

# Industry Research

**How Might We:** Make wealth services more appealing to Gen Z?

**HMW Company:** Citi

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**Industries Researched:** Financial Industry - *Retail Banking, Investment banking, Payments , Asset & Wealth Management*

# PLAYERS: Incumbents

Who are the legacy major players in this industry?

**Investment Managers** - Fidelity (**Mutual Funds**), Blackrock (**ETF's**), Vanguard Group, D.E. Shaw (**Hedge Fund**), The Capital Group, State Street Global, Citi

**Investment Banking** - Goldman Sachs, Morgan Stanley, Barclays, UBS, Deutsche Bank, JP Morgan Chase & Co.

**Retail Banking** - Chase (**Best Bank Bonuses**), Bank of America (**Best Online Banking**), Wells Fargo, HSBC

**Payment Processors** - Visa (**Payment Network**), MasterCard (**Payment Network**), American Express (**Card Issuer & Payment Network**)

# PLAYERS: Challengers

Who are the newer entrants who are attempting to displace the incumbents?  
What characteristics do they have in common? How are they challenging?

**Investment Managers** - Charles Schwab (**first to cut equity trading commision fee to zero**), The Carlyle Group (**Private Equity**),

**Investment Banking** - Robinhood (**Mobile - allows users to invest in US stocks, ETF's, crypto commission free, effectively lowering the cost of retail trading**)

**Retail Banking** - Truist Bank (**Best Community focused**) , PNC Bank (**Best Banking Bundle**), TD Bank (**Best Customer Service**)

**Payment Processors** - PayPal, Apple Pay (**Mobile**), Google Pay(**Mobile**)

# PLAYERS: Digital Challengers

Who are the disruptors who are attempting to transform the industry?  
How are they disrupting the industry?

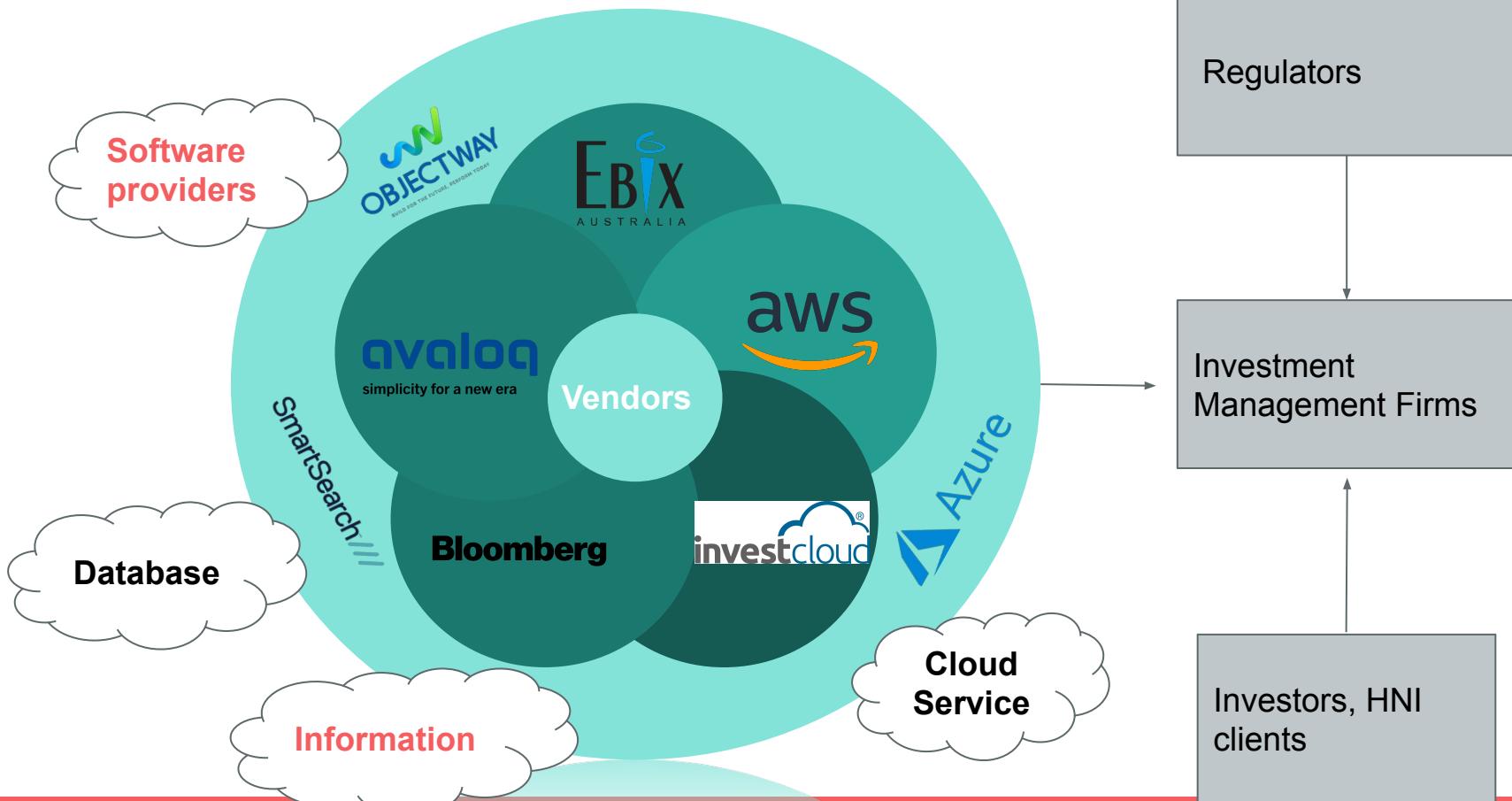
**Investment Managers** - Wealthfront(***Robo-Adviser***), Betterment(***Robo-Adviser***), Acorns, Axos

**Investment Banking** - Public.com (***commission free brokerage app***), Webull (***stock trading platform for individual investors***), E\*Trade (***acquired by Morgan Stanley to stay competitive***)

**Retail Banking** - Greenwood (***community focussed - blacks and latinos***), Daylight (***community focussed - LGBTQ***), Climate First Bank (***Environmental Sustainability***), Revolut, Chime, SoFi, Citizens Access

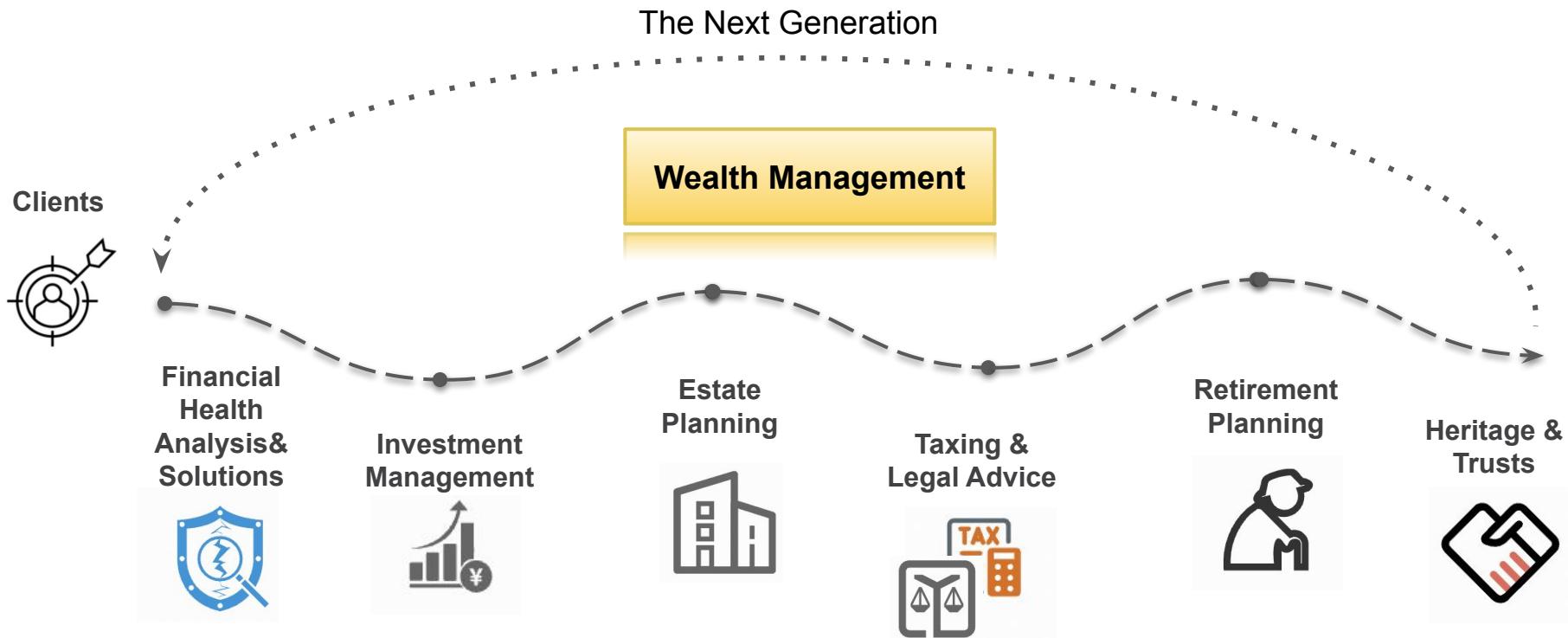
**Payment Processors** - Klarna (***BNLP***), Rapyd (***B2B***), Wise (***best rates for cross border wires***), Venmo (***Friends and Family***), Trustly (***Open Banking Payments***), checkout.com (***digital payment provider***)

# PLAYERS: Ecosystem- Wealth management



# PROCESSES

**Clockspeed:** Annual renewal, which can last lifelong or even generations



# PROFITS

## Assets under management (AUM)

Could be different wealth management program for clients with different asset values



## Take Rate/Gross advisory fee

Usually the take rate for high-net-worth accounts is lower than low-net-worth accounts; the take rate for a robo-advisor is lower than a human-advisor



## Pre-tax Profit Margin

Deduct costs

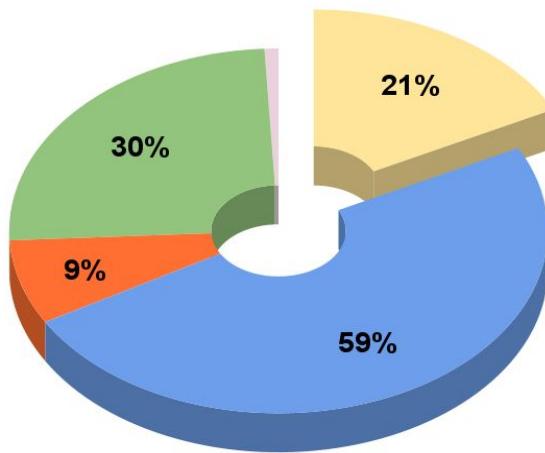


## Wealth Management Profit

A wealth management service is usually an annual contract and is charged based on account values monthly. It is not insured by the FDIC or Any Federal Government Agency, clients bear the risk of losing asset value.

# PROFITS - UBS as example

Profits and Costs for UBS Wealth Management in 2019



- Pre-tax profit margin
- Personnel expenses
- General and administrative expenses
- Cost of services received to other departments
- Others

\*In 2019, the average gross advisory fee for UBS wealth management is 0.67%

# TECHNOLOGY RESEARCH

## Robo Advisors: (Commercialized)

"Robo Advisors" leverage client survey data into complex algorithms that produce customized financial plans and asset allocations. They also help investors find relevant research within market commentaries.



SoFi Automated Investing



Wealthfront



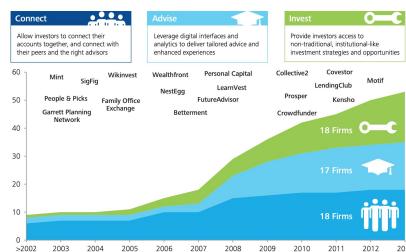
Ally Invest Robo Portfolios



E\*TRADE Core Portfolios

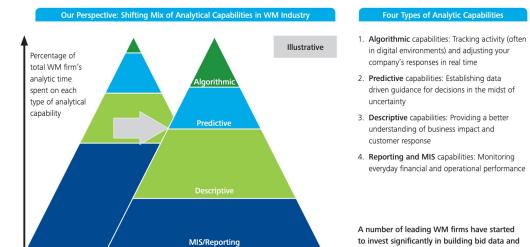
## Digital Platforms (Commoditized)

According to research, investing is becoming more democratic, and the investor community more diverse. More people are investing, they are starting younger and with fewer assets, and they are using new technologies to get started. Social media platform such as Reddit and TikTok for the education support has to meet these investors where they are.



## Analytics and big data (Commoditized)

The Wealth Management industry is behind the curve in terms of leveraging big data and analytics, but it may be poised to make rapid progress in the next several years



# The Digitization Audit

Business Name: Wealth Service

	Main Activities	Current State of Digitization	Opportunities for Digitization
Sourcing	Discover and manage investment products	Digital data collection	Use AI, cloud computing to analyze more information from the internet, including trading platforms and social medias, to predict the return and better manage portfolios.
	Industry research	Analog	Use AI to automatically subtract key points from in person meetings.
Organizational Processes	Track and visualize the performance of portfolios	Data analysis for business insight	
	Risk management	Data analysis for business insight	Improve algorithms and models to better predict risks.
	Paying employees and HR management	Digital data collection	Analyze employee's satisfaction rate using data to improve retention rate.
	Track the performance of human advisors	Digital data collection	
	Track the performance of robot advisors	Digital data communication and sharing	Use robot callers to collect customers' feedback and automate the analysis process.
Customer Interaction	Customer access to their account and investment portfolios	Data analysis for business insight	Improve UI for better user experience.
	Discover potential clientele	Data analysis for business insight	Use big data to reach to more potential clients who might in need for wealth services.
	Collect customer information and their needs to provide investment strategies	Digital data communication and sharing	Automate strategies and decisions based on clients' need. Protect customer privacy using AI. This will increase the numbers of customers by lowering the entry barrier for wealth service. However, automate strategies should be used mostly in asset allocation and mutual fund selection like tasks. Human and robot combined services could be provided to tax, estate, and retirement management, etc.
	High networth client meetings	Analog	Improve online meeting methods to make meetings more safe, easy, and efficient.
	Customers who are not aware of the importance of wealth management and are not sure what wealth services do	Digital data communication and sharing	Publish clear and straightforward introductions and brief reports on websites and social media.
After-sales	Protect customers from fraud	Data analysis for business insight	Use digital identity to identify customers. Use cryptocurrency for transactions.
	Upgrade service for valued customers	Digital data communication and sharing	Use algorithms to identify potential customers and provide sample reports for the scenario of increasing input into the wealth service.

# COLLECTIVE INTERVIEW SUMMARY

**Total Amount of Interviews: 12 ; Total Time Duration of Interviews: 280 mins**

**Amount of Interviewees Categorized as:**

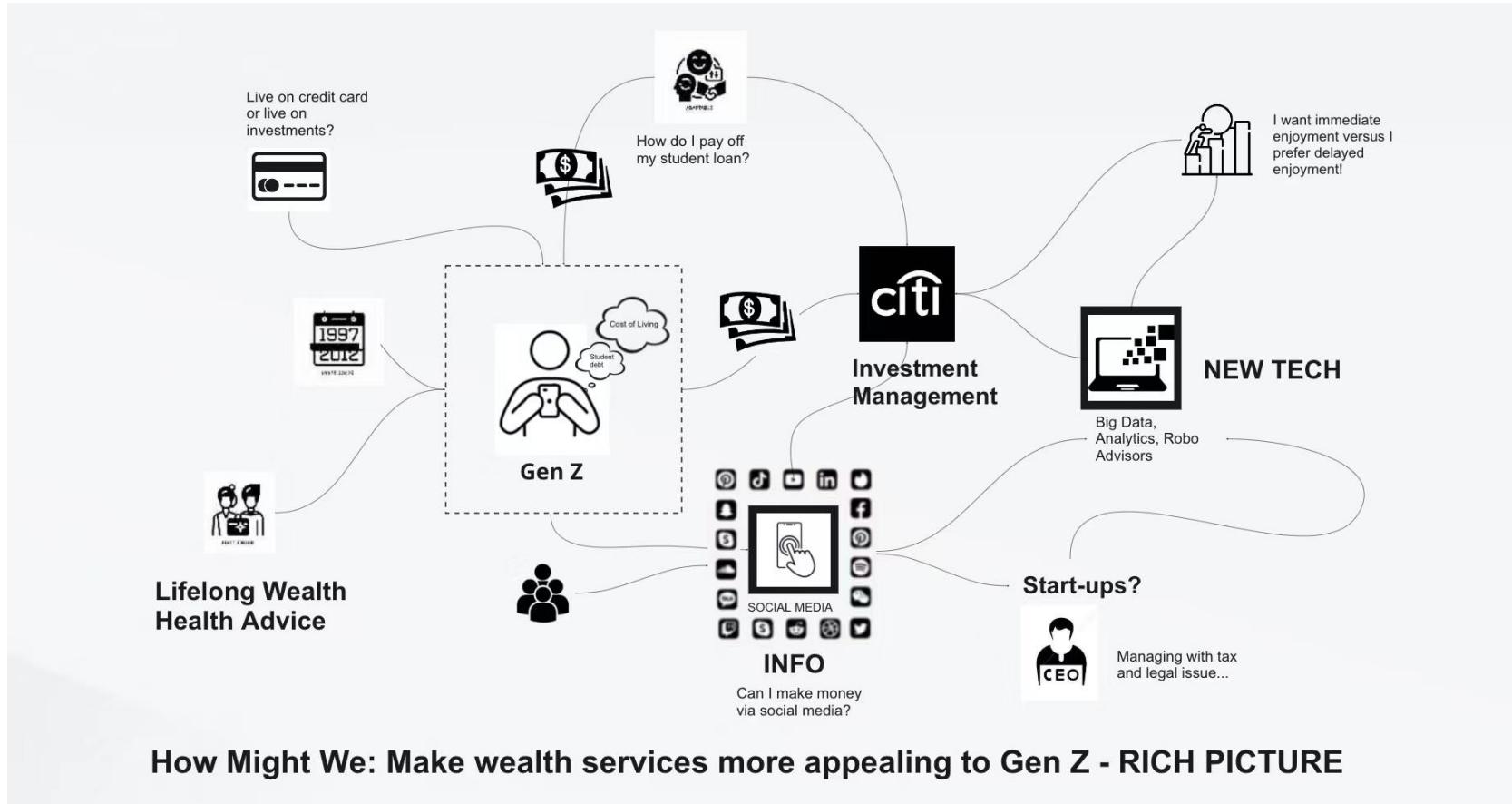
*[It is okay to double count a participant under the breakdown if you genuinely believe they exist in multiple categories. It is also okay if you eventually re-categorize participants when you revisit this document]*

- *Potential Customers:*
- *Potential Users:* 11
- *Stakeholders (Experts, Service Providers, Suppliers, etc):* 1
- *Other:*

**What have been the *most* successful ways to source interviewees?** - Going out and approaching potential interviewees in public places around Manhattan (3 at a restaurant, 1 at a Bank of America branch).

**What have been the *least* successful ways to source interviewees?** - Contacting Stakeholders via Linkedin, just 1 response came back others have failed to engage.

# RICH PICTURE



# DECOMPOSING HMW INTO THEMES/TOPICS

## **HMW make wealth services more appealing to GenZ**

Themes/Topics:

- 1) Some Gen Z's do not feel they are the target clients of wealth services.
- 2) Some Gen Z's are yet to regain lost income as a result of the Covid pandemic.
- 3) Some Gen Z's do not trust financial institutions due to previous financial market crises.
- 4) Some Gen Z's are grappling with student debt and unable to save.

# ESG Investment Sharing Map

- Is a
  - ◆ Networking, ESG sharing, investments tool
- For
  - ◆ GenZ investors
  - ◆ Social media users
  - ◆ ESG enthusiasts
- Who want to
  - ◆ Communicate about ESG investment
  - ◆ Showcase ESG investment
  - ◆ assess ESG scores on portfolio
  - ◆ build networks with those who are like-minded
  - ◆ acquire professional wealth management & investment services

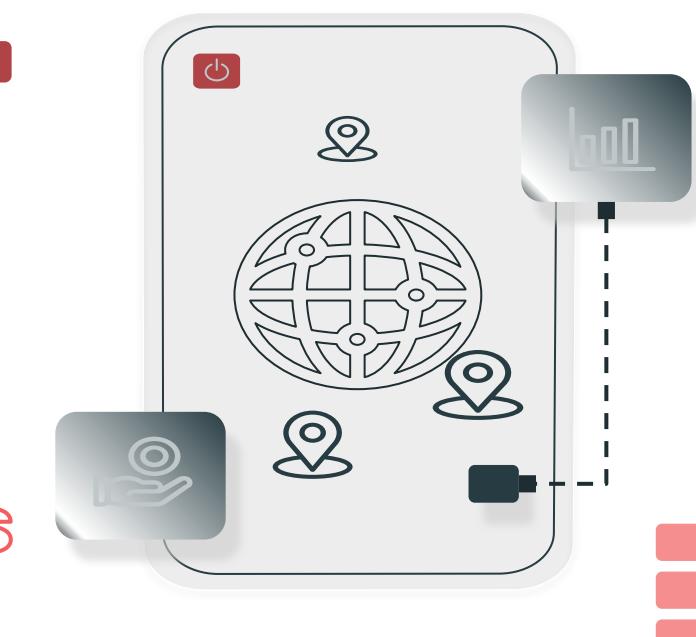




Cornell University

# ESG Investment Activity Sharing Map

## Value Creation Analysis





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**03**  
**New & Old**

Research What's New and What's Old



**01**  
**BMC**

Draft a Business Model Canvas

**02**  
**Comparison**

Identify Points of Comparison

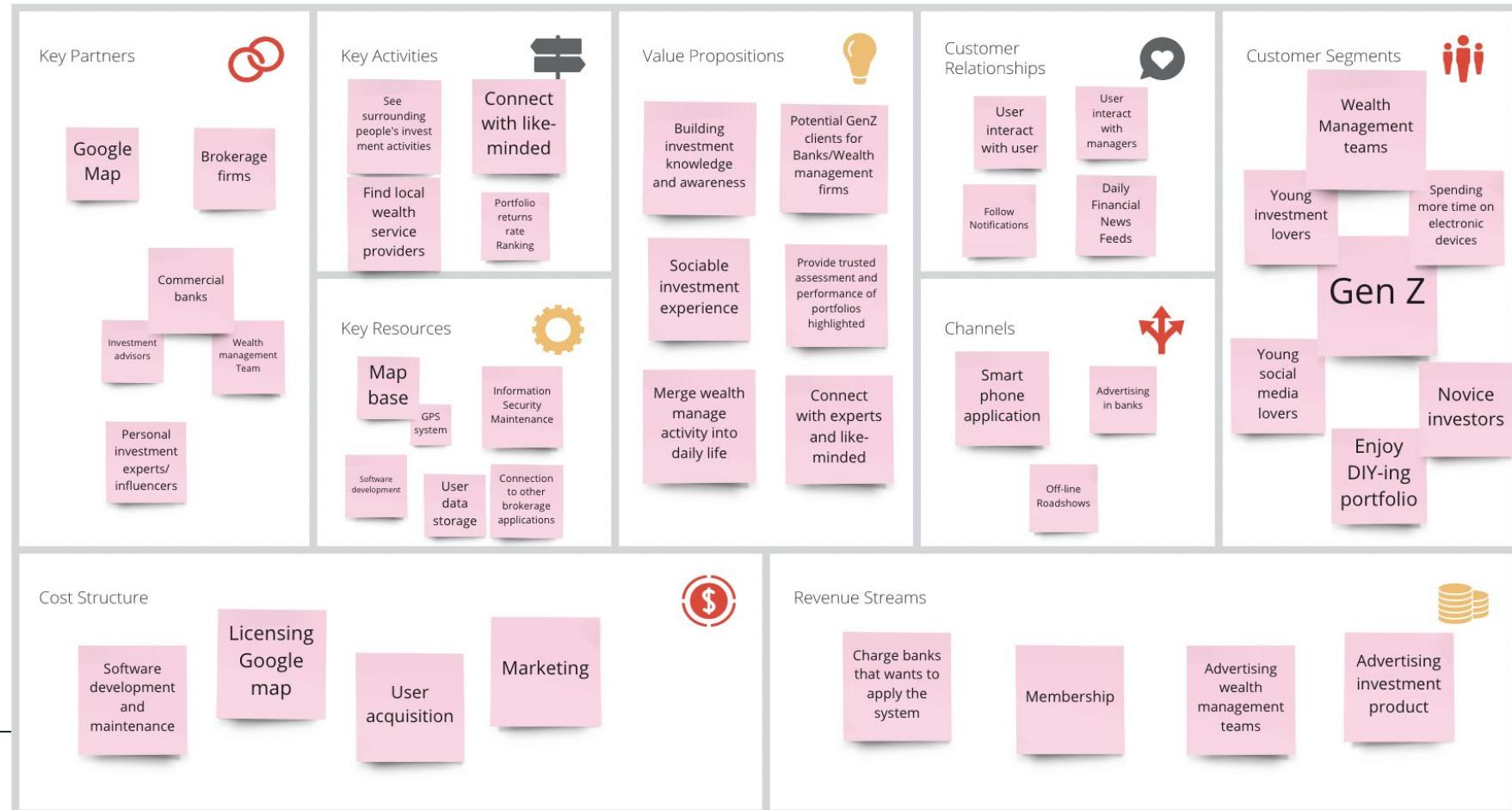
**04**  
**Demand**

Iterate the Demand Side: Will People Buy It?

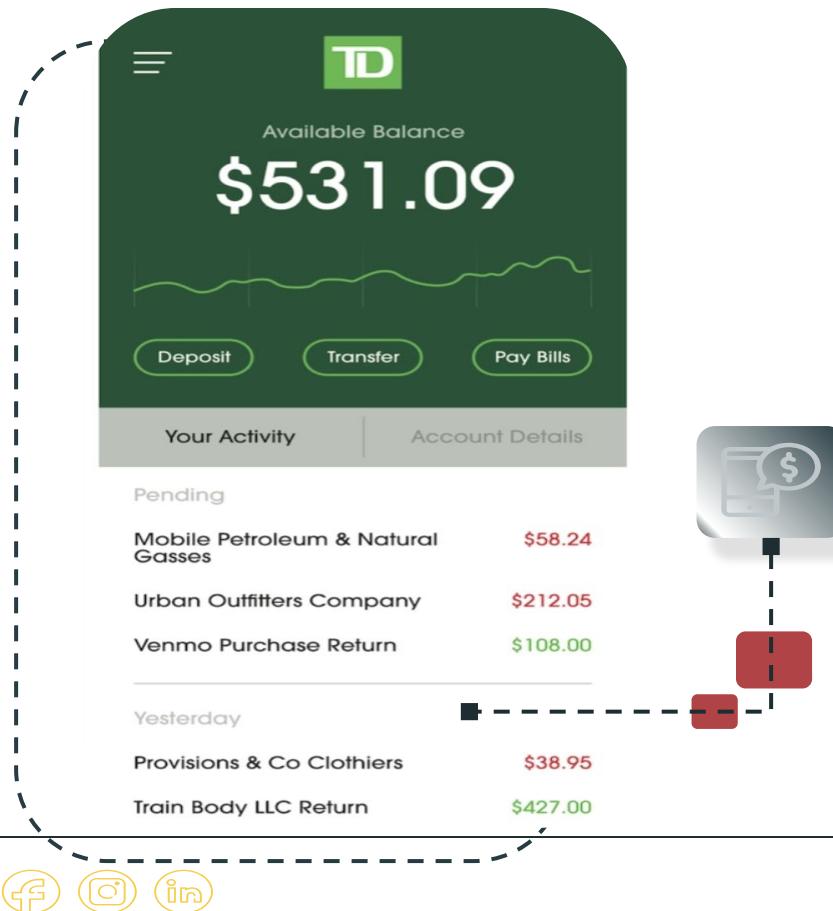
**05**  
**Supply**

Iterate the Supply Side: Can You Make It?

# Business Model Canvas







Demand side:



## Online Banking

Track your personal savings and spendings



Competing products: TD Banking App



Points of Comparison



## Demand side:

### Portfolio Tracking & Financial News Feeds

Track your personal investing stocks and create a watchlist

Get financial news feeds

Competing products: Robinhood



The smartphone screen shows the Morningstar Sustainalytics website. At the top, there are navigation links: 'About Us', 'Careers', and 'Sign In'. Below this, the Morningstar logo and 'SUSTAINALYTICS' are displayed. A main headline reads: 'Uncover the climate risks facing your portfolio with Physical Climate Risk Metrics'. A blue 'Learn More' button is located below the headline. The central image is a globe showing global temperature or climate data with a color gradient from blue to red. The text 'Impact metrics' is overlaid on the globe. At the bottom of the screen, there are three sections: 'Product' (High-Quality ESG Research and Data to Help Investors Meet the New Regulatory Requirements), 'Blog' (6 Things Portfolio Managers Need to Know about Physical Climate Risks), and 'Guidebook' (ESG for IPOs: Becoming ESG-Ready for Your Initial Public Offering). Social media icons for Facebook, LinkedIn, and YouTube are at the very bottom.

## SUPPLY SIDE

Provides highly analytical social, environmental, social and governance research, ratings and data to institutional investors and companies.



The screenshot shows a user interface for the CopyTrader feature. On the left, a sidebar lists "Most Copied" traders: JohnW, LauraStevens, and DavidNor. The main area displays a post by Ethan Pierce (@AltcoinTrader) with the text: "Investment could potentially flow to \$BTC if continues to gain traction as a 'safe haven' alternative to \$GOLD". Below the text is a close-up image of several gold Bitcoin coins.

## CopyTrader

CopyTrader, enables traders to replicate other traders' actions in real time. To encourage top traders to get copied, eToro created the Popular Investor program.

[Start Copying Other Traders](#)

## Demand side:

### Social Investment

Follow others' portfolio and replicate others' investment moves;

Form investing groups with like-minded

Competing products: etoro



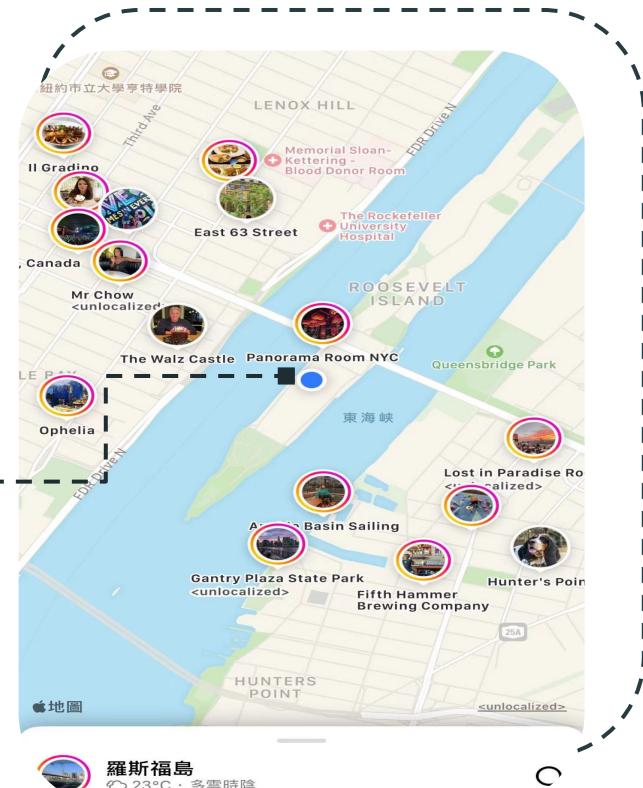
# Supply side: People Nearby

Cooperation with mapping base;

Instead of at random, see activities of users surrounding

Create a tighter sense of community

Example: instagram





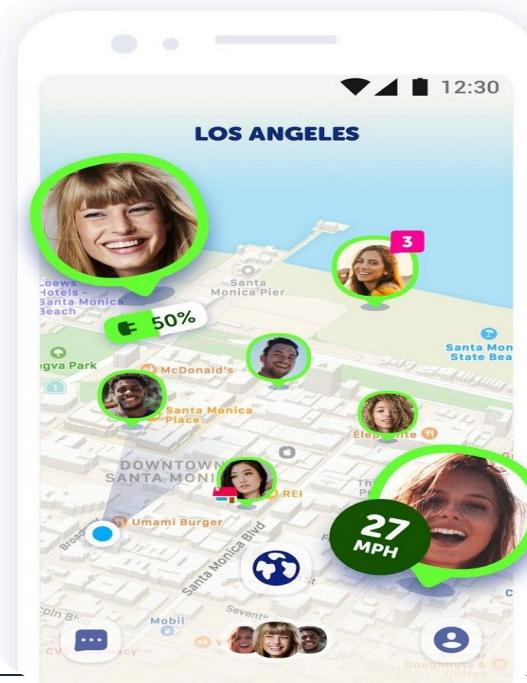
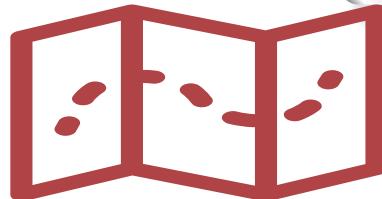
# Supply side:

## View friends' status

Closely track friends' and connections' real time activities;

User Interactions

Example: Zenly



See exactly where your friends are

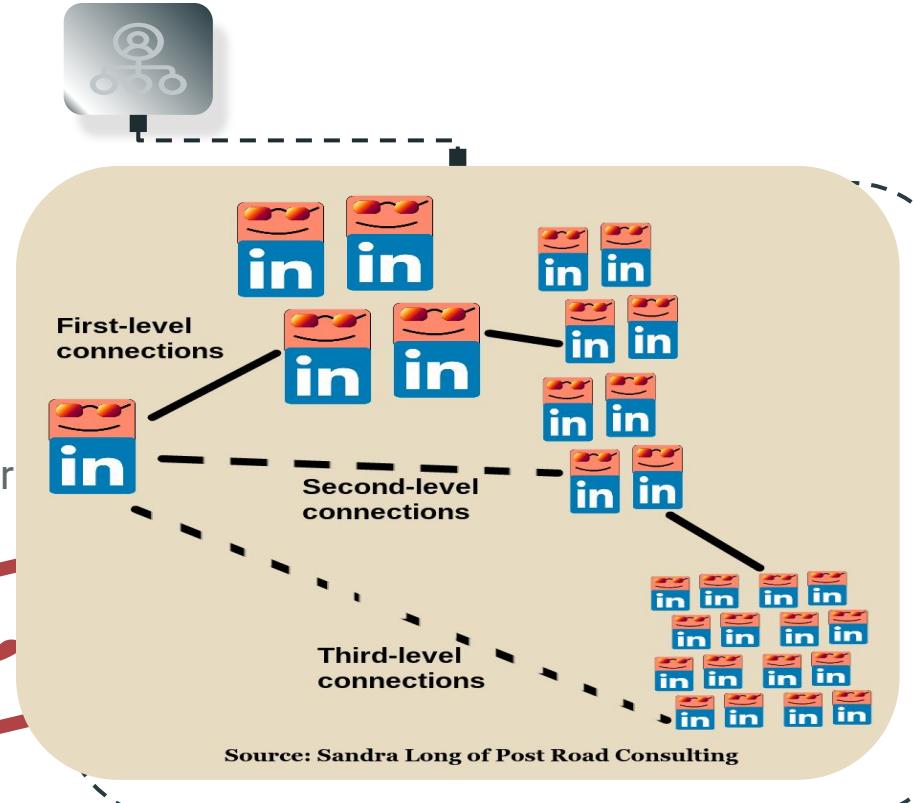
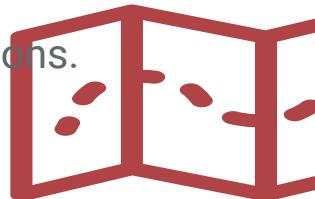


# Supply side: Connection Levels

Due to information protection, the more information is disclosed to users with higher intimacy;

Encourage deeper connections.

Example: LinkedIn





# What's Old

## Manage Personal Portfolio

Like TD banking and Robinhood, users can manage and operate all accounts they have on our products, including their saving account, funds account, stocking account as long as the platforms are our partners



## View and replicate other investors' moves

Like etoro, users can posts their insights, follow other investors and experts' update and portfolio, replicate other's investment moves with permission

## Users are personal investors

Personal investors use this app for learning new knowledge, socialize with investors around, compare and contrast portfolios..

## Form groups and gain information feeds

Get timely investment updates pushed to your fingertips. Meet high-end investors online and learn new things. Build groups chat with like-minded investors and invest together.

# What's OLD?



- Investment manager and advisors are starting to incorporating ESG factors into their activities.
- Robo advisors that provide automated algorithmic investing services with minimal supervision but offer little in terms of flexible investing.
- Robo advisors that tend to be optimized for indexing strategies best suited for new investors and less so for ethically minded investors.

# What's NEW?



## ESG-ometer provides

- A consolidated assessment of users investment portfolio across multiple providers
- An Aggregate score based on multiple ESG assessment strategies and rating systems
- A historical view of how funds are performing against their ESG goals
- Advice on sustainable alternative ESG investments based on similar performance
- Transparency and visibility on ESG strategies of advisors



## What's New

### Form groups and gain information feeds

What's more users can find a professional investment advisor for the group on our product! (We would also host official groups for ESG, Forex investor, etc )

### Users are both personal investors and Wealth Service Providers

Wealth service providers use this app to advertise their services and products, so that they can educate market and attract potential clients.

### Wealth Management Client Authentication

Want to be special? All wealth management clients with our partner companies get a golden mark. Show how much more you profit with the team and win more attentions!



### Find close by Investors geographically

Not just randomly see someone who comes from a far away community with different culture background and financial status, search what people in your community are investing. If necessary, grab a coffee with the nearest investment advisor!

### Establishing deep connections layer by layer

Users can set information disclosure level: Strangers can only see daily movements and brief portfolio buckets, low-level connectors can see portfolios, medium-level connectors can see real-time movements , high-level connectors can replicate portfolios or with permissions,

### Want Adds-on Service?

Not satisfied with just investing, want more retirement planning, tax planning and other services? Users can contact the joined wealth services team through the app to inquire about further paid service and become a high-end financial player!.



Demand Side

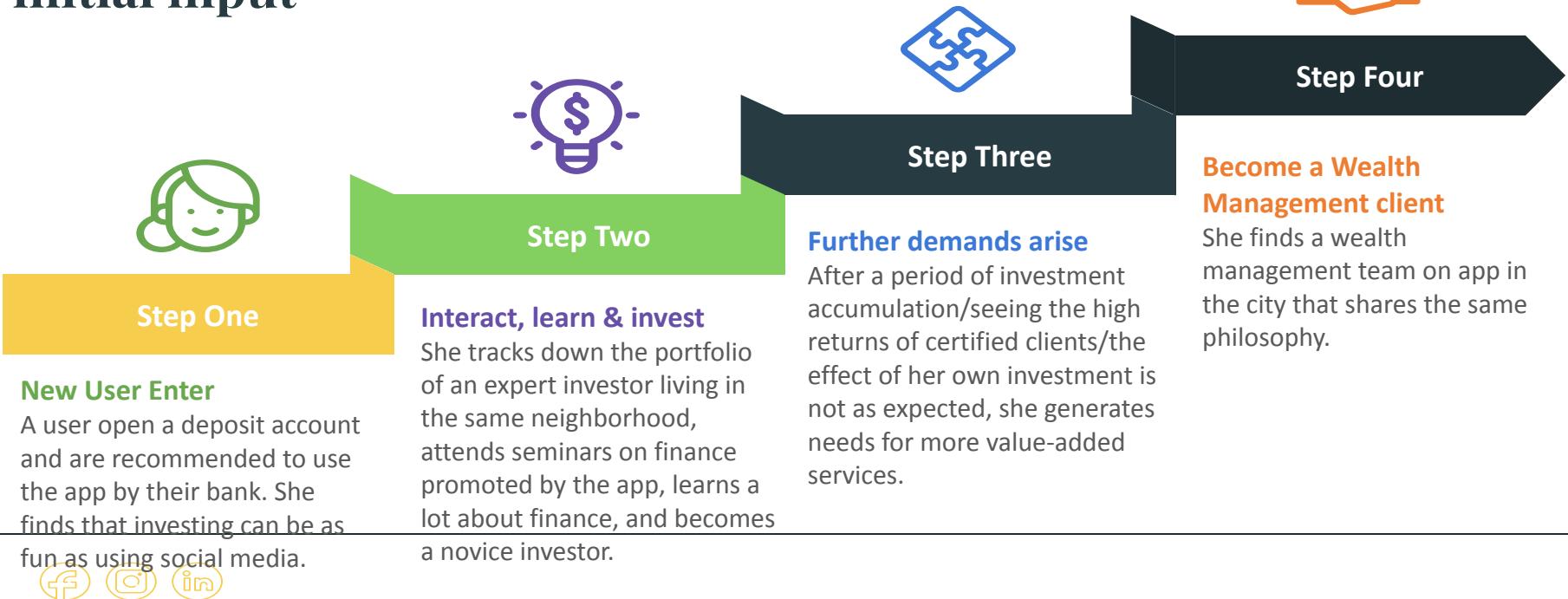
# Demand Side: WILL PEOPLE BUY IT?





# From novice investor to wealth management client:

## A one-stop solution with convenience and low initial input





# Supply Side: CAN WE MAKE IT?





# Operation Stages

## STEP 01

### - [Fixed cost & Tech]

Through advertising, marketing, and bank customer diversion to attract users to the app, while inviting wealth management teams and investment influencer to join the game also.

## STEP 02

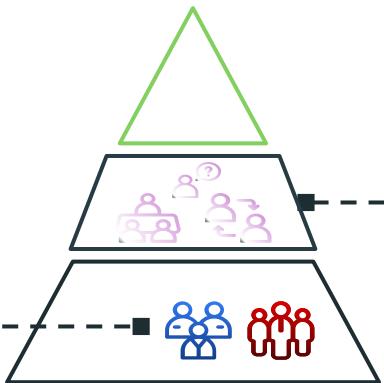
### - [Fixed cost & economy of scale]

SDEs build the app system, lease Google Maps base.



## STEP 03

### - [Variable cost & E of S]



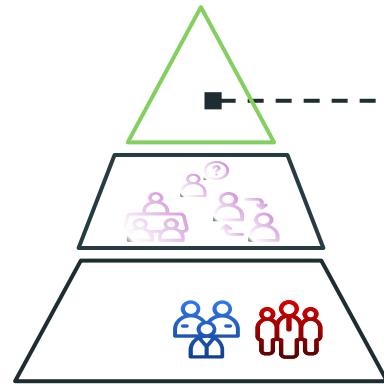
## STEP 04

### - [Variable cost & E of S]

System maintenance; running various official investment groups; organizing roadshows & seminars; investment managers sharing high-return portfolios to subliminally educate the market do overall wealth mgmt



# Operation Stages



## STEP 05 - [Profits]

Convert users into wealth management clients of partner companies, prove the effectiveness of the app. Charge companies that apply the system, and realize profits.





# MAJOR OUTPUTS



## Configuration Most Likely to Succeed:

We are creating an investment activity sharing map for GenZ investors and wealth management teams. Users can manage personal portfolio, interact with geographically close by Investors and managers, establishing deep connections with them layer by layer. Also they can view and replicate other investors and experts' moves and Want add-on service? Quickly match with a wealth management team on app that shares the same philosophy with them.



## Central Business Logic:

We are creating an investment activity sharing map that provides a one-stop investment solution with convenience and low initial input and fun.

We aim to accompany our users to grow from a novice investor to a high-end financial player, a wealth management client.

## **Investment map EIA:**

### **People & Public Health:**

There are more concerns regarding people and public health. We care about both the physical and psycho health of our users. Some GenZ are spending excessive time on social media. [More than 65% of GenZ users claim they're using social media on a daily basis](#), which brings us opportunities but the potential harm to their health. If they get addicted to the app, they may get less time exercising, talking with their family and friends face to face, and not getting enough sleeping time. Young people have slightly less self-control, and they are more impulsive. Making investing interesting potentially lowers their alertness to the risks in investment activities also.

#### ***Mitigation for People & Public health :***

Considering the user health issue, first of all, we only allow adult users aged 18 and above to register. For the problem of user addiction, we will remind users to take a break every half an hour with a pop-up window. We will track individual usage trends over time. For investment impulses, we pop up investment risk warnings before each time a user enters the app and makes an investment move. In addition, we could offer webinars on investment safety to provide users with opportunities to socialize and educate them on the risks.

### **Civic Life, Equality, Justice Questions:**

In terms of civic life, equality, and justice, we are worried about external and internal resource inequality. External inequality means that our users have more access to specialized investment advisors, receive more professional guidance, and are, therefore, more capable of trading and obtaining higher rates of return than non-users, which in turn creates wealth disparity. Besides, as we encourage users to connect with investors in their community or around them, people who commute or travel a lot within the cities and have more chances to get in touch with other users are potentially favored, thus creating a further divide between those in rural or underserved communities. In such a case, the Internal resource inequality is raised.

#### ***Mitigation for Civic Life, Equality, Justice Risks:***

We will work on the internal resources inequality. We understand that GenZ, who live in areas with shorter population density/investment density, might feel demotivated as they won't connect with investors nearby as frequently. So we potentially would send virtual professional investors in these areas and hold online webinars for them. External inequality means that our users have more access to specialized investment advisors, receive more professional guidance, and are, therefore, more capable of trading and obtaining higher rates of return than non-users, which in turn creates wealth disparity. Besides, as we encourage users to connect with investors in their community or around them, people who commute or travel a lot within the cities and have more chances to get in touch with other users are potentially favored, thus creating a further divide between those in rural or underserved communities. In such a case, the Internal resource inequality is raised. Concerning external resource issues, there is not much we can do, because we do hope to create extra value for our internal users.

#### ***Security Risks:***

We also have concerns about user information security. Our users disclose a lot of information: portfolio, return on investment, location, activity times, etc. All this information can enable GenZ to achieve social attributes, and information sharing can mutually benefit everyone involved. However, such information can also be used for other undesirable purposes by people with bad intentions. The worst scenario is that if someone sees an investor with high assets and gets his geographical location from the map, he approaches that investor in reality with malicious intent to seek profit. So we must consider the balance between the level of information disclosure and user safety.

#### ***Mitigation Assessment for Security Risks:***

As regards information disclosure and security, we get inspiration from LinkedIn's connection levels system. The relationship hierarchy between users is divided into strangers, shallow, medium, and deep contacts. Users can personally customize the level of information they disclose and decide for themselves which information can be seen by each level of connected friends. For example, strangers can only see daily movements and brief portfolio buckets; low-level connectors can see portfolios; medium-level connectors can see real-time movements; high-level connectors can replicate portfolios or with permissions. We will also set up an information security department to monitor unusual user behavior for focused observation. Since every user needs to have at least a valid connected bank account, security risks should not be too rampant.

## **ESG-ometer for assessing potential investments**

### **Implicit Trusts & User Understanding :**

As our product is able to direct a large number of high net worth clients to invest in companies with higher ESG attributes, similar competing companies with more impressive ESG-related data may be more favored. We are concerned that these companies may spend their efforts on embellishing the data in this area rather than on improving the company's hard power and securing more long-term benefits for shareholders.

Much of the analysis and data on ESG ratings and measurements on how they impact the environment and society at large is outsourced and made available through companies that specialize in this research for example Sustainalytics.. We inherently trust that they undertake their due diligence rigorously with safety and quality checks to ensure integrity of correctness of the assessments they provide.

### ***Mitigation Assessment for Implicit trust & User Understanding :***

We ensure that our users are well informed on how current these assessments and ratings are, we will seek to audit and work closely with these third party researchers and analysts with a view to potentially build a potentially cheaper research tool using AI and web data extraction tools.

### **Surveillance State :**

While we seek to promote ethical investing by incorporating ESG factors, we are not seeking to tarnish the social reputation of any fund providers who are struggling with a viable path to sustainability in their respective industries. We are not seeking to create data that might impact their future opportunities or put them out of business

***Mitigation Assessment for Surveillance state :***

We will tell it as it is, keeping these assessments fair, highlighting both pros and cons as well as reaching out to understand what external factors might need to be addressed in order to remove these impediments on the path to sustainability

***Functioning of Markets :***

This has a potential side effect of redirecting the necessary investments from non-ESG to ESG companies or activities and might impact the daily livelihood or jobs of people who rely on Non ESG companies. The way we can mitigate this risk is by having a measure or metric that important investments in other sectors are not affected.

***Mitigation Assessment for Functioning of Markets :***

We offer seminars, not only to investor clients but also to corporate executives, to promote the value of ESG proposition and provide a paid consulting team to assist companies that wish to transition to ESG. In this way, we can make a real contribution to the Environmental, Social, and Governance field and reduce undue negative externalities from big corporations in the society .

***Civic Equality and Justice :***

***Economic & Asset Inequalities:***

ESG funds may not deliver better ESG performance and might lead to losses for Gen Z investors in the short term, leaving them torn between cutting their losses or sticking to their principles of investing only in environmentally friendly or sustainable entities.

# Decomposition and Rating of Risks - ESG Investment Sharing Map

ID	Key Risks	Risk Type	Degree of Doubt (1, 2, 3) with 3 being most uncertain	Importance (1, 2, 3) with 3 being a important risk to mitigate	Risk Factor (auto calculated)
1	Technically, is it feasible to obtain portfolios of clients from different banks	<Supply>	2	3	6
2	Whether there is enough GenZ doing ESG investing	<Demand>	2	3	6
3	Whether we should setup our own ESG scoring system or lease another scoring system	<Product>	2	2	4
4	How to set rate (annual fees and customer conversion fees)for banks that use our system	<Product>	1	1	1
5	Should we make the app for all type investments and set a block for ESG investment to encompass a la	<Market>	2	2	4
6	Weather enough GenZ care about ESG investing	<Market>	2	3	6
7	User Data security risk	<Product>	2	3	6
8	No proper Revenue model from customers	<Demand>	2	3	6
9	User Onboarding in initial days and creating a network effect	<Demand>	1	2	2
10	Competitors copying and implementing the same feature	<Product>	2	2	4
11	how do we make sure investments are actually into ESG activities	<Supply>	2	2	4
12	Low returns might demotivate investors	<Demand>	2	2	4
13	Banks agreeing to share information of portfolios	<Supply>	2	2	4
14	What is users on the platform change their portfolio to non sustainable investments	<Supply>	2	2	4
15	actual conversion of users into portfolio management services	<Demand>	2	2	4
16	Do people want to share investment activity	<Demand>	3	1	3
17	Does proximity improve trust and willingness for users to find wealth services	<Demand>	2	2	4
18	Most people do not go to different places daily, how to retain users	<Product>	2	1	2
19	How to make our ESG certificate credible and accept by public	<Product>	2	1	2
20	How to differentiate with other ESG scoring products on the market	<Product>	2	1	2

# Decomposition and Rating of Risks - Gamification Investment Platform

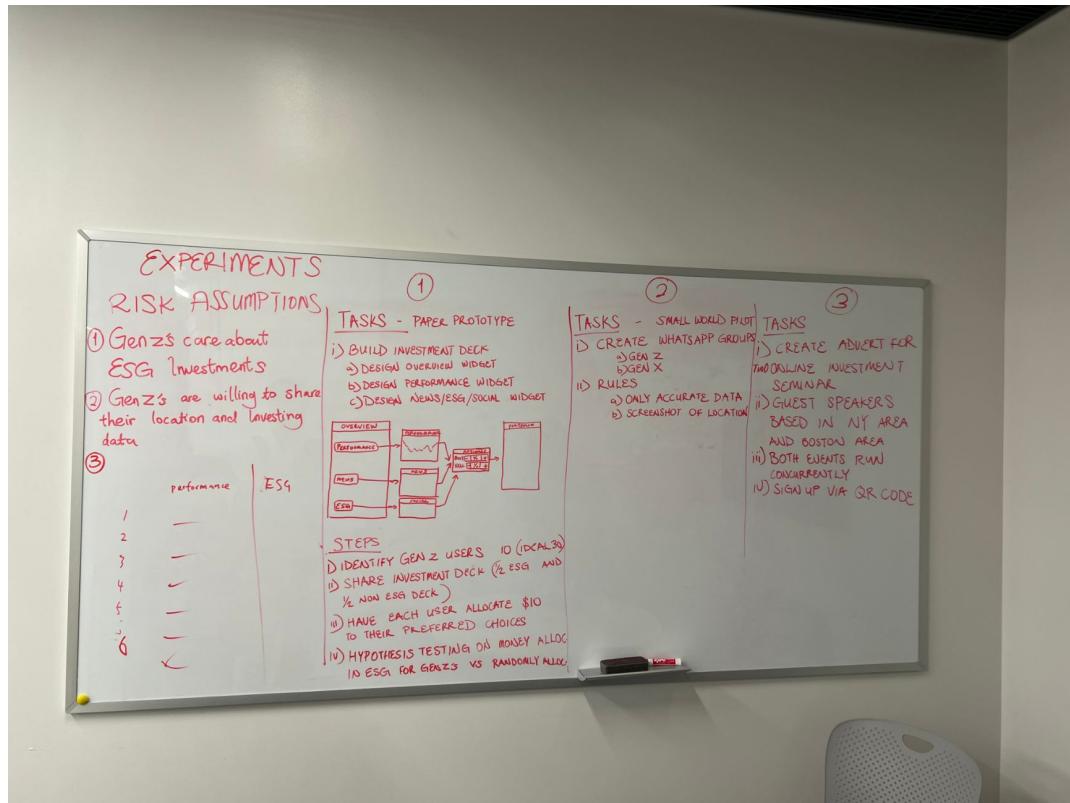
ID	Key Risks	Risk Type	Degree of Doubt (1, 2, 3) with 3 being most uncertain	Importance (1, 2, 3) with 3 being a important risk to mitigate	Risk Factor (auto calculated)
1	What are the specific 'game' features in our product	<Product>	3	3	9
2	What is our fee model and who do we charge.	<Supply>	2	3	6
3	Can we attract users through campus promotion	<Market>	1	1	1
4	Are we going to reward the users on game mastery? Where will the fund come from	<Supply>	2	2	4
5	Is the concept sticky enough	<Demand>	2	2	4
6	Too much Development work, Technically complex	<Product>	2	2	4
7	User Data privacy	<Product>	2	2	4
8	Users getting addicted and investing in real life like a game	<Product>	1	1	1
9	How to keep investors' personal data and property safe	<Supply>	1	3	3
10	How to keep investors interested once they lose interest in the game	<Market>	3	2	6
11	Some people may use the game's investment loopholes to make profits, how to prevent improper behavior in game	<Demand>	2	3	6
12	Many people will question the rationality of gamification investment, how to promote and make more people understand	<Market>	2	1	2
13	Most of the objects of gamification services are game lovers. How to expand the service objects?	<Market>	1	1	1
14	How to develop global business in different geopolitical economy and culture	<Market>	2	2	4
15	Whether investors must have certain gaming ability to participate in investment, and how to simplify investment, so that everyone can participate	<Market>	2	2	4
16	How do we ensure that the game's development expenditure is balanced with the benefit from investors	<Demand>	2	3	6
17	Is investment game really attractive to gamers	<Demand>	2	3	6
18	What is the wealth status for gamers, should they be targeted	<Demand>	2	3	6
19	Do people want to social using a new platform (Meta's Horizon is an example)	<Demand>	3	1	3
20	Do people want to share investment activity	<Demand>	3	1	3

# De Risking Sequencing - ESG Investment Sharing Map

ID Key Risks	Degree of Doubt (1, 2, 3) with 3 being most uncertain	Importance (1, 2, 3) with 3 being a significant risk	Risk Factor (auto calculated)	Risk Mitigation Task	Risk Mitigation Effort (1, 2, 3) with 3 being the most costly	Risk Factor / Risk Mitigation Effort Ratio (auto calculated)	Feasibility Constraints	Final Risk Scores (enter manual number starting from 1)
1 Whether enough GenZ care about ESG investing	<Market>	3	3	<p><b>Task 1:</b> Build out a paper prototypes of investment option of 10 to 15 options and test these amongst at least 50 GenZ's <b>Scenario 1:</b> 1. Each paper option roughly highlights current performance of each option 2. Each paper option highlights 1-3 factors relating to the impact of the funds on Environmental, Social or Governance factors. 3. Collect behavioral data on which factors matter most to each Gen Z by measuring which paper options they choose to invest in, how much and why? <b>Learning Outcome:</b> 1. Scenario 1: Understand which ESG factors matter most to Gen Z's or if at all this is the case 2. Scenario 1.1 (different configuration): Understand and rank order of importance of factors in each specific Category below: <b>Environmental</b> (Climate change vs Pollution vs Energy efficiency vs Waste management) <b>Social</b> (Human rights, Community, Diversity) <b>Governance</b> (Lobbying, Political contribution, Bribery, Fair Competition, AntiTrust Laws)</p> <p><b>Task 2:</b> Build out a paper prototypes for each key Activities and key Metrics and paper capability to share some of these metrics by putting them in the right box <b>Scenario 1:</b> 1. Simulate a typical day of activities at random against <b>Task 1</b> 2. Observe which activities each user is willing to share 3. Simulate changes to key metrics as a result of each activity 4. Observe changes in key metrics each user is willing to share <b>Learning Outcome:</b> 1. Scenario 1: Learn how much data about activities and metrics users are willing to share, under what circumstances and why <b>Activities</b> (Trades, Buys/Sells, Sell off or Sell down, disclose portfolio as a swap, disclose their location as a swap) <b>Metrics</b> (Portfolio, Performance, Trade History)</p> <p><b>Task 4:</b> Small world pilot Recruit a group of GenZ (roughly 50 people) who are interested in ESG investing and who claim to be willing to share their portfolios and form a group chat. Conduct a 7-day sharing trial within the group chat, calling for sharing in 3 dimensions: 1. a screenshot of the map to share their geographic location each day 2. a screenshot of their portfolio each day 3. a screenshot of their investment actions each day <b>Recorded data:</b> 1. frequency of testers' participation in 7 days (for each of the 3 dimensions) 2. Percentage of people who completed the entire 7-day test 3. Percentage of testers who did not participate in the test at all 4. participants testing experience</p>	2	4.5	F Gathering all the data for the prototypes	1
5 Do people want to share investment activity	<Demand>	2	3	<p><b>Task 3:</b> Small world pilot <b>Scenario 1:</b> 1. Invite some wealth managers (half of them are Cornell Alumni (higher proximity) and half of them are not) to campus 2. Hold a campus info session about wealth management and ESG investment 3. After the session, split the wealth management managers into two different rooms to hold consultation sessions simultaneously 4. Also ask each wealth management managers to bring their business card <b>Scenario 2:</b> hold a virtual session with wealth managers from across states without location constraint Converse the important metrics in terms of willingness to take wealth services post the sessions. <b>Learning Outcome :</b> Understand what proximity factors such as location, college alum, investment philosophy etc leads to better interacting and trust for genZ investors <b>Record data:</b> 1. The number of people entering each room 2. The average length of stay of each group 3. The average length of communication of each group 4. The number of business card being taken of each manager 5. Content of the conversation 6. Frequency of follow-up contact of each group</p>	2	3		2
6 Does proximity improve trust and willingness for users to i	<Demand>	2	3		3	2	2 results	4

# De Risking Sequencing - Gamification

# Brainstorming Board



Project Task Status Link:

<https://trello.com/b/p8ZdwJsO/eim>

# Experiment 1

**Objective** - Prove whether or not Gen z's care about ESG in their investment strategy

- Build deck of six companies (3 ESG, 3 Non-ESG) and ask 30 Gen Zs to allocate \$10 simply based on companies' stock performance

**Treatment** - Ask the 30 Gen Zs to allocate \$10 again based on stock performance, **description of the company, and the recent news of the company**

- We want to see whether Gen Z changes their investment portfolio after they see Companies' ESG activities



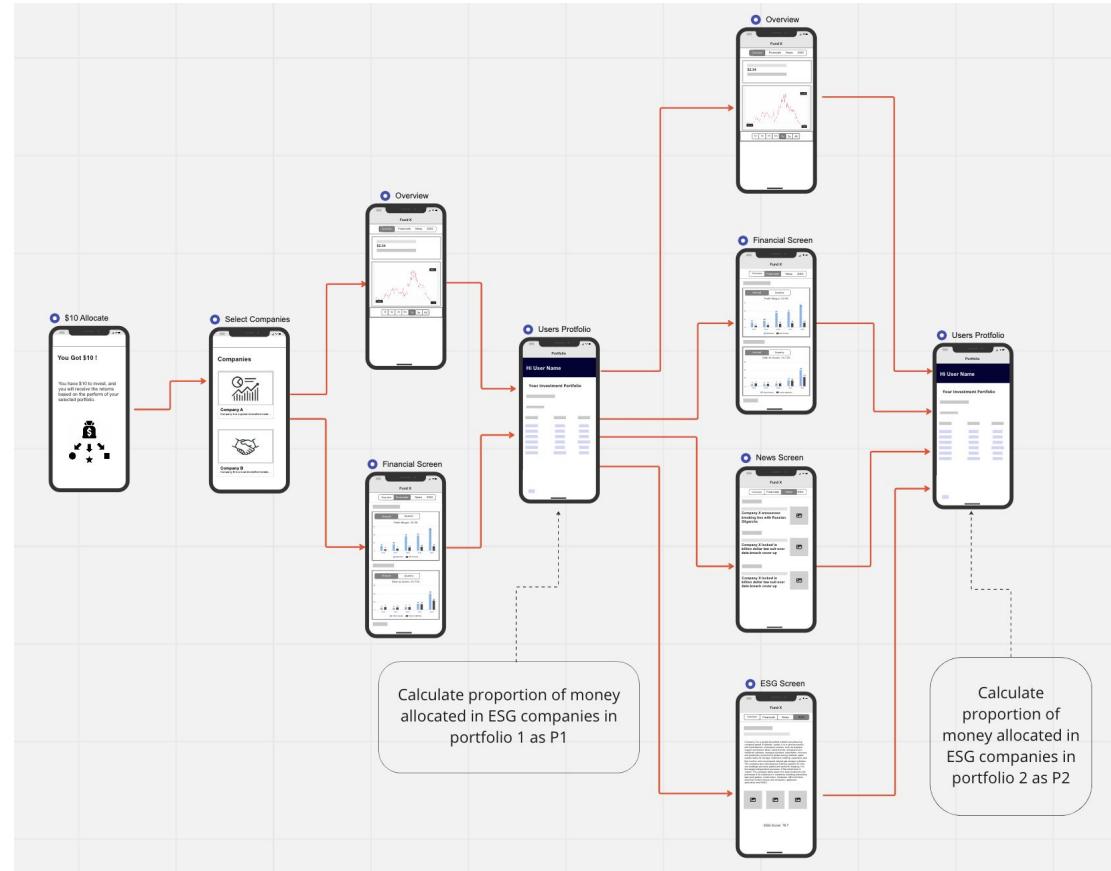
# Experiment 1: Paper Prototype

The image displays six paper prototypes of mobile application screens, each labeled with a blue circle icon and a title:

- Select Companies**: Shows a list of companies with icons and brief descriptions. Company A is a global diversified metals company, and Company B is a local diversified metals company.
- Overview**: Shows a summary card for "Fund X" with a label of "\$2.34", a "Description" section, and a line chart.
- Financial Screen**: Shows the "Income Statement" for Fund X, featuring bar charts for Annual and Quarterly Profit Margin (20.9%) and Revenue (2001-2015).
- News Screen**: Shows news articles for Fund X. One article from November 3 discusses Company X breaking ties with Russian Oligarchs. Another from October 29 discusses Company X being sued over a data breach.
- ESG Screen**: Shows the ESG score of 78.7 and a table of company investments with their share values and proportions.
- Users Portfolio**: Shows a personalized portfolio for "User Name" with a total expected return of X% and a table of investments.

# Experiment 1: Experiment Procedure

1. Find 10 (ideal number: 30) Gen Z participants.
2. Tell each of them that they have \$10 to invest, and they will receive the returns based on the perform of their selected portfolio.
3. Show them the deck of 6 companies (3 ESG, 3 non-ESG), which only shows the stock performance. Ask Gen Z participants to allocate the money and build up their portfolio.
4. Compute the proportion of money that is invested in ESG company, record as P1.
5. Show them the company descriptions for each company as an addition to the stock performance, give them the chance to reallocate their money and build a new portfolio.
6. Compute the proportion of money that is invested in ESG company, record as P2.
7. Do a one sided t-test on P1 and P2, with null hypothesis of P2 is less than or equal to P1. If we reject the null hypothesis, we can conclude that Gen Z care about ESG effect in investment.



## Experiment 2: Small World Pilot Description:

1. This event is voluntary. The event will last for 7 days and the start time will be announced later.
2. Participation is restricted to GenZ investors (those born between 1997 and 2012) and Millennial investors (those born between 1985 and 1997), and you must be an active investor to participate in the event. Please enter the activity by scanning the appropriate QR code below according to your age group.
3. Participants must ensure that all information shared is authentic.
4. Please show your name as 'Name\_Year of born' after entering the WhatsApp group.
5. You share something, you GAIN something. Please share your current geographic location via Google Maps screenshot at least once a day in the group. You are welcome to share multiple times if you have made a move.
6. Please share your current Portfolio via screenshots at least once a day in the group. You are welcome to share multiple times.
7. Please share your daily investment actions via screenshots at least once a day in the group. You are welcome to share as many times as you like.
8. You are welcome to have friendly discussions in the group about investment operations.
9. You are welcome to make friends in the group.
10. Participants' personal rights are protected. Please do not spread information shared within the group outside the group.
11. The final interpretation of this activity belongs to CT Product Studio Team 15.

# Experiment 2

**Objective** - Prove whether or not Gen Z's are willing to share their Investment data socially

1. Build two group chat for Gen Z and Gen Y for a 7-day sharing trial
2. Requiring sharing - Geographic location, Portfolio metrics, Investment actions

**CALL FOR INVESTORS!**

**JOIN US FOR A 7-DAYS**

**INVESTMENT & LOCATION SHARING EVENT**

**TO EXCHANGE MINDSET AND MEET NEW FRIENDS NEARBY**



**GENZ SCAN HERE TO SIGN UP**  
(Born between 1997 and 2012)

**MILLENNIALS SCAN HERE TO SIGN UP**  
(Born between 1981 and 1996)



**INVESTMENT & LOCATION SHARING EVENT**

**Event description:**

1. This event is voluntary. The event will last for 7 days and the start time will be announced later.
2. Participation is restricted to GenZ investors (those born between 1997 and 2012) and Millennial investors (those born between 1981 and 1997), and you must be an active investor to participate in the event. Please enter the activity by scanning the appropriate QR code below according to your age group.
3. Participants must ensure that all information shared is authentic.
4. Please show your name as 'Name\_Year of born' after entering the WhatsApp group.
5. YOU SHARE something, YOU GAIN something. Please share your current geographic location via Google Maps screenshot at least once a day in the group. You are welcome to share multiple times if you have made a move.
6. Please share your current Portfolio via screenshots at least once a day in the group. You are welcome to share multiple times.
7. Please share your daily investment actions via screenshots at least once a day in the group. You are welcome to share as many times as you like.
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**GENZ SCAN HERE TO SIGN UP**  
(Born between 1997 and 2012)

**MILLENNIALS SCAN HERE TO SIGN UP**  
(Born between 1981 and 1996)



## Group Chat:

返回 群組資訊

Investment & Location Sharing Group

GenY- 📈📍 Inv&Loca Sharing

群組 · 2 位成員

致電 視像 搜尋

Event description:

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2. Please show your name as 'Name\_Year of born'
3. You share something, you GAIN something. Please share your current geographic location via Google Maps screenshot at least once a day.
4. Please share your current Portfolio via screenshots at least once a day.
5. Please share your daily investment actions via screenshots at least once a day.
6. Please do not spread the shared information outside the group.

返回 群組資訊

Investment & Location Sharing Group

GenZ- 📈📍 Inv&Loca Sharing

群組 · 2 位成員

致電 視像 搜尋

Event description:

1. This event is voluntary. All information shared must be authentic
2. Please show your name as 'Name\_Year of born'
3. You share something, you GAIN something. Please share your current geographic location via Google Maps screenshot at least once a day.
4. Please share your current Portfolio via screenshots at least once a day.
5. Please share your daily investment actions via screenshots at least once a day.
6. Please do not spread the shared information outside the group.

# **Experiment - Risk 3 - Location Proximity improves trust and willingness to seek wealth services**

We are conducting a two dummy Online event at the same time which will have speakers from two cities where GenZ will be able to Interact & Network with Wealth Managers.

We will ask 10 GenZ from Newyork to Sign-up for either of the event.

We have already created the QR- code and registration link forms

Our expectation is GenZ will register for the first meeting

We will run this experiment this week and analyze the results.

## **Investments opportunities and Wealth Services for GenZ**

Network and know more about Investment strategies & services crafted for GenZ



**Rob Taylor, Wealth Manager  
Citibank, New York**

Specializes in Cryptocurrencies, NFT's  
ESG investments, Alternative Investments

**Online Event -November 16th**

**7.00 PM - 9.00 PM EST**

Scan to register



**Edward Gonsalves, Wealth Manager  
Citibank , Boston**

Specializes in Cryptocurrencies, NFT's  
ESG investments, Alternative Investments

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Scan to register



# Results



# Experiment 1

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**Objective - Prove Gen z's care about ESG in their investment strategy**



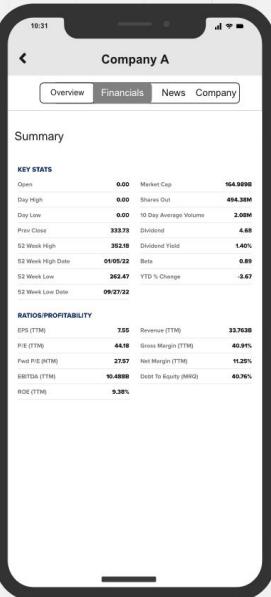


# Experiment 1 Overview

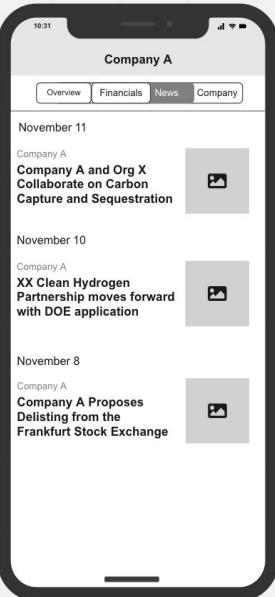
Overview



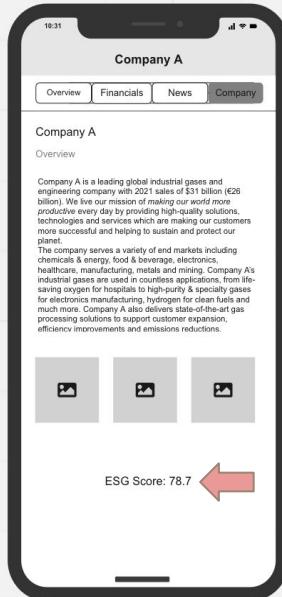
Financial Screen



News Screen



ESG Screen



\$ \$10

1st Round

2nd Round

# Experiment 1 Data Collection

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	Name	P1 A	P1 B	P1 C	P1 D	P1 E	P1 F	P2 A	P2 B	P2 C	P2 D	P2 E	P2 F	Sum P1 ESC	Sum P2 ESC	P1 Weighted E	P2 Weighted ES
2	Ken	0	5	5	0	0	0	0	5	5	0	0	0	10	10	77	77
3	Darlene	0	3	0	5	2	0	0	3	2	3	1	1	3	5	71.5	72.6
4	Serena	0	0	0	8	2	0	0	0	0	8	2	0	0	0	68.8	68.8
5	Zihao	0	3	3	1	0	3	3	3	0	1	3	0	6	6	72.6	74.31
6	Shibo	0	0	0	3	7	0	5	0	0	0	5	0	0	5	68.3	73.35
7	Fansu	3	1	1	2	1	1	3	2	2	1	1	1	5	7	66.11	74.61
8	Isaac	0	0	0	0	5	5	0	5	3	0	0	2	0	8	66.5	74.8
9	Elaine	0	0	0	5	5	0	0	1	0	4	1	4	0	1	68.5	68.2
10	Ivy	2	1	1	4	2	0	0	2	4	3	0	1	4	6	72.34	73.2
11	Alice	1	1	1	1	5	1	1	2	1	0	5	1	3	4	70.67	71.57
12	Jean	1	0	0	9	0	0	1	0	0	9	0	0	1	1	69.97	69.97
13	Hansen	0	4	0	3	0	3	0	4	0	4	0	2	4	4	71.4	71.8
14	Helen	5	0	0	0	5	0	5	2	0	0	3	0	5	7	73.35	75.35
15	Ester	0	2	0	1	4	3	4	2	0	0	1	3	2	6	69.2	73.38
16	Yunxiang	0	0	0	5	5	0	0	0	0	5	5	0	0	0	68.5	68.5
17	Wendy	2.5	2.5	2.5	0	0	2.5	5	2.5	2.5	0	0	0	7.5	10	74.425	77.85
18	Leon	3.3	3.3	3.4	0	0	0	3.3	3.3	3.4	0	0	0	10	10	77.551	77.551
19	Rahul	0.5	2	0	4	1.5	2	1.5	2.5	0	3.5	1	1.5	2.5	4	70.335	72.005
20	Bhuvan	0	0	0	10	0	0	0	0	0	10	0	0	0	0	69	69
21	Nikhil	3	0	0	7	0	0	4	0	0	6	0	0	3	4	71.91	72.88
22	Cynthia	0	0	0	10	0	0	0	0	0	10	0	0	0	0	69	69
23	Rajkulasekar	2	0	0	6	1	1	2	0	0	8	0	0	2	2	70.44	70.94
24	Alice	4	2	2	2	0	0	0	2	4	3	0	1	8	6	76.08	73.2
25	Lucas	2	0	3	0	2	3	1	3	2	2	2	0	5	6	71.64	73.87
26	Qi	1	0	1	2	4	2	2	2	2	0	2	2	6	6	69.47	73.34
27	Lily	0	2	4	2	0	2	1	1	3	1	1	3	6	5	72.8	71.67
28	Lu	1	2	2	3	1	1	2	3	3	0	2	0	5	8	72.67	75.54



# Experiment 1 Overview



27

Gen Z Test  
Takers



\$3.48

Average  
investment in  
ESG companies in  
the First round

71.11

Weighted ESG  
score of  
portfolio in the  
First round

\$4.85

Average  
investment in ESG  
companies in the  
Second round

72.75

Weighted ESG  
score of  
portfolio in the  
Second round

# Experiment 1 Result

**Hypothesis:**

**Money invested in ESG companies in Round 2 is greater than the money invested in ESG companies in Round 1**

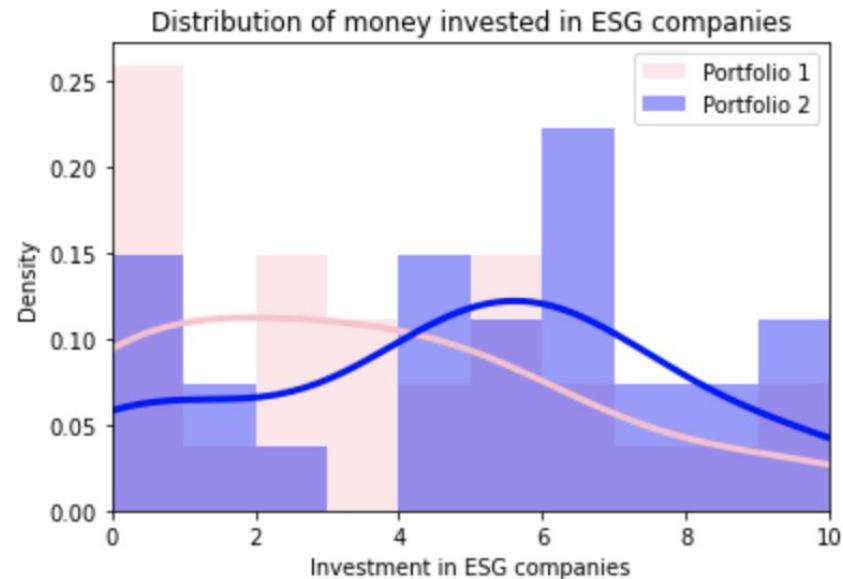
**Result:**

**Mean \$ invest in ESG in R1: \$ 3.48**

**Mean \$ invest in ESG in R2: \$ 4.85**

**P-value: 0.054 (<0.1)**

**We are 90% confident that ESG news would increase GenZ's investment in ESG firms**



# Experiment 1 Result

**Hypothesis:**

**Weighted ESG score of Portfolio 2 is larger than the weighted ESG score of Portfolio 1**

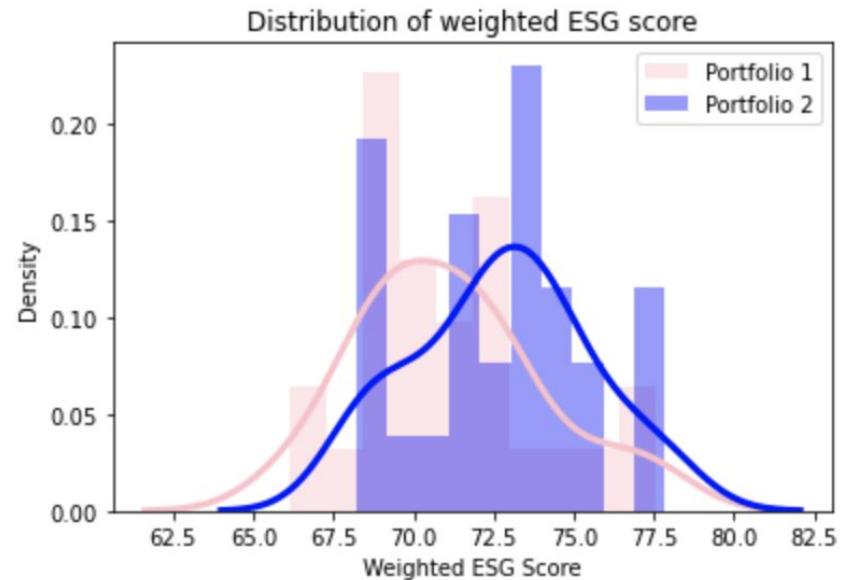
**Result:**

**Mean P1 ESG score: 71.11**

**Mean P2 ESG score: 72.75**

**P-value: 0.018 (<0.05)**

**We are 95% confident that ESG news would increase GenZ's investment ESG scores**





# Experiment 1 Result



We can conclude that Gen Z do care about ESG in their investment strategies



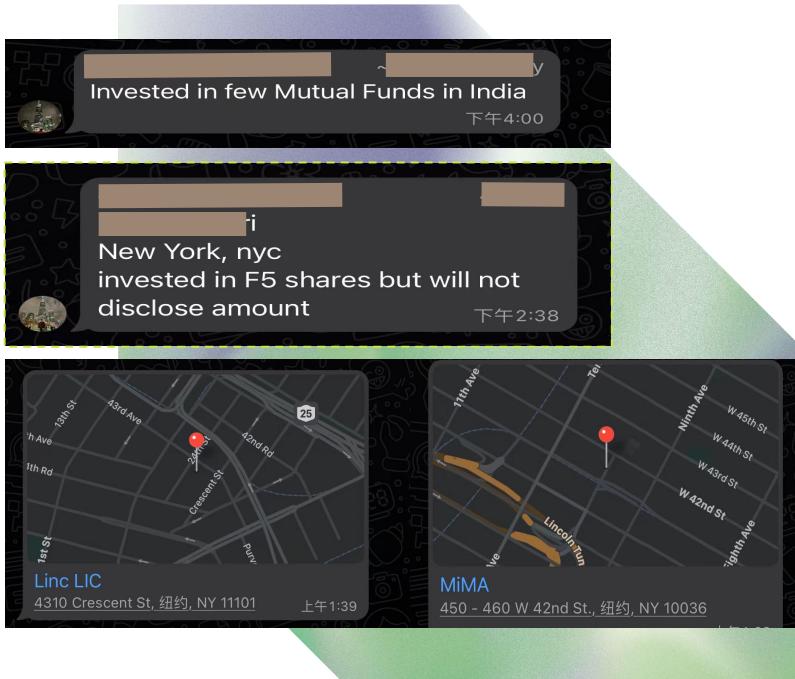
# Experiment 2

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**Objective - Prove Gen Z's are more willing to share their Investment data socially**



# Fail to prove GenZ are more willing to share



**1. Fewer GenZ people doing investments**

**2. Geographical location is shared more often**

**3. Even who share portfolios are hesitant to disclose amounts**

Due to several reasons, including the long thanksgiving break in middle, this experiment doesn't run smoothly as we wished. We suppose to find 20 GenZ and 20 GenY and let them share their investments and location for 7 days. We first found there are relatively fewer GenZ dining investment than GenY,makes us really hard to recruit participants. Perhaps many GenZ are not yet financially independent and are still in school.

Also, among the participants, they are more willing to share their locations rather than portfolio. Even for those who share their portfolios, they may unwilling to disclose the exact amounts.

This may be due to concerns of information protection because we don't have a big brand to endorse us, and the situation could be improved after we enable the degree-of-connection system that you disclose different level of information to different level of friends.

# Experiment 3

**Objective - Prove location proximity improves trust and willingness to seek wealth services**

Investments opportunities and Wealth Services for GenZ  
Network and know more about Investment strategies & services crafted for GenZ

 Rob Taylor, Wealth Manager  
Citibank, New York  
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# Experiment 3 Data

We ran an experiment on 27 GenZ wherein we asked them to sign up for either of the online event one taking place in the same city they live in and one in some different city. 85% chose to sign up the event in the same city as they live and also some mentioned they would personally might want to connect with the manager after the event.

A	B		C	D
1	Name	Current Location	Sign Up Loc	Match
2	ken Su	Newyork	Newyork	1
3	Darlene Dai	Newyork	Newyork	1
4	Serena	Boston	Boston	1
5	Zihao	Newyork	Newyork	1
6	Shibo	Newyork	Newyork	1
7	Fansu	Newyork	Newyork	1
8	Issac	Newyork	Newyork	1
9	Nikhil	Newyork	Newyork	1
10	Akhila	Newyork	Newyork	1
11	Cynthia	Newyork	Newyork	1
12	Rahul Rai	Newyork	Newyork	1
13	Bhuvan	Newyork	Newyork	1
14	Chenming	Newyork	Newyork	1
15	Rajkulashekar	Newyork	Newyork	1
16	Parul	Boston	Boston	1
17	Ming	Newyork	Boston	0
18	Weigi	Newyork	Boston	0
19	Elaine	Boston	Boston	1
20	Ivy	Newyork	Boston	0
21	Alice	Newyork	Newyork	1
22	Jean	Newyork	Newyork	1
23	Hansen	Boston	Newyork	0
24	Helen	Newyork	Newyork	1
25	Ester	Newyork	Newyork	1
26	Yunxiang	Newyork	Newyork	1
27	Wendy	Newyork	Newyork	1
28	Leon	Newyork	Newyork	1

# Location Proximity

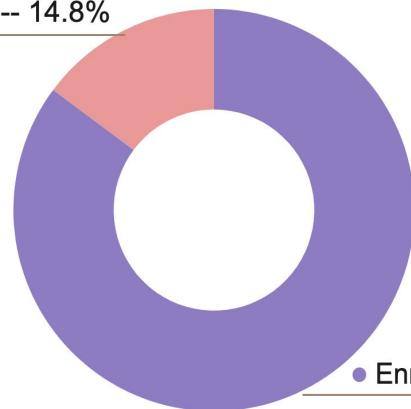
85% chose to sign up the event in the **same city** as they live.

Some mentioned they would personally might want to **connect with the manager** post the event.

P-Value: 0.0000147 (<0.05)

We are 95% confident that location Proximity does play a significant role in improving trust to seek Wealth Services

● Enrolled out of city -- 14.8%



● Enrolled within city -- 85.2%

Total 27 participants

# Final Verdict- our idea is Validated



- Genz's do care about ESG investments and build a community of Genz investors and wealth managers to foster better trust and engagement ' .



- Initially source data from some volunteer investors and wealth managers, and further limit displaying the data basis the order of connection.



- Investment Map feature definitely helps as it would lead to more meetings and conversations. Gender, school connections other investment preference filters can also be introduced.

# THANKS !

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