

Introduction

Pop Tarts are perhaps my favorite snack food of all time, and after a grueling morning of music classes and orchestra (I'm quite the avid cellist), ten-year-old me was entranced by the scrumptious sprinkled strawberry delights within the newly-installed cafeteria vending machines. They beckoned me, like a siren song, and I watched as classmate after classmate lined up to get one of the shiny foil packets. Finally, I tore my eyes away from this spectacle and back to my lunch, convincing myself that the \$1.50 for 2 Pop Tart deal in the vending machine was much less desirable than the \$12 for 48 deal in my local grocery store, and with an already plentiful lunch, I decided to keep my quarters for another day. Recounting this story to my parents later that day, they commended me for my smart decision to save - and got me some Pop Tarts!

Another vivid memory of mine occurred on a 2016 trip to the Yunnan Province in China. My family and I decided to trek to the summit of the nearby Cang Mountain. We plodded up the steep and at times treacherous pathway for well over five hours, rising over 3000 meters in elevation. Arriving at the peak, our celebrations were cut short as we realized that what comes up, must come down. We debated whether to use the expensive chairlift down the mountain, and ultimately, decided that walking down would be too demanding. As it turns out, riding the lift was the perfect cap to our journey, letting us soak in the gorgeous views and lush forests surrounding the mountain range with comfort and ease. In that case, savvy spending rescued the day.

One last story to share, from my middle school years: the Rainbow Loom fad. For the low price of a kit, one could knit colorful rubber bands into bracelets and necklaces. It was quite the craze during two months of 5th grade, and the best weavers would sell complicated designs and beautiful patterns for seemingly rich sums. My sister and I wanted in on the business scheme, deciding to get our own set and factory going. Unfortunately, we were totally unprepared for this cutthroat business, as my customers quickly complained about my shoddy handiwork. Most importantly, it seemed that we had arrived late to the trend - Mighty Beans were the hot new thing! Looking back at my first failed venture, I wish I had been a more informed investor.

These three distinct childhood anecdotes first sparked my interest and passion in the world of finances, exposing me to what I now coin (pun intended) "The Financial Literacy Triangle", consisting of smart saving, savvy spending, informed investing, and everything in between. I've come to realize how these skills permeate nearly every single decision we make and that achieving optimal management of personal finances is critical for navigating the world we live in. This essay will approach this idea from three prisms: firstly, the challenges that prevent my peers and I from achieving optimal management of personal finances; secondly, technology-related steps to overcome the aforementioned challenges; and thirdly, education-related steps to achieve optimal management of personal finances.

Current Challenges Preventing Optimal Management of Personal Finances

1. *The Necessity of Long-Term Planning (Saving)*

Our generation is facing two relatively new phenomena that pose enormous threats to our personal finance management. The first is the exorbitant cost of higher education, with the average tuition at a 4-year university increasing 25% within the past 10 years¹, ranging from around \$10,000 to more than \$35,000 today². Yet, for many students including myself, college is a necessary step for a good career and can dramatically improve future earning potential³. More people must take out student loans that can cause immense financial and emotional stress on people into their late 20s or even 30s. As college students and future parents, we must recognize that the price of education is expensive enough to disrupt our financial lives, and we must prepare long-term strategies to pay it off.

Another issue that necessitates long-term planning is retirement, and it's certainly an issue that all generations have faced. However, Gen Z is facing a new and unprecedented challenge: our social security system is strained to its limits, with most experts predicting that “the reserve assets will be depleted by 2035”⁴. While this doesn't mean benefits will end, it does indicate that my generation will have even smaller benefits. Starting now, my peers and I must carefully budget and save for our post-career future, requiring long-term vision for high school and college students. Without an adequate retirement plan, we face the worrying future of working for the rest of our lives to cover our most basic living expenses.

2. *Social Media and Digital Shopping (Spending)*

New technological developments such as social media and e-commerce offer enormous improvements in our standard of living, but also pose new challenges that stimulate our spending culture. As much as 72% of adult Americans report daily social media usage in a 2019 survey⁵, and additional research about Gen Z predicts that the number will only increase in future years⁶. Social media is clearly becoming the new normal, and one report found that people are four times more likely to purchase something after being influenced in some manner on social networks⁷. E-commerce further compounds the problem. Even pre-COVID, we've seen consumers shift increasingly from brick-and-mortar stores to online retailers, often huge companies like Amazon or eBay⁸. With the power of Big Data Analytics, websites are able to target

¹ Abigail Hess, “The Cost of College Increased Over Past 10 Years”, *CNBC*. December 13, 2019.

² Farran Powell and Emma Kerr, “See the Average College Tuition in 2020-2021”, *US News*. September 14, 2020.

³ Elka Torpey, “Measuring the value of education”, *Bureau of Labor Statistics*. April 2018.

⁴ AARP, “How Much Longer Will Social Security Be Around?”, *AARP*.

⁵ PEW Research Center, “Social Media Fact Sheet”, *PEW*. June 12, 2019.

⁶ Toby Cox, “How Different Generations Use Social Media”, *The Manifest*. July 2, 2019.

⁷ Kasey Lobaugh, “Navigating the New Digital Divide”, *Deloitte Consulting LLP*. 2015.

⁸ Statista Research Department, “Online Shopping Behavior in the United States”, *Statista*. August 30, 2019.

consumers with advertisements that entice their wallets better than any physical store could.

These developments strike at one fundamental corner of the Financial Literacy Triangle by encouraging unnecessary spending. Social media and e-commerce influence perceived need and desire for products at an unprecedented level, even though optimal personal finance management should cause us to question if all of these needs are actually luxurious wants.

3. *An Incomplete Financial Education (Investing)*

The last critical challenge discussed in this paper is the incomplete financial education that most students receive. As a student in the Chicago Public Schools district, the extent of our financial literacy course was a single two-week long “Consumer Education seminar”, consisting of a few online modules. It was terribly ineffective, presenting only a surface level look at many topics relating to saving and spending. Beyond simple information about budgeting and expenses, we learned little about other knowledge, such as monetary trends or investing basics.

The theme of my high school financial education course was “save and you’ll be alright”, which ignores a major trend: inflation. It leads to the misconception that putting earnings into a savings account will lead to a steady increase in the value of the assets. However, the average interest rate for a savings account is 0.05%⁹, while the long-term average rate of inflation in the US is about 3.22%¹⁰. If I deposited \$10,000 right now, with additional monthly deposits of \$100 and with monthly compounding for the next 10 years, my bank account would show \$22,079.22. That seems great - except that money is actually worth only \$15,916.22 after factoring in inflation, far less than what I put in! This highlights a critical problem with our financial education: we can’t simply be taught to save and assume the money will grow, we need to see the entire financial picture.

That picture includes the third corner of the Financial Literacy Triangle: investing. Even though it’s a critical component of personal finances, my education barely mentioned it at all, only defining stocks and bonds. At the same time, it’s never been easier to get into the stock market with new investment platforms such as Robinhood (with over 13 million users¹¹), which have no account minimums or trade commissions. But when people have no prior background knowledge or education about investing, they can be easily manipulated into dangerous positions. There’s no better example than Hertz, the rental car company that declared bankruptcy back in May 2020. Surprisingly, the Hertz share value gained nearly 900% in the days that followed, driven by inexperienced investors¹² who believed that Hertz’s declining stock price was an opportunity to buy in, rather than the natural result of the company’s restructuring. When

⁹ Lauren Perez, “What Is the Average Interest Rate for Savings Accounts?”, *SmartAsset*. November 30, 2020.

¹⁰ Tim McMahon, “Long Term U.S. Inflation”, *Inflation Data*. April 1, 2014.

¹¹ David Curry, “Robinhood Usage and Statistics”, *Business of Apps*. November 11, 2020.

¹² Kelly Anne Smith, “Robinhood & Hertz: The Troubling Saga Of A Bankrupt Stock”, *Forbes*. June 24, 2020.

the stock price finally dropped to essentially zero, many rookie investors lost thousands of dollars. An incomplete financial education can leave uninformed investors clueless and susceptible to false trends, a major challenge facing our generation.

Technology-related Steps to Achieve Optimal Management of Personal Finances

1. *Use online tools that automate personal finance management and offer insight on saving and budgeting.*

The core of financial management is meticulous bookkeeping and keeping careful track of your income, expenses, and account balances. Put simply, it is impossible to properly manage your finances when you don't know the state that they are in. Luckily, we can turn to developing technologies for support. Firstly, it's important to use tools to stay on top of bills and payments. There's no need to stress about if I paid the credit card monthly fee or the gas. There are numerous platforms and apps that will pay it automatically, eliminating one simple task off our busy workloads.

Secondly, we can use cutting-edge data analytics to provide insight about our spending habits and create better budgets. Numerous websites and apps like *Mint* or *Personal Capital* breakdown all of your monthly purchases, yielding sometimes surprising information (did I really spend that much on food?). Indeed, many programs will auto-generate suggested budgets that reflect spending habits and offer recommendations for where to cut costs. These new technologies not only address our most basic account management needs, they crunch helpful statistics as well. For my peers and I, it's as simple as creating accounts and using the mostly free services available.

2. *Consult Internet resources to improve how we spend our money.*

One of the defining traits of the Information Era is the increasing accessibility to the knowledge of other people around the world. My peers and I can draw upon the experience of others to make smarter spending decisions. For example, as the founder and host of *The Path Forward Podcast*, I was interested in acquiring a higher quality microphone. Without online forums and social media, I might be lost without knowing an expert sound engineer. Nowadays, a quick web surf reveals the advice of hundreds and thousands of professional podcasters. Youtube channels offering product reviews were unimaginable in the past, but now, they were necessary to consult for sound quality. Furthermore, new online price-matching software (e.g. Pricescout) and coupon code applications (e.g. Honey) allow consumers to find the best deals for the products and services we want. The rise of social media and networks allows us to make smarter, savvier, and more informed purchases than at any stage in history.

3. *Understand evolving technologies to uncover new earning opportunities.*

A major development in the financial world is cryptocurrency. It uses specialized blockchain technology that is able to operate without the regulations from central banks or a Federal Reserve¹³. The increasing capacities of computer security and internet distribution causes some analysts to predict that the value of crypto will continue to rise in the near future. This is an excellent example of technology resulting in new investment opportunities, and while cryptocurrency is not everyone's cup of tea, my peers and I should be wise to recognize the potential of new opportunities that emerge with new technology.

There are many earning opportunities that are not so technical but still fresh. My uncle runs a drop shipping company, where he acts as the third-party shipping products from supplier to consumer. The rise of e-commerce results in the creation of many businesses that are fully operational online without any storage facilities of their own, opening up an opportunity for people like my uncle to provide a needed service. My peers and I must familiarize ourselves with existing technological trends to understand where we can better invest and earn money.

Education-related Steps to Achieve Optimal Management of Personal Finances

1. *Demand changes to our education models to encourage and inspire more opportunities for financial literacy.*

No one should be satisfied with the level of financial education students are receiving in middle school and high school. At the same time, if my peers and I only complained about it, we would not be improving the situation. I am a firm believer that we must advocate for improvements to financial education, and while changes might not arrive in time for graduating seniors, it is an opportunity to leave an impactful legacy for future generations of students.

This year, I'm enrolled in AP Research and independent study classes, where I have free reign to explore a topic of my choosing. I'm using this opportunity to investigate how to improve music education to include modern entrepreneurship skills. I will organize my findings into a detailed set of recommendations that I can present to community music school directors I know, hopefully implementing classes where music students start their own ventures, a great way to practice and learn key personal financial skills like budgeting, long-term goal setting, and investing.

As the founder and director of the Association of Chicago Student Councils, a coalition of public high school student governments across the city, we seek to offer feedback to district-wide education leaders about curriculum. One subject in which we want to offer suggestions is (you've guessed it!): financial literacy. If we want to move society to a place where everyone knows how to manage their personal finances, we must be ready to do the heavy lifting by educating people from a young age.

¹³ Shawn Carter, "How does cryptocurrency work?", *Fox Business*. February 24, 2020.

2. *Experience the power and importance of managing finances optimally in the real world.*

One of the most accessible ways to do this is to participate with any family decisions. When I was younger, my parents would have me propose itineraries for a winter break vacation, asking me to look into where to stay, what activities to do, and plan for where we might eat. That is real-life experience with budgeting and making smart spending decisions, and quickly, I realized the importance of finding good deals and balancing various costs. Helping with the family finances is a minimum step that everyone should take to be exposed to real world examples of financial decision-making. Following how my parents save, spend, and invest is practical training for future lives on our own.

Another important educational step in the real world is making money for yourself. I'm careful not to say "get a job" - that's certainly one way to do this step. This previous summer, I had an internship with the Chicago Philharmonic, an initial exploration into the world of arts administration. Not only did I have the chance to work in the intersections of music and business, two fields I'm passionate about, the pressure of meeting deadlines and working for a paycheck taught me valuable skills of self-discipline and bookkeeping. Beyond jobs and internships, I also know peers who have started their own businesses selling clothes, jewelry, photography, and artwork. Ultimately, the act of making money, no matter which way, is a rewarding experience like no other. We can directly see how our hard work results in earnings, but also reminds us to use that income in smart ways.

Helping with family finances and making money by ourselves are perhaps the two most important steps on our quest to achieve financial literacy. We aren't hearing about it from some lecturer or podcast, reading about it on social media or the news. We are actively living in the financial world, governed by the need to save, spend, and invest with real money. This type of experience is the best teacher we can have and the most important step when learning how to optimally manage our finances. Therefore, I advocate that my peers and I should directly involve ourselves with real-world opportunities to save, spend, and invest.

Conclusion

Although achieving financial literacy is perhaps the single most important outcome of an excellent education, my peers and I face many challenges that prevent us from optimally managing our personal finances. Soaring costs of higher education and retirement-stage Social Security instability can disrupt our financial plans. The expansion of social media and ecommerce makes impulsive buying and spending easier than ever before. An incomplete financial education can leave people without the tools to tackle uncertain financial futures. However, there are also many ways to move beyond these challenges and towards proper personal finance management. Technology-related steps I would advocate for include using

data-driven tools that automate and offer insight about our financial management, consulting social media and the Internet to make informed spending decisions, and uncovering new earning and investment opportunities by understanding new technologies. Education-related steps that are necessary include demanding more rigorous financial literacy standards and gaining real-world experience with finances.

Ever since my childhood, I knew finances were in my future. I'm passionate about understanding smart saving, savvy spending, and informed investing and how it is necessary for reducing our financial stress and burdens. Skills like budgeting and goal-setting, analyzing credit card deals, and others may help us enjoy a higher quality of life with financial freedom and independence. Furthermore, I know that finances are found at the core of all important decisions, whether social, environmental, or political. In order to change the world, we have to change how money flows, and that's something that fascinates and inspires me.

Getting a quality college education is a crucial step of the way to realizing my dream of entering the financial world. I am so grateful to Farzad and Ochoa Family Law Attorneys, LLP, for sponsoring a scholarship opportunity that can support me throughout this journey. Perhaps one day, I'll finally have saved smart enough, spent savvily enough, and invested intelligently enough to afford infinite Pop Tarts, lift tickets, and rainbow loom bracelets!

Word Count: 2979