail Council of Canada, 2024).

Figure 26 (facing page)-The tax we pay to transact.

"I almost feel like telling any newcomer in Ontario to tattoo the words '13% tax' on their forearm so they do not get a rude shock each time they purchase something from a store." -P8

"A simplified explanation of taxes is no longer a 'good-to-know" but a want. Because no one can escape taxation in this country." -P2



ACTUAL PRICE

Figure 27- Price of Purchase.

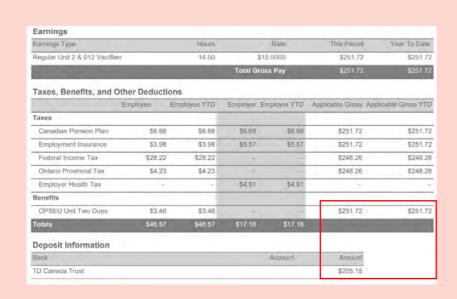


Figure 28- A Payslip.



Figure 29- Actual Earnings

Talking Taxation, continued...

Representation- One major factor that goes unnoticed initially by spenders is the added tax along with every expenditure. In Ontario, the prevailing tax rate is 13%, which appears in the form of HST or Harmonized Sales Tax (Government of Ontario, 2023). Simply put, every transaction incurs a cost of 13% higher than the quoted price of the product. This applies to earnings as well, in the opposite direction. The quoted earning is not the amount one gets paid. This is because earnings are also taxed, which appear in the form of 'statutory deductions' in pay slips (Farrugia, 2023).

Emergent Gaps-Tax systems are vastly different across geographies; hence it almost becomes a hindrance to re-acclaim oneself to a completely new set of tax rules. Most retail outlets display prices without tax implications, hence leaving the buyer off-guard if they are unaware. The same implication applies to earning as well. Because companies usually state salaries by hour/on an annual basis minus the effective taxation. As a newcomer, it is important to know this as it can impede overall affordability. Taking a step back, there is also a lack of understanding of what taxes are and why are they even collected in the first place? For most, it is just considered as an existing entity that is a part of the monetary cycle in any country.

51

"It is important to know what you earn. More than that, it is important to know how much gets cut off. This applies even to spending. If I must pay 13% more than the quoted price, it might just make me not want to buy something at all." -P9

Talking Taxation, continued...

Beyond earning and spending, another area where taxes come into picture is the end-of-year income tax declaration. The Canadian income tax declaration happens based on forms labelled as T4, T2202 etc.

"Why can't anyone simply tell me what forms are needed on a basic level while filing income tax?" -P2

The good part is that once anyone registers with the Canada Revenue Agency (CRA) which is the central tax authority, their forms are automatically linked to their profiles. The CRA is responsible for administering tax laws in most of Canada's provinces and territories (Canada Revenue Agency, 2024).

However, unfortunately one cannot register with the CRA in the first year of self-declaration of taxes (Agency, 2023). Thus, one must be responsible for compiling and adding these forms to their tax return, which might end up being overwhelming for a first timer.

Forms for declaring income

T4

T4A

Forms for tuition payment declaration

T2202

There are more specifics/forms that come into play depending on personal situation.

Figure 30- Forms in Income Tax.

[&]quot;A basic overview of the taxes you end up paying will make you understand the disparity between earning and spending. The barometer is never equal." -P4

Budgeting (Earning, Spending, Saving)

After considering where to secure one's money and how to spend & earn, it comes down to fiscal management. An element of life which is like an everyday tussle with oneself. An internal battle each one has at different intensities through the year. Everyone has their own process and method. Some prefer first saving and then spending, some spending first and then saving the leftover, some allocating set portions to each and so on (University of Pennsylvania, n.d.).

"I know how to make budgeting sheets on Excel and other softwares, but what irks me is that something which I do not know about suddenly springs up and takes me off balance. It might feel like a smaller impact if I was proactive and prepared for it in the first place." - P11

It is something which gets developed with practice and habit, with no absolute right or wrong way. This is because each one has a unique way of living, different lifestyle, habits and preferences. The only thing that can be recommended is bettering one's own ability to manage their 'life-cycle' of money. This can be only achieved if one knows what the elements are within this life-cycle.

Mandatory spending

Voluntary spending

Voluntary Fund / Emergency Fund /

Figure 31- The cycle of money.

Factors that affect budgeting

Lifestyle
Career
Stage of life
Location
Age
Financial goals
Location
Policy
Mindset
and so on..

Figure 32- Factors affecting Budgeting.

"Saving money is the biggest challenge in Canada as a student. Excel templates do not really help because each person's lifestyle is vastly different and involves different spending patterns." -P6

Budgeting, continued...

Representation- "The goal to a secure financial future is saving 30% of your income", "Ensure that your expenses are always under control", "Here are 5 tips to help you monitor your spending", "Best hacks to beat inflation", "You may be spending more than you know", "The all-new tool to budget better". The nature of these statements is the kind most of us would have come across in some form or the other. The internet is littered with 'so-called best practices' to manage money. This goes right from Microsoft Excel templates to detailed budgeting apps, which at times are even linked to one's bank account or debit/ cards. Subsequently, such 'mantras' for budgeting are portrayed with a sense of 'artificial urgency,' making one feel that they might be completely wrong in what they are doing presently.

Emergent gaps- Besides knowing best practices or how to budget money, it is crucial to realize the elements within budgeting. It goes in a cycle of earning-spending-saving (maybe investing) in no specific order. Within each of these, what most websites and articles do not highlight is the pretext that there are subsections.

For example- within spending, there can be a statutory recommendation to save 30% of one's earnings. But what gets missed out is there is an element of mandatory expenditure that needs to be accounted for. Scenarios like monthly rent, phone and Wi-Fi bills, electricity bills and so on may come under mandatory spending. This creates a situation where one must choose their outlook of allocation. Does one subtract these from earning, or simply consider it as a recurring expenditure? It is certainly a factor of consideration that affects mindset and planning overall.

Earning

Avenues through which you can earn money for survival.

scholarship / bursary

Job income

Tax rebates and benefits

Saving / Emergency Fund

Money that is accessible immediately for use. It is usually necessary to save to account for any unforeseen expenditure or purchase over time.

Savings accounts in banks

Alternative savings account

Retirement accounts

Bonds or certificates

Figure 33- The Elements within earning, saving, mandatory & voluntary spending and investing.

Mandatory spending

Expenditure that is part of your life, which you cannot escape. One view might be to look at it as a subtraction from income rather than an expenditure itself.

Living premises rent and insurance

Utility / Phone / WIFI Bills

Travel, clothing and utilities

Food / Groceries

Paying down debt

Voluntary spending

Discretionary spending, expenditure which is not absolutely necessary or can be put off for some time.

Dining out / ordering food

Buying expensive collectibles

Entertainment, appliance upgrades

Any non-essential discretionary spending

Investing

Method of growing money over time to meet financial goals, beat inflation and secure one's financial future.

Stocks, government bonds

Guaranteed Investment Certificate

Mutual Funds

Real Estate

Budgeting, continued...

The illustration alongside (Figure 33), brings to light the basic elements that might come under each stage of the life-cycle of one's money. The intention is not to prescribe channels or methods, but to merely make one aware about the potential factors or avenues that one might come across.

The idea is to be proactive, rather than react impulsively. It is about developing a positive mindset about fiscal management, looking at it from a point of abundance rather than scarcity or fear.

"This is sensitive for some. My point of view on money in general is that it should be viewed with a mindset of abundance, rather than scarcity. We can take the analogy of the earth's natural resources. It is abundant if used responsibly. Same goes with money. There is no need to live in constant fear of scarcity." -P10

"It is weird why investing seems so 'not for me,' if you think about it, all the money that is present is in society. Yet, it feels that capital markets work on the principle of scarcity." -P10

"Investing culture in today's world seems very 'forced.' Who will not be happy to have an opportunity to grow their money? Yet, all the communication is centered around 'doubling your money' and 'offering lowest fees.' Barely any company speaks about the rewards of investing for the client in the long term." -P3

> "I will not invest until I have a secure job because I feel that when you put money in, there is a very high chance it will go to zero before I can even think of withdrawing it." - P1

"There are so many layers of information, that it feels too complicated. Having said that, I have no clue what happens within the world of investing anyway. I am okay to save my money in my bank account." -P10

Investing

The most fear-inducing phenomenon among participants was that of investing! Mostly due to the perceived lack of access and technical nature of the concept, participants tended to stay away from investment altogether. What is investing? And why are we discussing it as a pillar of knowledge that one must imbibe?

Investing simply means putting your money to work so it can grow over time. It is not a get-rich-quick scheme and it is not gambling. For many Canadians, investing is an important and necessary part of retirement planning (Canadian Securities Administrators, n.d.).

So why is it important to invest? The prevailing rate of inflation in Canada is a whopping 2.8% (which has come down from about 4-4.5% last year (in 2022-23). Simply put, the average prices of everything around us go up by 2.8% each year (Statistics Canada, 2024). Subsequently, average savings account rates in a Canadian bank are no more than 1.5% (that too for a specific promotional period of 3-6 months). Hence it is almost impossible to keep up with the growing rate of inflation in the present economy. Even if one ends up saving most of their money, the likelihood of sustenance with growing costs is almost impossible.

"It is interesting that you give this inflation number. I have not really thought about it. Now that I do know, it scares me because all my money is rotting in my savings account with practically a zero rate of interest." -P12

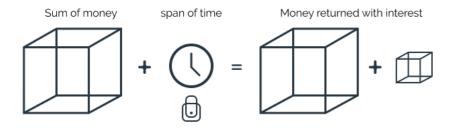
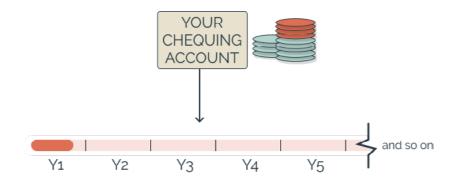


Figure 34- A Guaranteed Investment Certificate.



TAX FREE SAVINGS ACCOUNT

Room of \$7000 each year which keeps adding up

Figure 35- Explaining a Tax Free Savings Account.

"I came to Canada 2 years ago, no one told me about a GIC (Guaranteed Investment Certificate) or TFSA (Tax Free Savings Account). It already feels like I am late. Come to think of it, such basic concepts must be taught sooner rather than later. It feels better to know something and choose to do nothing, rather than not knowing and regretting it later." -P12

Investing, continued...

Representation- In the age of 'social media education,' investing is often promoted as the get-rich quick schemes (Keen, 2022). This lures an amateur investor into a notion of greed and impatience, oftentimes leading them to lose most of their money and all their confidence. Beyond this, investing is flooded with technical terminology which has been in operation for centuries (Canadian Investment Regulatory Organization, n.d.), which makes it seem inaccessible and complicated for individuals.

It almost serves as a barrier to entry for someone without formal education. There is also a prevailing notion or conventional wisdom that investing requires large capital (sum of money). Which is contrary to reality. Also, popular media portrays a large element of risk, which keeps the average individual away, purely from the fear of losing hard-earned money.

Design consideration-

- 1. A Guaranteed Investment Certificate issued by a bank, as a method of investing with a fixed rate of return
- 2. Basic working of a Tax Free Savings Account.



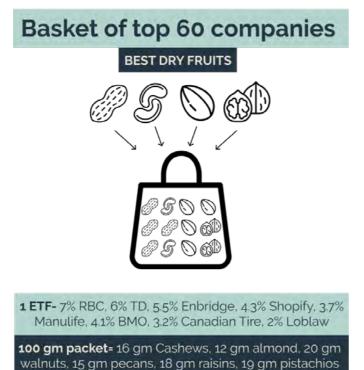
Canadian stock market

Average annual return of 6.5% each year

Figure 36- A historical chart of the TSX 60.

Toronto Stock Exchange

DRY FRUIT MARKET



Investing, continued...

Emergent gaps- From the interactions with the participants, one thing is clear- there is a vast gap between communication about investment in general and its ensuing purpose. This notion prevails because a newcomer must plan and survive short-term and in the bargain, the long-term outlook is overlooked until essential. The language surrounding investing is hazy, often comparing it to 'gambling' or 'betting,' making a risk-averse individual not even consider potential options. Instruments like Guaranteed Investment Certificates (GIC) or Exchange Traded Funds (ETF) are explained in short form, deterring one from 'understanding technicalities' behind it.

The goal here is to address this communication gap and present simplistic representations of investing as an instrument to help monetary sustenance (Holzhauer, 2023). Because investing does not have to be all about risk and dependency on capital markets.

Design considerations-

- 1. What is a stock market index?
- 2. Exchange Traded Fund and how it works.

"This comparison is very simple and now makes me want to go back to my bank and ask them about my ETF's because I know I do have some, but did not ever understand the concept of what went into it." - P13

Figure 37- Explaining an Exchange Traded Fund.

Exposure diversified

Limited Fees

Risk is extremely low

Best of breed



"As a newcomer, I do not even know whom to trust with my doubts. Sometimes I feel my questions are the most basic and silly, it does not seem worthwhile to call my bank, get on hold for 20 minutes, wait for the most generic response and be back to square one. Information on the internet is very contradictory and text heavy." -P6

The National Financial Literacy Strategy

Having gone through a few different channels and manifestations of finance within the Canadian ecosystem, by this stage one realizes that this system is vast. Each one has their own process and struggle of making sense of it and eventually getting accustomed to its quirks, benefits, and fallacies.

This process occurs even if one is born into the system or immigrates into it at a later stage of life. Yet, between both these scenarios and beyond, what stands out is the human mind and its affinity to establish trust when it comes to finance (The Organization for Economic Cooperation and Development, 2019). Thus, the purpose of this research paper might be defeated if it ends up standing as 'just another source of information' in the humongous ocean of the internet. Therefore, as mentioned before, contextualizing any financial information is extremely important.

The Government of Canada is moving towards a goal of financial resilience through its National Financial Literacy Strategy (2021-2026) (Financial Consumer Agency of Canada, 2023). This is a three-stage process that begins with financial literacy. With the number of new financial instruments emerging in present times, it is extremely risky to be financially illiterate. Hence the government has placed maximum impetus towards financial literacy

Figure 38 (facing page)- The Government of Canada's financial literacy initiative.

(on being asked if they had come across the 'Financial Toolkit' or the National Financial Literacy Strategy' during their transition to Canada/research about finance)-

"No, I have never seen this." -P1, P2, P3, P4, P5 P6. P7. P8, P9, P10, P11, P12, P13.

The Financial Toolkit

For the purposes of spreading this initiative of financial literacy, the Government of Canada has produced a financial toolkit that is an extensive 12 module learning program that provides basic information and tools to help individuals manage and learn about personal finance and beyond (Financial Consumer Agency of Canada, 2023). Each of these modules covers topics like banking, income, expenditure, credit and debit systems, insurance and beyond.

Ironically though, during my interactions with participants for this research, not even one person had encountered this toolkit during any point of their transition/learning of the Canadian financial system. I took this conversation beyond to some locals and other acquaintances as well, but with no positive response from any of them.

"Sometimes, internet provided information is given under the pretext that I am a pro at digesting this and more! I may not always want to know the complete A to Z, but what will be helpful is a simple logical explanation of what is going on. That is enough to just get started to want to solve my problem." -P8

Decoding the Financial Toolkit

This lack of awareness about the existence of the toolkit was quite insightful. Being an immigrant myself, I came across the toolkit only while researching for this study. To further expand my own understanding, I went through each of the modules and noted down my observations. There are a total of 12 modules from which I have not specified the last 4, as they are not elements which one might come across immediately upon their transition to Canada. My observations were as follows-

- In module 1 (income, expense, and budget), there is room to explain how expenses can be simplified based on mandatory and voluntary expenses. This will help them structure their cycle of money.
- In module 2 (banking), there is a text-based explanation of the kinds of banking accounts and banks in general. However, there is no explanation on the possible movement of money and what basic accounts are required. This is the same observation on the top 6 bank websites as well where they are only trying to sell their products rather than convey information. Ratios of how much money should be allocated to which account is also not mentioned.
- In module 3 (saving), there are templates and examples on increasing saving and reducing spending, but resources for saving are not highlighted. There are textual explanations of the instruments of saving (some of which, like government bonds, are non-existent today).

In module 4 (credit and debit management), the types of credit have been explained, but it gets too technical. The concept of a credit and debit card is touched upon, without explaining how money flows through transactions via each medium.

In module 5 and 6 (mortgage and insurance respectively), these are straightforward and may not be something one might immediately need. Plus, the explanations on these are robust and vary from company to company.

In module 7 (investing), there is a good risk appetite calculator. But there is no introduction of how one can even invest and what are the options. Here the basic idea of a TFSA and RRSP can be expanded on. The idea of index investing or ETF investing can be explained.

In module 8 (income tax and contributions), the basics of tax are well covered. Opportunity here will be to simply explain what tax is, what are its implications when one earns and when one spends. Distinct types of taxes can also be simplified.

Decoding the Financial Toolkit, continued...

Some general observations are-

- The financial toolkit is extensive. It provides several insights and interactive tools to help make sense of one's finances through numbers and calculations.
- There are easy and automated calculators to enable one to understand their allocations and monetary earning, spending, and saving.
- The banking system is explained in terms of access to accounts. What gets lost in the explanation is the actual movement of money within accounts.
- There is a particularly good account comparison tool as well as an interest calculator. However, there is a lack of explanation of what 'interest' might mean and how it is calculated over time.
- The taxation toolkit only shows how taxes are calculated but does not provide insight into when an individual encounters these taxes.
- There are simple tips and tricks provided to understand savings (rule of 72, envelope system etc.). Despite that, there is a lack of clarity on what might be the elements within this lifecycle of money in the process of earning-spending-saving-investing.
- A few modules begin with quizzes or personal spending/saving/risk estimations. This is great if someone has spent time in a particular location within the country (as prices and taxations vary). However, for someone who is new/or has not even entered the country, it makes little sense to make these estimations at the outset. And the priority for an immigrant is settling in and getting used to a new way of life.

- The modules go into detail about the respective topic in terms of providing information but contain limited actionable information.
- There are substantial amounts of textual information containing technical terminology which might not be conducive to some individuals.
- Not every module might be useful to a 'newcomer' or a person who is just getting started on their personal financial journey. For examplemortgages or pensions.
- There is a lack of general awareness of the existence of this module altogether. One might have otherwise thought of this being a go-to instrument for local Canadians and immigrants alike. Unfortunately, through the small sample study, that is not the case.
- There might need to be more thought given into how to make this absorbable for someone who just needs a head start, keeping in mind that every individual has their own way of learning or grasping information.
- More than anything, the modules take a good 6-7 hours and might require multiple sittings as the content is extensive. It is textually heavy, requiring high levels of concentration and ability to grasp information in a particular medium.
- Last but not the least, the toolkit is available only on the Government of Canada website (which might be a suitable location considering the trust factor). However its accessibility in multiple mediums might be essential to reach a wider audience, who might just happen to be the people who truly need this service.

Your Financial Toolkit From: Financial Consumer Agency of Canada A comprehensive learning program that provides basic information and tools to help adults manage their personal finances and gain the confidence they need to make better financial decisions. Learn more about the program and how to use the learning modules. Module 1: Income, expenses and budget Module 2: Banking Module 3: Saving Tips and tools to help you save money. Managing your incoming and outgoing Basic banking, bank account packages and finances, tracking your expenses, making a alternative financial arrangements. budget and setting goals. Module 4: Credit and debt management Module 5: Mortgages Module 6: Insurance Types of credit, managing debt, credit The costs of buying a home, types of Types of insurance, how they work and how reports and credit scores. mortgages and tips for negotiating your to get the coverage you need. Module 8: Income taxes and Module 9: Income taxes and Module 7: Investing contributions Quebec The basics of investing, types of investments, Tax basics, taxable income, deductions. Tax basics, taxable income, deductions, investment advisors and setting investment credits and filing your taxes. credits and filing taxes for Quebec residents. Module 10: Retirement and pensions Module 11: Financial planning Module 12: Fraud protection Public and private pensions, personal Creating a financial plan, estate planning Recognizing and protecting yourself from savings and estimating your retirement and how financial professionals can help fraud, including what to do if you are a

Figure 39- The overlap between this research and the financial toolkit.

Where does this research fit in?

This research's core intention is to act as an intermediary between the government's financial toolkit and the barrage of information available online. The intention to link it to a central source of information is to exemplify the aspect of trust. Reason being, as an immigrant, the first interaction that one has with the system is through the Immigration, Refugees and Citizenship Canada (IRCC) website portal.

However, local Canadians trust their individual financial institutions to divulge accurate and pertinent information. Hence a balance or a middle ground needs to be established on the source or home for this initiative. My underlying reason to ground this research on the government's initiative is that it is the responsibility of the government to control and distribute accurate and pertinent information regarding any topic. It also helps that there is already an initiative in place in the form of the 5-year National Financial Literacy Strategy.

"I wish I was taught about basic personal finance when I was younger. When it comes to such a topic, it is always better to be proactive and prepared. It should be taught in schools." -P7



Figure 40- To infinity and beyond.

Giving Back

This hope is that this research will serve as a foundation for an inclusive approach towards financial literacy. Most of this study was conducted by the guiding principles of inclusive design and I am grateful to have contributed a minute chunk of insight to this novel approach. The intention was to address and debunk the notion of 'this should be known' when it comes to financial literacy, by enabling the creation of designs that can help the most vulnerable user.

Having said that, I also acknowledge that there may have been certain steps along the way which some might prefer to accomplish in a different order. The aim was to open the doors towards the consideration of a sidelined yet prominent user group amidst the Canadian system and actively seeking solutions by involving them as facilitators and co-designers. This is not a generic representation and reflects the observations recorded among the participants and the researchers involved. In the years to come, I hope to continue this research as a professional in the field of graphic design and as a lifelong student of inclusive design.

Another reason for keeping the infographics and prototypes as simple as possible was that it can possibly cater to a younger audience. This is another potential avenue where this research can eventually flow into, deriving benefit for another set of users.

The tax rate in Ordanio is 3% The BASICS OF THE BASICS OF TAX IMPLICATIONS According to the first of the control of the co

Figure 41- Design prototypes in the form of print and digital mediums.

Conclusion & next steps

This research is a drop in the ocean of opportunities that come with financial literacy. It represents the pain-points of the few participants that were involved in the process. However, these participants did represent many people who might find some sense of connection to a similar situation or challenge. The study was intended mainly to bring forward the impetus and impact that financial literacy can have on personal growth and its absolute necessity in today's day and age. Both these goals were highlighted and enabled awareness of the topic among participants and beyond. Further, participants' views, experiences and feedback were considered central in any design decisions. It was a rich learning experience to even take back the design iterations to participants seek input for further improvement.

As a graphic designer, simplifying visual communication is part of my everyday work, and this research was another opportunity and avenue to explore effective and relevant communication methods. Finance as a topic is always contextually relevant and yet it somehow has mostly been left to 'self-learning'. However, times are changing. More importance is being given to financial education among younger people, as awareness and education is probably key to a financially secure future for generations to come.

Looking ahead, I find scope for such studies to be conducted by educational institutions, inclusive design researchers and central federal agencies. This also is an opportunity to utilize multiple mediums as an effective means of pedagogy. Direct involvement of users in the design process is the best way to disseminate knowledge and give agency to the real drivers of economies- we the people.

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