Stanford Law School Law and Policy Lab

Exploding the Fine Print:

Designing More Effective Legal Disclosures

Designing 21st-Century Disclosures for Financial Decision Making

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Designing 21st-Century Disclosures for Financial Decision Making

Research and design of more engaging and comprehensible user-facing legal and regulatory disclosures

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Abstract

This report details the research and development work of the Spring 2016 Stanford Law School Policy Lab class, Exploding the Fine Print: Designing More Effective Legal Disclosures. The class, in partnership with staff from the U.S. financial industry's self-regulatory body, the Financial Industry Regulatory Authority (FINRA), explored how financial services companies (primarily registered broker-dealers and mutual funds) can communicate effectively terms, conditions, fees, and other information (the "fine print" or disclosures). The class targeted improvements in disclosure in sales material and advertisements regarding financial products and services so that lay people can better comprehend this information. Using a human-centered design approach, the class identified core insights about how "digital-native" millennials interact with the fine print, and how this interaction can be improved. Some of the improvements identified include using more engaging visual design, plain language, technological interactivity, and standardized disclosure styles.

This report summarizes the class's concept designs and suggested guiding principles that companies crafting disclosures and regulators (like FINRA), who set standards for disclosures, can use when defining how to better communicate critical information to people making investment decisions.

Table of Contents

Introduction

How do we design more effective communications of legal and regulatory disclosures? How do we get more people to pay attention to the fine print, and all of the warnings, advice, admonitions and disclosures that are contained within?

This is one of the overarching themes that the Legal Design Lab[1] at Stanford Law School and Institute of Design (d.school) have been researching. Over the past year, we have been studying different types of legal disclosures and experimenting with new models for presenting and interacting with these communications. Our goal is to define the principles, user research, and new models that can guide more effective communications with lay people about legal terms, risks, options, and other material typically conveyed through fine print, lengthy contracts, or policy documents.

In Spring 2014, we ran a two-day workshop on complex information design, in which we worked with interdisciplinary graduate students to redesign legal notices and disclosures for financial products.[2] In Autumn 2015, we ran an experiment in developing new models of privacy policy disclosures for mobile phone users.[3] In that effort, we interviewed young people about their relationships to privacy policies, their needs and goals for protecting their data privacy while using their phone, and what new types of interventions might be most engaging and valuable to them. We prototyped a handful of new models for communicating privacy policies on a mobile phone, tested them with our target users (people in their 20s and 30s who are tech-savvy but not particularly interested in privacy). From this prototyping and testing, we then distilled down to a shortlist of promising new privacy policy models, findings about users, and design principles for those composing future privacy policies to learn from.

Building off this initial design research, in early 2016, we focused on disclosures preceding a financial investment. Partnered with FINRA, our class was given the challenge of engaging ordinary consumers with disclosures made by financial services companies (and required and regulated by FINRA) while the consumer is considering advertising or marketing materials for investment products and services. The goal of the class was to produce insights, concepts, and testing results for FINRA to consider when it

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[1] The Legal Design Lab's site, profiling its work and mission, is at http://legaltechdesign.com

[2] A write-up of this workshop and the models that emerged is available at Cornell's Legal Information Institute's Vox Populli site: https://blog.law.cornell.edu/voxpop/2014/09/05/designing-legal-communications-that-resonate/

[3] See a write-up of this process here, along with concept designs that came out of the class for new models of notice. http://www.legaltechdesign.com/21st-century-privacy-policy-designs/

revises its own policies and leads stakeholder meetings with broker-dealers, government agencies, and others interested in creating an effective disclosure regime that empowers and protects laypeople.

From this mission and partnership, our class further framed the challenge as follows.

> People may not pay attention to disclosures or the fine print or believe that disclosures are of interest to them when considering financial advertising, or specific marketing materials for products or services. How can we help people understand that there may be important information in the form of disclosures or fine print for them to know before they invest and to assist them in making wise decisions?

As a class, and with the encouragement of FINRA staff, we chose to focus in particular on first-time investors in their 20s to early 30s (the Millennial generation), who likely are using tech products as they consider whether and how to invest. FINRA staff members indicated that they are interested in learning about the preferences, needs, and concerns of this particular group in regards to decision-making and disclosures. They were aware that typical marketing communications (print ads and web advertisements) were less likely to be the main source of information about financial investments for this group, and thus the traditional kinds of regulation, aimed at integrating disclosures into these communications, may not effectively work for them.

This report

This report summarizes the class's design research and process that we conducted between January and March 2016.

We share our findings and our concepts primarily with policy-makers as our audience, but we also hope that they will be useful to lawyers who wish to communicate content more effectively, designers who want to understand how best to create effective interventions, and technologists who are exploring new ways to make smart, empowering tools. The insights, concepts, and findings in this report ideally can motivate more work on the challenge of improving lay people's engagement with, comprehension of, and decision-making within complex systems (like those of law and personal finance).

The importance of financial products to consumers

Specifically, mutual funds are important for many people's household finances and retirement planning. One estimate is that 28 percent of US retirement funds are invested

in mutual funds, and that mutual funds hold $15 trillion in assets under management (at the end of 2013), which makes up 22 percent of overall US household financial assets.[4]

The Securities and Exchange Commission (SEC) and FINRA regulate how mutual fund companies communicate with consumers. The SEC rules requires all mutual funds to provide a 'prospectus' document to all shareholders that describes the fund's goals, strategies, risks, fees, past performance, and managers and advisers. It is a complex document with a great deal of legalese and without graphic design techniques that would enhance usability.[5] FINRA's communications rules require all marketing communications used by financial services companies that are members of FINRA to be fair, balanced and not misleading. FINRA's communications rules also require clarity and instruct companies to consider the nature of the audience to which a communication is directed. FINRA rules also require companies that are members of FINRA to file for review all mutual fund general marketing communications such as websites, advertisements, videos and brochures.

Recommendations

This report proposes that disclosures can be made more effective for consumers by using better processes and more design-oriented techniques. Better processes involve user research into the lay audience's mental models, information preferences, and values. More design-oriented techniques mean that the proposed ways to improve disclosure do not involve only the paring down of the amount of text used or the use of Plain English rather than legal jargon, but rather using techniques from visual design and interaction design to involve appropriate visualizations, interactivity, and choice. The net result of the class's research is that effective disclosure may be defined by four factors.

An effective disclosure can be measured by its ability to:

1. **engage** the target audience's attention,
2. improve the audience's **comprehension** of the material presented,
3. improve the individual's **decision-making**, so it corresponds with her own values and interests; and
4. get the individual to **follow through** on the decision she has made.

In order to achieve these outcomes, our exploratory work and research has defined several distinct strategies and standards that can be used. First of all, organizations who are trying to communicate complex legal information to a lay public, whether they be courts, regulators, corporations, or otherwise, need to embrace a new mindset in regards

[4] Investment Company Institute 2015.

[5] SEC 2007 report on prospectuses.

to how they communicate information. There must be a willingness to go beyond the easiest way to communicate information – lengthy passages of legal text – and invest in new models that are more user-friendly. These user-friendly new models are those that have greater interactivity, more transparency, and more visual and story-based presentations. It also means stripping the communication of jargon and complex data, to streamline the message and simplify each stage of the communication.

Our work points to several orders of possible new communication models, from least ambitious to the most. These tiers of new types of communication design can all be useful strategies to improve legal and regulatory disclosures. We would encourage companies, regulators, and other actors to think beyond just the first tier, though often it seems the most attractive because it would not costly or a significant departure from the status quo. We present the higher tiers to set a more ambitious agenda of direction for future types of disclosures.

Tier 1: Plain Language and Good Visual Design

The first tier of better communication design for disclosures focuses on making the standard disclosure text more accessible and easier to consume. The strategies in this tier include the use of plain language standards to simplify the text and the application of core visual design standards to bring greater clarity to the communication.

Some of the practices in Tier 1 include:

- Replacing legal jargon with plain language equivalents
- Writing at an 8th grade reading level
- Shortening the length of sentences
- Increasing the font size of text to 14 or 16pt as default, and never using below 12pt
- Placing the disclosures in contextually smart places – so that users will encounter them (not buried or positioned as footnotes would be) and that they will do so when they are in a decision-making mode (in the best moment when they are hungry for information to make a strategic choice)
- Providing headings that group different types of communications and title them
- Establishing a hierarchy, that put the most generally important (from the perspective of the users) information in prime locations and with greater emphasis
- Laying out the disclosure into tables, bullet point list, check list, and other formats that provide greater structure and comprehensibility
- Using greater white space, avoiding the temptation to overcrowd the communication
- Color-coding information to show groups and hierarchy of the parts of the disclosure more effectively

- Illustrating the disclosure content with visuals like icons, charts, storyboards, short videos, pictograms, and other media that take it out of abstract text and ground it through imagery

Tier 2: Interactive, Staged, and Customized Communications

The second tier is slightly more ambitious, in that it involves making the text more interactive and more graphic. The strategies in this tier give the user more control over what kind of information they see in the communication. This can be done through the use of interactive staging, in which information is shown selectively so as not to overwhelm the user, and to to respond more directly to their interests. It can also be done by providing some amount of customization, in which users express what their particular situation or needs are, and then can adjust the mode or content of the disclosure accordingly.

Tier 2 strategies might include:

- Breaking up lengthy disclosures into stages, of higher level points first, followed up with more detailed and referenced information. The staging can be done through a series of screens, tabs, tooltips, accordions, and other digital interface tools that display a first set of information, and then allow the user to opt into seeing greater amounts of information.
- Letting a user choose from a menu of archetypes, and based on this choice, showing them a curated set of information that is typically most meaningful to this type of user.
- Giving the users a menu of filters or preferences to choose from, and based on their choices, showing them the most relevant disclosure information.
- Making a game of the disclosures, (for example, letting people learn some of the content, and then quizzing them on their knowledge, or giving the user an avatar and having them role-play about how to learn and use the disclosure information to serve this avatar).

Tier 3: Comparisons, Predictions, and Personalization

The third tier of disclosure communication redesign involves even greater interactivity and personalization of it to the user's specific situation and concerns. In this tier, a user is not only selecting what information to see, but can draw from many different data sources and smart algorithms to make better sense of this information through comparisons, analysis, and predictions. This tier of disclosures would help a user more directly ask questions of the disclosures about what is 'normal', what effects and outcomes the disclosure might have on them, and what the 'best' option for their specific situation is.

In tier 3, the types of strategies and tools may include:

- Scenario spinners, that allow a user to enter in some data about their current or future situation, and then provide an analysis about how the disclosure's terms and conditions may affect them, and what kinds of strategies and outcomes might apply to them.
- Comparison tools, that let the user draw in disclosures from multiple providers, and then compare their terms against each other based on the most relevant factors to users.
- Wisdom of the crowd tools, which gather up information from a large number of users who have faced similar disclosures or decisions, and tell the current user what parts of the disclosure should be given the most attention, as well as what effects and outcomes the terms in the disclosure have in fact had on their situations
- Forums and social sites, which allow users to confer with their peers and with subject matter experts about their specific situation, and getting customized responses to their queries.

This tier of disclosure redesign requires more intensive development by the company, or it could be done by the regulator, third party organizations, or collaborations among them.

Tier 4: Education, Cultural, and System-Level Initiatives

This final tier involves the most ambitious types of efforts – to not create just one product or tool, but new organizations and systems. It aims for cultural shifts and system shifts, that would lead to larger changes in how people think about complex topics like finances, law, government regulation and engage with it.

The fourth tier of efforts can include:

- Cultural efforts to improve understanding of the system which the disclosures refer to (finances, medicine, legal, etc.)
- New courses in high school, and college that provide foundational knowledge of complex systems and how to navigate them
- In-person social events that give foundational education about the topic area, and facilitate social networks that allow for conversation, support, and cooperation around smart financial decision-making
- Awareness and branding campaign for the regulator, that helps lay people understand who the regulator is, what they can offer a person, and why they can be trusted

This report will detail the work of the class from Winter and Spring 2016, that led to these recommendations. Our research and development work led to both insights about

how millennials relate to disclosures, regulators, and financial companies, and what types of notices

2. Background Research

The project began from the fundamental assumption that current models of notice – in the form of text paragraphs containing legal jargon – do not effectively engage most lay people, nor does this style of notice help them understand or act upon the information the communication meant to convey. There has been substantial conversation in legal research about the failure of traditional forms of notice,[6] as well as from behavioral economists.[7] Government agencies, including the SEC, have also acknowledged that their traditional lengthy, text-based means of disclosures are not effective communications to most lay consumers.[8] There is a particular challenge in making user-friendly, usable web- and app-based disclosures, since most of the current disclosure models have been crafted for print documents, as government agencies like the FTC have recognized.[9]

Our class's design process began with a review of previous research and proposals about how legal and regulatory disclosures could be communicated more effectively. It built from disparate threads of academic research on designing more effective communication of complex information to lay people. In particular, it builds on work in legal academia (and practitioners) considering how to improve the visual design of contracts in corporate settings and from business-to-consumer. It also draws on research from social sciences about people's decision-making when faced with complex information and choices, like in the domains of data privacy, healthcare, and insurance.

Simplifying text of disclosures is not necessarily effective

[6] Omri Ben-Shahar and Carl Schneider, "The Failure of Mandated Disclosure," 2010, *U of Chicago Law & Economics, Olin Working Paper No. 516*.

[7] Richard Thaler and Will Tucker. "Smarter Information, Smarter Consumers," *Harvard Business Review*. Jan-Feb 2013. https://hbr.org/2013/01/smarter-information-smarter-consumers

[8] Angela Hung, Min Gong, Jeremy Burke, "Effective Disclosures in Financial Decisionmaking," July 2015, DOL, RAND Labor and Population, https://www.dol.gov/ebsa/pdf/conflictofinterestresearchpaper3.pdf

[9] Kleimann Communication Group, "Web-based Financial Privacy Notice: Final Summary Findings Report," 2009, https://www.ftc.gov/system/files/documents/reports/model-form-rule-research-report-creating-web-based-model-form/model_form_rule_research_report_on_creating_a_web-based_model_form.pdf

Ben-Shahar and Chilton studied whether a simplified disclosure of a privacy policy would increase laypeople's comprehension and decision-making.[10] Their version of a simplified design involved laying the information out with headings and bullet-points, rather than in long paragraphs. It did not involve any graphics, reductions of content, media, choices, or other types of design changes. They found that their simplified design did not substantially improve users' comprehension or ability to make self-interested decisions regarding privacy.

This study indicates that merely converting a disclosure communication with plain language and more structured layout (headings and bullet-points) is insufficient to change laypeople's lack of engagement with disclosures, or their ability to comprehend it. It suggested to our class that we needed to think beyond merely using plain language and more headers and categorization to improve the effectiveness of disclosures. Mere 'simplification' of text does not improve the usability of a disclosure.

Factors to consider when designing better disclosures

In the realm of privacy design literature, Florian Schaub, Rebecca Balebako, Adam L. Durity, and Lorrie Faith Cranor lay out the key factors to manipulate when crafting new kinds of disclosures and notices.[11] They define a systematic scheme of what type of factors a disclosure-designer should be conscious of as they choose how to present information to lay people. This scheme can be useful to regulators and two companies, and thinking about next generation disclosures.

The key parts of the scheme for disclosure design include (a) timing, (b) channel, (c) modality, and (d) control. Timing concerns when the notice is presented, recognizing that there are many different ways to time a notice – periodically, just-in-time, on demand, during an introduction to the experience, or persistently. The channel concerns where the notice is presented – on the same platform on which the user is engaging with the product which the notice is referring to (a primary channel), on a different platform that might have more space and ability to detail the information (a secondary channel, like a booklet, or a separate website, or a desktop site when the user is on the mobile or a wearable). Modality of notice concerns how the communication is presented – with options of visual notice, auditory notice, haptic (i.e., through vibration or ambient light or taste) notice, or machine-readable notice. Finally, the factor of

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[10] Omri Ben-Shahar and Adam S. Chilton, "Simplification of Privacy Disclosures: An Experimental Test," (April 13, 2016). University of Chicago Coase-Sandor Institute for Law & Economics Research Paper No. 737. Available at SSRN: http://ssrn.com/abstract=2711474

[11] Florian Schaub, Rebecca Balebako, Adam L. Durity, Lorrie Faith Cranor, "A Design Space for Effective Privacy Notices," Symposium on Usable Privacy and Security 2015, July 22-24, 2015. Available at https://www.usenix.org/system/files/conference/soups2015/soups15-paper-schaub.pdf

control regards how the notice is presented to the user – as an opt-in experience, an opt-out experience, something that blocks the user, something that is completely optional.

In our design work, we took note of this scheme from the privacy disclosure domain, and used it to prompt new kinds of concept designs during our brainstorming and generation phase. The choices around notice design laid out in this scheme provide useful levers to those experimenting with more effective and radical types of disclosure design, to be more aware of how they can go beyond standard text-based notices that are stored on a disclosure part of a website, or are shown to a user immediately before they purchase a product.

More visual communication of legal text improves comprehension

In the world of legal scholarship, particularly around contracts and transactions, there is a burgeoning track of work exploring how communications of legal terms and conditions can be made more user-friendly. In the space of contracts between businesses, Stefania Passera, a designer, and Helena Haapio, a corporate attorney, have been researching how the integration of more visuals into the contract documents can enhance the usability and user experience of these contracts for their end-users.[12] With a priority on user-centeredness, meaning that artifacts should support the user in performing a given task and achieving their goals, Passera and Haapio worked directly with users of contracts to redraft them to be simpler, shorter, and more visual.[13] This involved integrating histograms, process maps, and images into the contract to make sense of the obligations, conditions, and points of reference contained in the document.

After redrafting the document, Passera and Haapio then tested it with people from the corporation's legal team, business team, and sales team. They found that the more visual contract produced less misunderstandings, and was faster to read and understand. The users also had improved user experience, perceiving that the contract would be easier to use and to navigate. It also improved the brand image of the company, in the eyes of the users. The conclusion of the study is that contracts that are more visual, and designed with the principle of user-centeredness, can better allow for knowledge transfer, prevent costly misunderstandings, and reduce frustrations among the users.

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[12] Stefania Passera and Helena Haapio, "User-Centered Contract Design: New Directions in the Quest for Simpler Contract," http://iaccm.com/userfiles/docs/HH_Paper.pdf.
[13] Stefania Passera and Helena Haapio, "Enhancing Contract Usability and User Experience Through Visualization," SHOK Summit 2012, April 25, 2012.

Proposals for new models of disclosures

Beyond the discussions that basic text simplification of disclosures does not seem to improve their usability, and that more visual and user-centered approaches can increase user comprehension, there have also been a crop of new models for disclosures forwarded by academics and practitioners. From our research, we present a shortlist of these new models that we thought might be useful in guiding our own design work around improved financial disclosures and decision-making.

A. Choice Engines

Behavioral economist have touted the rise of the choice engine as a new way to disclose important terms and conditions to consumers, and also facilitate their decision-making around them.[14] This is a category of tools that would let a user sort through various options that they have in front of them, by making interactive comparisons using data points sourced from past users, expert analysis, and other track records. A choice engine is a digital experience, that could happen on a computer or on a mobile phone, and that lays out information — usually in a table or in a search interface — to let a person to sort through a lot of information in a more categorized and directed way. In the ideal, a choice engine will let a user get an overview of what their choices are, and then use the tool to find which would best fit their own preferences, by seeing how different options would actually affect them.

The value of the choice engine is that it allows a consumer not only to see the terms and conditions they would be agreeing to with a contract, but also to use data to compare, weigh, and understand outcomes these terms could have. Choice engines would show the disclosed information in relation to benchmarks and peer offerings. It might also give a predictive analysis, identifying the best action for the person to take.

B. Standardized industry-wide Nutrition Labels

The iconic nutrition facts label that the Food and Drug Administration requires of companies selling food products has inspired many other types of disclosure redesign. In the realm of data privacy, researchers have prototyped 'nutrition labels for privacy' that lay out key features and terms in a systematic grid for users to explore.[15] The value of labels are that they are standardized across providers or companies, so that a user always knows where to look to find key information about a product, as well as how to read the disclosure effectively, because it is so familiar.

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[14] Thaler and Tucker, see footnote 7 above.

[15] Patrick Kelley, J. Bresee, J., Lorrie Faith Cranor, and Robert W. Reeder, "A 'nutrition label' for privacy," 2009, in *Proceedings of the Symposium on Usable Privacy and Security: SOUPS 2009*.

Interestingly, the label can also have the effect of setting a user's expectation that there should be a disclosure in the first place, and that a responsible consumer would read and consider this disclosure as a part of their decision-making about whether and how to use this product. A nutrition label model could possibly set a 'disclosure routine', letting a person easily follow the same pattern of evaluating key terms and conditions, and relieving them of the difficulty of making sense of many individual types of design of disclosure. The standardized presence and composition of the disclosure can allow the user to go into 'auto-pilot' while assessing the product's terms, and also makes it easy to compare products against each other.

C. Visceral Notice

Ryan Calo, a law scholar interested in improving data privacy notice, proposed that disclosure design move towards more "visceral notice", involving other senses to have the communications resonate.[16] This type of notice could include buzzing vibrations, or other physical kinds of interactions. It could include auditory notice, with beeps or other sounds that signify positive, negative or important things. Or, it could use other types of stimuli that catch the attention of our body's senses, in ways that standard text does not. Some examples of visceral notice include speed bumps on roads, that tell a driver to slow down to be in compliance with the speed limit, or in a more digital environment, the app Privacy Bird, created by Carnegie Mellon University (though now phased out of use), that has a bird that chirps at the user whenever they visit a website that has privacy practices which diverged from their privacy preferences.[17]

D. Iconography

Another stream of projects and research has been about adding a visual layer to notices. This includes most prominently, the use of icons to capture and signify the contents of the disclosure text. The icons work as flags, to draw the user's attention and then as shorthands, to summarize the main points of that part of the disclosure and hopefully to stick in the users mind as they make their decisions.

For example, in the domain of privacy notice, several groups have introduced icon sets to represent key parts of data privacy disclosures. Some of these initiatives have come from Mozilla,[18] the designer Aza Raskin,[19] and the Privicons.org project.[20] Apart from privacy, there have been initiatives to create intellectual property-related icon languages by the

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[16] Ryan Calo, "Against Notice Skepticism In Privacy (And Elsewhere)," March 20, 2011, 87 Notre Dame Law Review 1027, Available at SSRN: http://ssrn.com/abstract=1790144

[17] http://www.privacybird.org/

[18] https://wiki.mozilla.org/Privacy_Icons

[19] http://www.azarask.in/blog/post/privacy-icons/

[20] http://privicons.org/

USPTO working in conjunction with the design initiative the Noun Project.[21] These various icon-based disclosures do not aim to be comprehensive replacements for text-based notices, but rather visual complements to make the text more engaging and more memorable. The icons tend to be simplified pictograms rather than detailed illustrations, with some standard shapes in combination to give a sense of what the text notices contain.

E. Staging a Disclosure Walkthrough

A final model that has been put forward as a more user-centered means of communicating legal and regulatory information is the 'staged disclosure'. In this model, the text of the disclosure is reduced to simple, bite-size messages, and often accompanied with an image that reinforces this message. Then the messages are displayed sequentially, one-at-a-time, so that the user is taken through a journey of the disclosure rather than having a single list of all the parts of the communication.

A recent example of this method comes from healthcare, where SAGE Bionetworks invested in a user-centered design process to create a better way of notifying patients of what it means to give consent to medical procedures, and giving them information before they were asked for this consent.[22] This method uses modern web and app design, so that each staged message appears as its own unique card – with large fonts, distinctive images, and high quality visual design. It is not merely breaking up text into paragraphs and having the user click through the paragraphs. Rather, it is creating a 'walkthrough' journey, with each part of the disclosure marked with distinctive imagery, a large takeaway message, and a feeling of progressive understanding as the user follows the path through the staged disclosure.

3. Design and Research Work

Exploratory Work

We began our process with consultations with our key partners in the class. From FINRA, Thomas A. Pappas, Vice President and Amy C. Sochard, Senior Director of FINRA's Advertising Regulation Department, visited our class to answer questions about FINRA's challenge around disclosures and the rules and constraints that it must work within. Alex Gavis, Senior Vice President & Deputy General Counsel of Fidelity Investments also visited the class to explain the disclosure process from a financial institution's point of

[21] http://www.uspto.gov/about-us/organizational-offices/office-under-secretary-and-director/intellectual-property-iconathon

[22] http://sagebase.org/platforms/governance/participant-centered-consent-toolkit/ and for background on the design process, see http://www.slideshare.net/wilbanks/patientcentered-consent

view. He explained how disclosure designs are created with different product and legal groups inside a company, and how interpretations and implementations of regulations influence and guide disclosure requirements and placement.

These introductory and exploratory discussions helped us understand the landscape of stakeholders that are involved in the creation, regulation, and consumption of financial communications.

(One short note – FINRA had asked us to look at the design of disclosures that could accompany 'advertisements' for financial investment products, but the term advertisement is used expansively. In effect, it is public-facing outreach by financial services companies about their investment products and services – and it includes websites and apps they publish regarding these products, in addition to more traditional 'advertisements' in print and television media).

The four key groups of stakeholders are as follows.

1. The financial institutions making the communications,
2. Consumers who potentially see them and use and act upon them as they consider investing money,
3. The government regulators that set rules and uphold standards around how the companies can behave and how to protect consumers, and
4. FINRA, as a non-governmental regulator which enforces both the federal government standards and its own conduct rules.

FINRA's role involves ensuring that companies' communications fall within the regulatory guidance and standards, as well as promoting transparent, predictable, and practical standards to the companies so that they can better understand whether their communications may cause any regulatory problems. These standards are intended to enhance understanding by investors and reduce the risk of rule violations by the companies. Violation of either the federal securities laws or FINRA's conduct standards could have negative consequences for firms from the financial and reputational damage of a regulatory disciplinary action.

A financial services company's interest may not be solely in making a short-term profit.. Companies may want to attract more consumers, satisfy them, and maintain strong relationships with them over a long term.

In addition to our stakeholder interviews, our group also surveyed the literature for strategies to convey complex information in clear, engaging, and empowering ways. From this review, in combination with our initial discussions with subject matter experts and lay users, our class began to scope out what specific challenges and opportunities that we might focus upon during our design work.

We staked out some initial hypotheses about the dynamics between the stakeholders and some promising 'what-ifs' to explore as we created new concepts for communicating legal disclosure. These included: eliminating all fine print; integrating good decision-making education into the disclosure itself; and aiming for a balance of quantity of information disclosed, the contents of the information, and the design of the information.

Our consultations with FINRA also led the class to define a specific type of target user to consider, when creating new designs for disclosures. Our class chose to focus on millennial users, who were in between their early 20s and mid 30s, and who were relatively inexperienced in financial investment. This type of user was of interest to both FINRA and to the class because it seemed that traditional types of disclosures and outreach, in the form of print advertisements, paragraphs of text and footnotes, and even charts of data, did not resonate with them. The challenge is in how to engage this type of user in new, more resonant ways, so that they can effectively understand how to best choose financial investments to suit them.

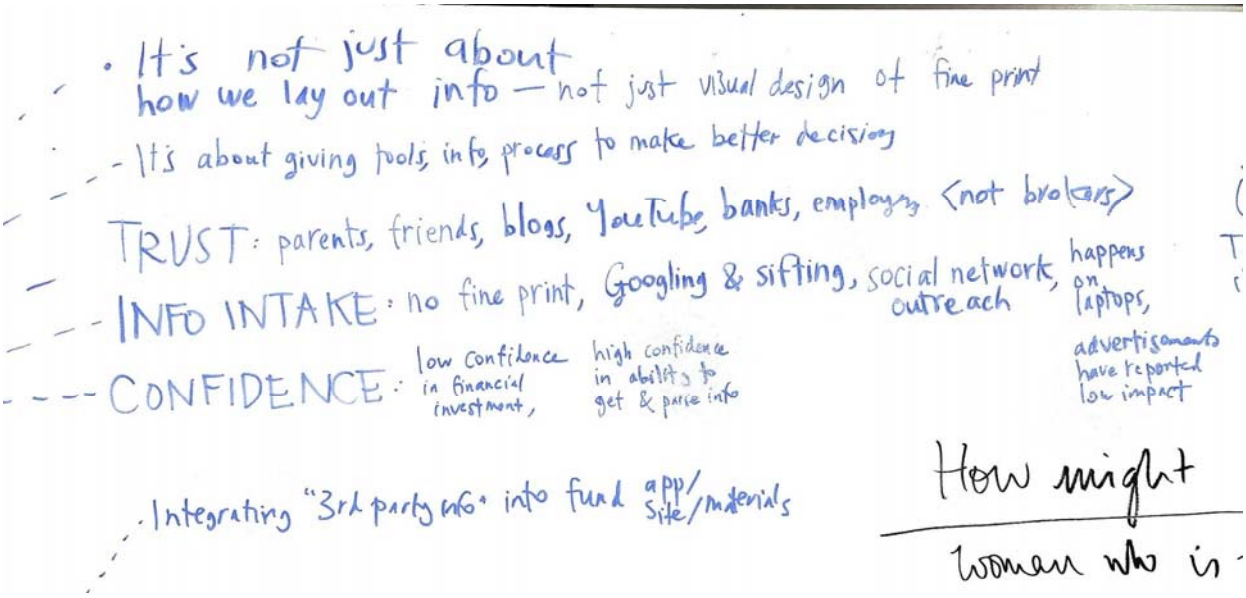
User research with millennial audience

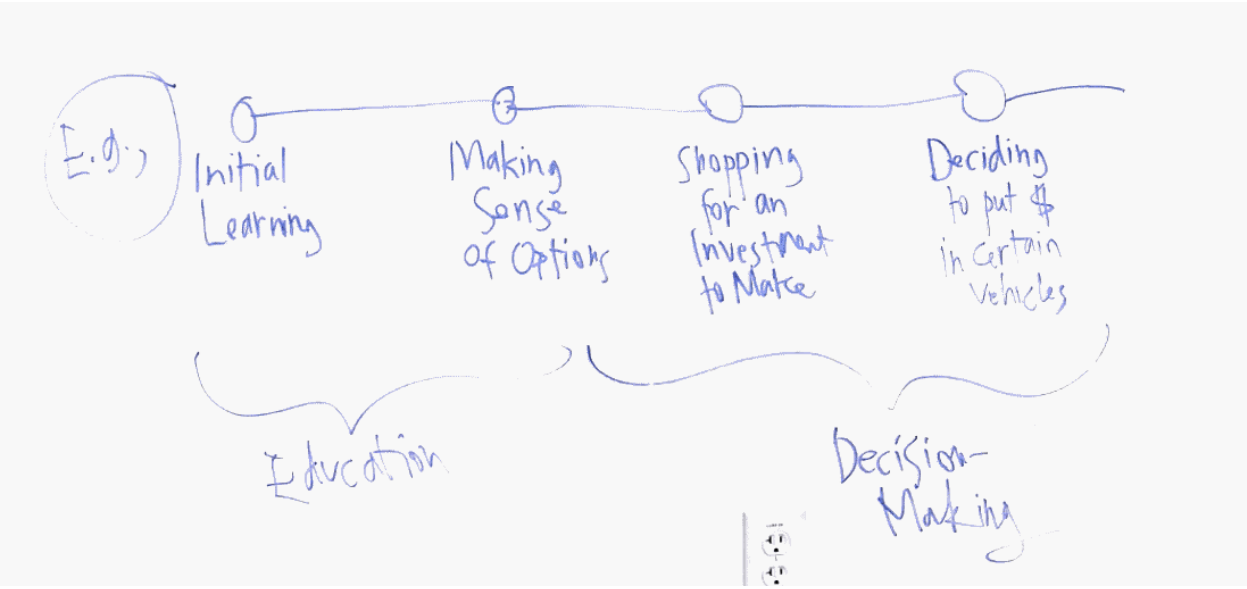
Once the class had selected the millennial demographic as its focus for disclosure redesign, we embarked on user research, using a mixture of methods: on-the-street interviews and in-person focus groups. The purpose of the research was to determine:

- **Current behaviors around investment and disclosures:** How various millennials made decisions about financial investments, and responded to outreach and disclosures by financial investment companies (if at all)
- **Communication preferences:** What types of communication they respond to, what types of devices and experiences they are currently engaged with, and what types of designs they prefer
- **Prioritization of factors:** What parts of the typical disclosure content for financial investment is of greatest priority when making financial decisions
- **Trust:** What kinds of sources and presentations already instill trust (and engagement) – whether specifically around financial decision-making, or other complex decisions?

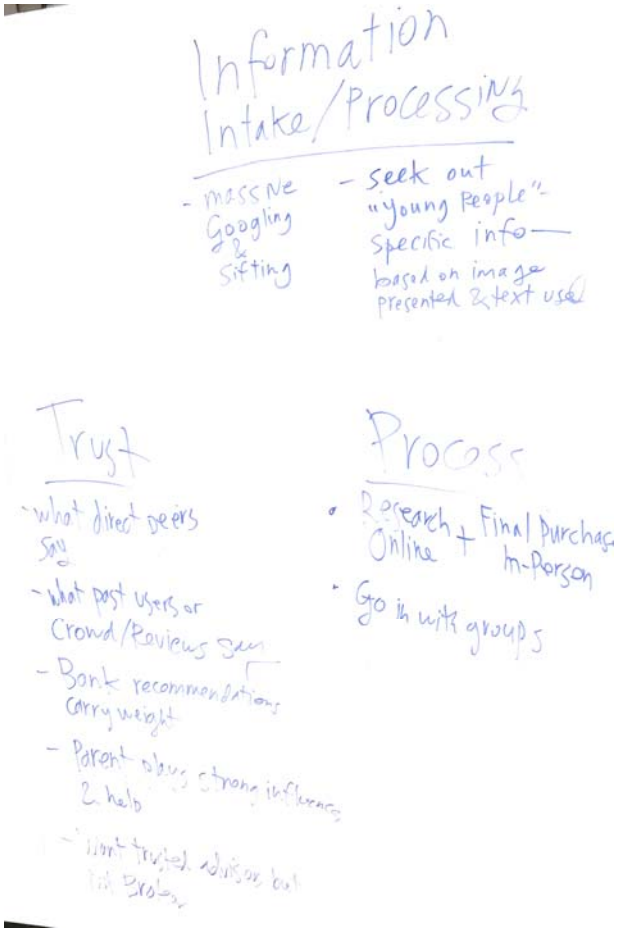
We explored these questions with a wide range of millennials via two methods. First, we conducted on-the-street interviews, in which we approached a range of people on Stanford campus to ask them in 5-10 minute discussions about their behaviors and preferences. This initial pass of conversations was meant to surface some themes and general reactions, that we could then use to direct our more structured research. Our second method was to recruit ten millennials from around the Bay Area to sit down for 30-50 minute semi-structured interviews. In these sessions, the class groups spoke with one or two participants at a time, in depth about their behaviors and their needs around financial investment decision-making, and their relationship with various disclosures. These discussions allowed our class to test our first hypotheses about what the current fail-points are with status quo disclosures, and to get early reactions to some of the new concepts we were considering.

The findings that emerged from the research are summarized below. We include some images of our synthesis process, as we shared out our notes from the research and listed out common, prominent themes.





Some common themes in user's discussion of financial investment decision-making is that they don't read disclosures currently, though they are hungry for trusted sources to guide them because they have low confidence in their own ability to navigate these decisions. They want better tools to make these decisions, and currently they try to do this by going through personal networks, online peer-to-peer networks like YouTube and blogs, or massive Google searches that they search through.



We also learned that there is a common track that the users went through regarding financial decision-making. There were two phases. First: 'Education,' in which they started to learn about this topic and make sense of the terminology, offerings, and factors they should consider. Second: 'Decision-making,' in which they began to think more concretely about what decision would best suit them and craft a strategy to decide exactly how to behave. This process-view of the situation revealed the question of whether there could be different kinds of regulatory communications or disclosures for these different touchpoints. Also, it raised the question of when the typical disclosure about terms and conditions is most useful to the user – is it during early education, as they are making sense of their options, when they are shopping and comparing opportunities, or just as they are deciding (or even after they have decided)?

The research also revealed the importance of online resources. Our users relied on Google, blogs, YouTube, and other online 'research' tools for education and background information leading up to decision-making. They were also using (or interested in using) app-based investment tools that dramatically streamlined the process or had modern, clean user interfaces, like Acorns and Robin Hood. They sought out 'wisdom of the crowds' online, to see what was normal and average, and felt they could rely on that. They also expressed trust for parents, friends, and their current banks. They did not want to engage with financial companies directly, because they did not feel they could trust information coming directly from the companies providing the investment products.

Key Takeaways from initial User Research

The most important themes from our class's initial user research into millennials' behavior and preferences regarding financial investment disclosures can be summarized into a series of points.

Lack of engagement with current disclosures: "they're not for me"

Lay people will hardly ever (if never) click to look at the fine print of disclosures. They will not choose to peruse, or even glance at, the policy document, the contract, or the paragraphs of disclosures.

The respondents think that disclosures (as they are currently communicated) are for regulators and other lawyers. They do not consider themselves the target audience for this communication. It is for 'lawyers, from lawyers'. Accordingly, they don't engage with the communication. They don't think it is speaking to them, or that it is worth their attention. Put simply, they think "disclosures are not for me."

There is a self-confidence gap around wise decision-making

The participants did not feel that they knew enough about financial matters to make wise decisions. That didn't lead them to read disclosures or other fine print from companies, though. Rather, it made them reach out to other sources, like family, friends, blogs, YouTube videos, and online forums, in order to build their knowledge. This lack of confidence was not necessarily grounded in truth, either. When one team tested focus group members using FINRA's Investor quiz, to assess their knowledge about investing, the participants scored well, though they doubted their own knowledge and ability. This lack of confidence made them cautious about making investments, and more likely to reach out to social networks and third-party authorities to guide them in their behavior. It did not lead to their engagement with fine print or other mandatory disclosures.

Search for a trusted advisor

Many people in our focus groups reported that they wish they had a 'trusted advisor' in the area of financial investments. When asked for examples of who this advisor might be, they referenced a parent, a knowledgeable friend, or the collective of their online social networks. Others mentioned banks, universities, or employers, that they would trust what these institutions, with which they had long-term relations, had to recommend to them for investments. Another possible source of trusted advisors was online, in the form of experts who blogged, wrote articles, created comparison tools, or provided media-based guides to smart investment.

Hunger for useful, neutral information through Internet searches (but not disclosures)

One of the most surprising findings from our focus group interviews was that users had a strong hunger for in-depth, complex information about how their potential financial investments will work, what the drawbacks and advantages of different plans are, and how they should evaluate different options. This hunger does not translate into engagement with disclosures. Among several of our participants, this manifested as extensive Internet

searches and reading for third-party neutral information. The participants were not necessarily discriminate about where they read information, based on source, but rather read voraciously from blogs, public forums, magazines and newspapers, and YouTube. Their strategy was to consume as much conversation and advice about financial investment strategies, and then to sift through the information looking for common themes. Essentially, this type of users reasoned that if they are smart Internet searchers, consumers, and sifters, so they relied upon this skill to provide them guidance enough to understand investment.

Interestingly, they did not consider companies' disclosures as part of the reading they would do in their information search, or as a final thing to check before making their investment choice. This is a paradox that our research and development aimed to tackle: how do we engage users with the content of the disclosures, when they are hungry for this kind of information but don't find the disclosures (at least in their current design and context) worth looking at? They do not see terms and conditions policies, or footnote disclosures, as speaking to them – so what kind of presentation would make them tune in?

Graphs and charts often undermine the communication

Many of our participants, particularly those who were 'rookie' investors and not confident in financial matters, were put off by communications that included charts and graphs about financial performance of investment products. They did not find these visuals legible. Rather, they indicated it took too much mental effort and background research to understand what these types of visuals were actually communicating, and how it should affect their decision-making.

Value on the political and social impact of finance

Another theme from the focus groups was the importance of values and sustainability in the investment decisions. Some of our participants wanted insights into how their potential investment would be spent, and what the political, environmental, and other values-based dynamics would be about this investment. The participants wished there were more disclosures and transparency around these dimensions of investments.

Persona Archetypes and Design Briefs

These findings about millennials' relationship to information disclosures and financial investments shaped two of our design deliverables: first, personas that summarized the archetypal users our concept designs would target, and second, the design briefs that define the challenge for disclosure design for this particular user.

The groups' personas were all variations of a millennial relatively inexperienced with financial investment. Each of the groups focused on a U.S. millennial in their mid-20s, at the start of their career, with an interest in investing but a lack of confidence about how to do so intelligently. This archetypal user aspired to be more self-sufficient and to make decisions that would give her more choice and confidence in her future. She knows she wants to start planning to obtain her future goals around travel, building a family, having a house, and other large expenses that seem somewhat far away, as well as for retirement, which seems quite distant. She is a quick learner, who can use technology without fear and feels confident in her ability to search and sort to find good answers. But she is also busy, and does not want to feel as if she is wasting time or drowning in details that don't directly make her more strategic about her decisions. She has a strong online network, a close group of family members whom she speaks with about life decisions and 'adult' topics, and feels comfortable talking about her income and finances within her network of family and close friends.

This user archetype was then the basis for the groups to create scoped versions of the class's initial challenge: of how to improve the millennial's engagement with and use of disclosures around financial investments. The scoped challenge statements were framed as design briefs that each of the three design groups began brainstorming with, as a springboard to new concept designs. The three design briefs were as follows:

1. How might we help an easy-going woman who is procrastinating on income management and just enjoying life to develop a strategic financial plan, she she has no idea about her financial needs and is avoiding the learning process?
2. How might we help a young professional with limited investment experience match their independent investment selections with their preferences, in light of the investor's belief that disclosures are not for them?
3. How might we help a well-educated, digitally savvy, financially resourceful first-time investor achieve financial literacy and feel confident making financial decisions because FINRA wants to engage, inform, and encourage first time investors while steering them toward investments that meet their risk tolerance and needs, without affecting their autonomy?

These design briefs all point to improved decision-making for millennials considering making their first financial investments, but take slightly different emphases. The first brief took the position that a focus on basic education was a necessary precursor to any effective disclosure, and so took a wider view of what types of interventions would be needed to lead to improved disclosures. The second brief is more concerned directly with creating ways to help the user make sense of options and choose the best one. The third tries to weave the concerns together, recognizing the need for both foundational educational interventions, tied into direct decision-making tools.

Rapid Prototyping and Testing

After creating design briefs, the teams then brainstormed new ways to accomplish the challenges defined in them. The students were encouraged to think beyond the traditional disclosure method of providing paragraphs of legal text, to consider new ways to communicate the contents of the disclosure and to make it meaningful to the end-user. With this ambit, several of the groups proposed concepts that departed from the disclosure itself – instead finding it potentially more meaningful to support wise decision-making and understanding of crucial terms about investments through different means.

One group, in Cluster 3 of the ideas listed below, focused more directly on revising status quo disclosures, while the other groups prioritized other kinds of experiences and communications as more meaningful for giving the user necessary foundations to make sense of financial decision-makings and appreciate the importance of disclosures. Their driving assumption was: no matter how well-designed a disclosure is, if the user has not been equipped with the knowledge of the domain, the regulator, and the possible risks around bad decisions, then it will not truly serve its purpose of protecting the user.

Cluster 1: Improving FINRA's outreach to and education of consumers

- An online FINRA-sponsored **self-profiling questionnaire** to help a user define their own investment preferences, by answering a quick series of questions that would then diagnose for the user what they should pay attention to, and how they should go about decision-making as they embarked on financial investment
- General online and print material **FINRA branding campaign,** to indicate what its role is, and to encourage consumers to engage with its resources, as well as the disclosures it requires of financial companies. It can leverage its 3rd party neutral status to build a relationship as a trusted advisor to millennials.
- FINRA **on-campus outreach**, in which the regulator would attempt to build a stronger brand, to raise awareness among college-aged and graduate student-aged millennials, about the importance of being financially savvy and how to make smart financial decisions
- In addition to this campaign, the launch of an **online FINRA-sponsored, user-focused question forum**, that would let lay people pose questions about financial investments, terms, risks, fees, and other considerations about how to act wisely while investing. The answers could be provided by other users (peers), representatives of companies and third parties, and from FINRA staff as well.
- **FINRA grading scale**, that would rank products on a scale based on the terms they offer the user, so that users can easily measure products against each other, using the metrics offered by a trusted neutral third-party regulator.

Cluster 2: Preparing millennial consumers to make wise financial investments, through social experiences and simulations

- A **financial investment game app**, that would let a person mock-invest in different products and see the outcomes that result. It would allow for role-playing and simulation to give the person test-runs with strategies, and the ability to have 'do-overs', in which they can learn how to be more discerning about terms and conditions, as well as more definite about what their own risk tolerance and preferred outcomes are. The simulation could possibly morph into a real investing experience, if the user wanted to go from 'practice' mode to 'real' mode.
- **Social group investing,** in the form of an online-facilitated network with people you know and trust in real life, to share explicitly and deliberately how you choose what to invest in, and to track outcomes with friends – at first fictionally, then for real
- **In-person meet-ups** among interested millennials, considering how to be more financially savvy and embark on investing, that introduce key concepts and disclosure content, but in a social and conversational setting. The education and decision-making support are introduced in-person, through both subject matter

experts (from trusted institutions) and reinforced through peer-to-peer conversations

Cluster 3: Improved presentation of terms of financial investments, targeted at preferences of millennial consumers

- Use of **visual cues i**n disclosures that flag that disclosure content is important, approachable, and consumer-directed, with more imagery, bolder fonts, more prominent placement – drawing from styles that are already popular with millennials in other publications, advertisements, and web content to show that the disclosures matter and "are for you"
- **An interactive tool** that let a user express what their concerns and preferences are around financial investments, and then respond with suggestions about (a) what parts of the disclosure the user should focus on, giving them a prioritized and summarized set of points tailored to them, or (b) what investment products fit their situation, with explanation including the disclosure materials to help them understand why the terms of this product are best for them
- **Socially-flagged disclosures**, which take the typical disclosure text or graphs, and then mark them up with notes about what other users find useful, and what takeaways others learn from them – in effect training the user about how how read the disclosure and make sense of its contents
- **Required friction with disclosure content**, that again takes the standard disclosure text, but now requires that users click consent to individual clauses, or must click through a staged version of the disclosure that is shown message-by-message rather than all at once. Another type of friction would be a quiz about the disclosure content that a user would have to pass before they would be allowed to make a decision.

These were the ideas that emerged out of the initial brainstorm, which the groups considered both breakthrough and viable. The point of this crop of ideas was not to create the perfect concept, but rather to test our hypotheses about what the target user would engage with, and what subject matter experts thought could actually be implemented to some success.

Evaluation of Initial Proposed Redesigns

Target users gave mixed reviews to the concepts. The class did on-the-street testing, presenting the ideas to approximately 30 people who fit the target user description. Each of the respondents were shown 'concept posters' of individual designs, with a title, illustration, and short description conveying the basics of the proposal. They were then asked to give critical feedback, specifically in regards to whether the proposal would

engage them (get them to use it), increase their comprehension (help them understand how to wisely make financial investments), and to help them follow-through on this wise decision-making. The themes of the user responses are as follows.

Avoid over-complicated or demanding initiatives

A general reaction was that any concept that would take a large amount of time or a large deviation from their current practices would not work for them. In this category were FINRA on-campus outreach, or in-person meet-ups around financial decision-making. There was resistance to these ideas as too demanding, mainly because they required in-person interactions, and without enough benefit to be attractive. Some users did express that they would appreciate the chance to speak with a neutral party face-to-face, but this was not the majority view.

Ignorance of/Disinterest in FINRA

Additionally, there was very low awareness of FINRA as a body, or its basic purpose. This meant that concepts centered on FINRA did not resonate with the users, because they did not know enough about the agency to want to learn more about it. Increased branding or outreach efforts did not excite the target users, because they did not see the value to them. When FINRA was explained to them, they did not clearly understand its role, because it was not clearly a government agency, so there was some questions about who FINRA represented.

Social holds promise

Social group investing was also seen as potentially too demanding of time and attention, but there was potentially more value in it, if it was relatively easy to bring the network together and if there was some added bonus apparent from operating in the group. The concept of having more social input and sharing of knowledge around smart decision-making tested well, whether it meant investing together, or as from Cluster 3, learning about how others have made decisions and what information has been useful to them. Respondents found value in hearing how people in their direct network, as well as a larger crowd, behave and weigh options. If social decision-making was quite easy to join into, they would have an appetite to try it out among their friends, roommates, or other relatively close network. Social cues around the disclosures would also engage them. They would look at the terms and factors that others have found most meaningful in order to gauge what is 'normal' to do when interacting with disclosures, as well as a shortcut to make use of the disclosures in a more efficient way.

Tell me more about me

The ideas of a self-profiling questionnaire or a financial investment game app tested better. Respondents felt there would be some benefit they would derive in learning about what type of investor they should be, and knowing more about how different choices might play out for them. These tools would allow for self-reflection and were oriented more around self-development, which made them attractive to the target users.

Less is More, but still give me oversight to know I'm covered

Users appreciated the designs in Cluster 3 that reduced the amount of text they would be confronted with initially, though they still wanted the chance to dig into more details in case so that they would know the short recap was based on something more substantial. They also expressed an interest to know that they "are covered" – meaning that they are not missing key information – while also not having to consume too much information. They want a simple experience, but one that is still comprehensive enough that they are assured they don't have large blind spots while entering into decision-making. This leads to the insight that there needs to be a fairly dramatic paring down of the status quo style of text disclosure of every single term and condition, but not to a single grade or other radically simple summary. A successful "less is more" approach would still give the user oversight of the key categories of disclosure content, and the main points to know within these key categories – but not over-disclosing with too many details or with categories that do not in fact contribute to good decision-making.

Interactive and visual disclosures would be better, but still I don't want to read disclosures

The concepts in Cluster 3, which give visual facelifts to the current text disclosures or provide some more interactive searching and comparison, tested generally well. Respondents said they still might not engage with them, because they are not always in the mood to 'read the fine print'. If they were offered by a neutral third party, or were more clearly presented as something giving obvious value to the user, then this increases the chance of engagement. One large value of the more visual design approach is that it would help people overcome their lack of confidence in being able to navigate the disclosures. One user responded "I'd like to see pop-outs that put terms and fee information into graphical representation… I understand a lot of the differences but still feel nervous that I'm missing some hidden things."

Smart, interactive tools that would let a user easily compare the terms contained in one product's disclosure with a similar product's was considered quite valuable. It resonated as something familiar to other shopping and planning comparison tools, like on Google Shopping or on Kayak. Visual additions to the disclosure, or a more systematic layout of the disclosure in a table, might increase the respondent's likelihood to pay attention to it,

but still suffered from the fact that it seemed like 'fine print' that could be extra details, beyond what the user wanted to engage with. Forced engagement with a disclosure, like through more click-throughs or a mandatory quiz, received poor responses, because it seemed like forcing unwanted content on the user.

Stay within the Regulator's ambit, with improvements on the traditional disclosure

Feedback from subject matter experts was also helpful in prioritizing what types of designs would be most viable, from both the regulator and the financial company's perspective. The ideas in Cluster 3, around improving the visual design and interactivity of traditional disclosures were the most warmly received. There was interest in 'tiering' information, so that it was staged into more discrete sections, and that would allow for more modular engagement – a user could dive deep into the details which she cared about, and avoid details that concern matters of less priority. There was also interest in integrating lightweight visuals, and cleaner visual designs that allowed for more white space, more readable fonts, and greater hierarchy. These ideas fell more directly into the established notion of how to communicate disclosure content to lay people, and so were judged to be more likely to be put into effect as suggestions from regulators or new designs from companies.

The proposals that involved the production of new apps, social events, group investing, or educational campaigns were sidelined, as too far afield from FINRA's ambit. Even if there is value to user, it did not seem to be in the ambit of the regulator to launch initiatives that were not directly related to disclosure through text, graphics, or a web tool. Some experts suggested that other companies or nonprofits might want to explore those more social or educational initiatives, rather than regulators.

The experts also gave negative feedback to any proposal that would involve FINRA evaluate financial products or monitoring investors' communications. The notion of a regulator sponsoring a grading scale for users was considered non-viable, because it would involve an entirely different regulatory paradigm. Even if users want this type of straightforward assessment from a neutral, consumer-centered third-party, the experts gave the feedback that FINRA is not in the position to play this role.

Revised Concept Design Proposals

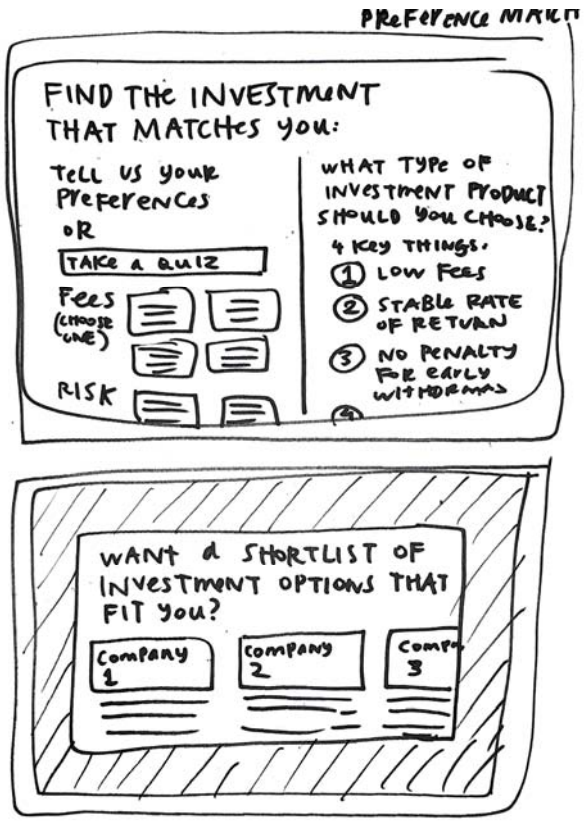
Based on the feedback from target users and subject matter experts, each of the three groups worked to either improve the ideas they had earlier proposed (if they had received positive responses during testing) or to pivot to new concepts that fit more closely with the feedback gathered during the testing. These revised concept designs were

fleshed out in greater detail, and were presented during the class's final review session, for further comment from our class partners.

These proposals still are early-stage prototypes, consisting of envisionment sketches and short descriptions. If there is interest in implementation of pilots of any of them, then the next step would be to develop functional versions of the concepts, in the form of 'minimum viable products' that could be deployed in the field and used to gather empirical results about engagement, comprehension, and follow-through by users.

Note: Larger versions of these images are attached in Appendix A at the end of this document, along with sketches from the earlier first-round concepts. If

Concept Sketch



Concept Description

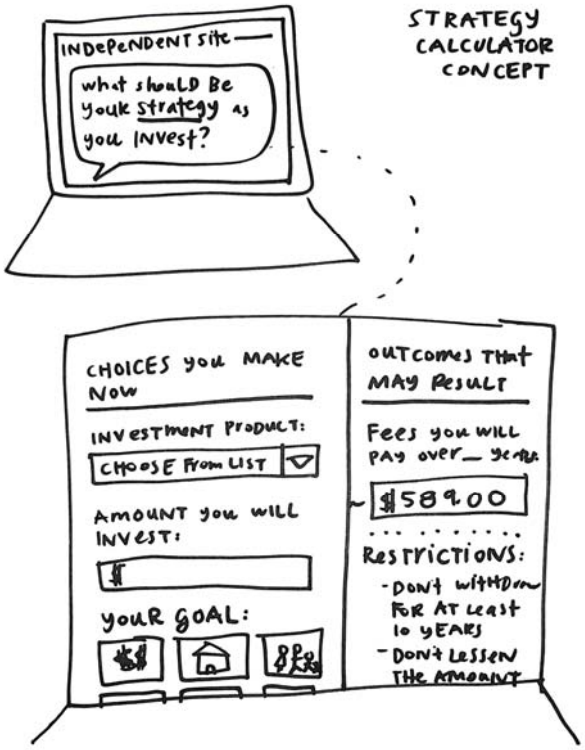
Preference Matching Tool

This tool is a web application that would let a person enter in their preferences in standard categories. They would choose from small, controlled menus about fees, risk tolerance, timeline, goals, etc.

The tool would process this information to deliver back two categories of content:

1) A set of commandments this person should use when making financial investments, personalized to their chosen preferences. This will help the person understand what their shortlist of factors are, that they should look for when choosing products and evaluating their conditions.

2) A set of investment options that may fit these preferences. If this app is hosted on a third-party site, then it can present a range of appropriate options from many different companies. If it is hosted on a company site, it can be products offered from this one company.



Strategy Calculator/Scenario Spinner

This interactive web/mobile application would provide customized guidance to a user. Ideally, it would be created and hosted by a third-party, neutral organization. A user would visit it when they are weighing and crafting a strategy for their finances.

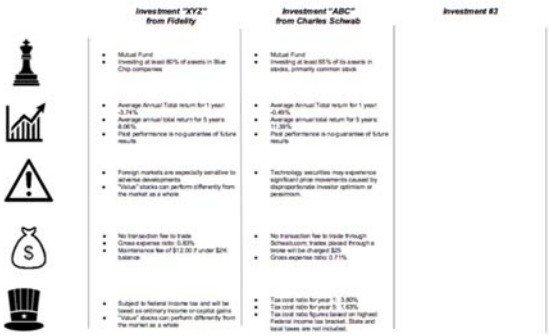
The tool would ask them to enter in a small amount of variables: inputs about the financial products they are considering, the kinds of money they would be investing, and the goals they have (for example). As the user enters in these variables, it immediately displays what kinds of outcomes the user can expect. It would show relevant fees, terms, conditions, restrictions, and flags that the user should know about – if they were to pursue this path.

Investicons and Table-based Disclosure

This is a visual redesign of the traditional disclosure. It categorizes the information into distinct columns, and marks them with clear headers and pictograms to make them more comprehensible and approachable.

In addition, the disclosures are summarized into digestible summaries, and paired with choices for the user to take. If the user wants more information, they can click on the links within the matrix to see the full legal wording.

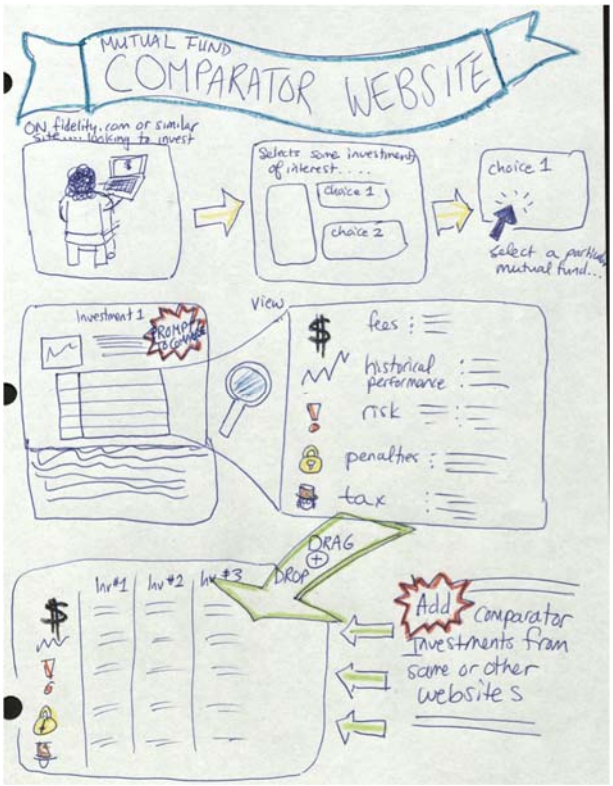
The column-layout allows users to jump more quickly to parts of the disclosure that matters the most.
The design principle at work is 'addition by subtraction' – by cutting information out, and providing more white space, the user is given more quality information that is easier to engage with.
The investicons could also be used apart from the official 'disclosure communication', and integrated into advertisements and anywhere else some disclosure must occur. The use of the same visuals will allow more literacy and engagement with the disclosures.

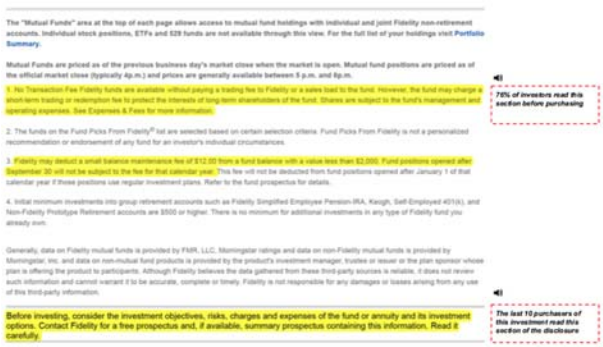


Investment "XYZ" from Fidelity	Investment "ABC" from Charles Schwab	Investment #3
• Mutual Fund • Investing at least 80% of assets in Blue Chip companies	• Mutual Fund • Investing at least 65% of its assets in stocks, primarily common stock	
• Average Annual Total return for 1 year: -3.74% • Average annual total return for 5 years: 8.06 % • Past performance is no guarantee of future results	• Average Annual Total return for 1 year: -0.49% • Average annual total return for 5 years: 11.39% • Past performance is no guarantee of future results	
• Foreign markets are especially sensitive to adverse developments • "Value" stocks can perform differently from the market as a whole	• Technology securities may experience significant price movements caused by disproportionate investor optimism or pessimism.	
• No transaction fee to trade • Gross expense ratio: 0.80% • Maintenance fee of $12.00 if under $2K balance	• No transaction fee to trade through Schwab.com; trades placed through a broke will be charged $25 • Gross expense ratio: 0.71%	
• Subject to federal income tax and will be taxed as ordinary income or capital gains • "Value" stocks can perform differently from the market as a whole	• Tax cost ratio for year 1: 3.80% • Tax cost ratio for year 5: 1.63% • Tax cost ratio figures based on highest Federal income tax bracket. State and local taxes are not included.	

Comparator Tool

This tool would allow users to compare investment opportunities based on their core factors (including those included in the disclosures). The options could be pulled from one company or many. Ideally, this tool would allow users to search based on the factors they value, and then surface the best option based on the search.
The comparator tool could also be created and hosted by third parties (non-regulators, and non-financial services companies) who have access to standardized data about the financial investment options and disclosures, and use this to provide a comparator tool to consumers.





The "Mutual Funds" area at the top of each page allows access to mutual fund holdings with individual and joint Fidelity non-retirement accounts. Individual stock positions, ETFs and 529 funds are not available through this view. For the full list of your holdings visit Portfolio Summary.

Mutual Funds are priced as of the previous business day's market close when the market is open. Mutual fund positions are priced as of the official market close (typically 4p.m.) and prices are generally available between 5 p.m. and 6p.m.

1. No Transaction Fee Fidelity funds are available without paying a trading fee to Fidelity or a sales load to the fund. However, the fund may charge a short-term trading or redemption fee to protect the interests of long-term shareholders of the fund. Shares are subject to the fund's management and operating expenses. See Expenses & Fees for more information.

70% of investors read this section before purchasing

2. The funds on the Fund Picks From Fidelity® list are selected based on certain selection criteria. Fund Picks From Fidelity is not a personalized recommendation or endorsement of any fund for an investor's individual circumstances.

3. Fidelity may deduct a small balance maintenance fee of $12.00 from a fund balance with a value less than $2,000. Fund positions opened after September 30 will not be subject to the fee for that calendar year. This fee will not be deducted from fund positions opened after January 1 of that calendar year if those positions use regular investment plans. Refer to the fund prospectus for details.

4. Initial minimum investments into group retirement accounts such as Fidelity Simplified Employee Pension-IRA, Keogh, Self-Employed 401(k), and Non-Fidelity Prototype Retirement accounts are $500 or higher. There is no minimum for additional investments in any type of Fidelity fund you already own.

Generally, data on Fidelity mutual funds is provided by FMR, LLC. Morningstar ratings and data on non-Fidelity mutual funds is provided by Morningstar, Inc. and data on non-mutual fund products is provided by the product's investment manager, trustee or issuer or the plan sponsor whose plan is offering the product to participants. Although Fidelity believes the data gathered from these third-party sources is reliable, it does not review such information and cannot warrant it to be accurate, complete or timely. Fidelity is not responsible for any damages or losses arising from any use of this third-party information.

Before investing, consider the investment objectives, risks, charges and expenses of the fund or annuity and its investment options. Contact Fidelity for a free prospectus and, if available, summary prospectus containing this information. Read it carefully.

The last 10 purchasers of this investment read this section of the disclosure

Social Signaling

Integrate social messages into the disclosure, that communicate to the reader what other users find valuable, what concerns them, and what is 'normal' around the disclosures. This could be done with visual markers, pop-ups, or annotations.

These different indicators would provide social hotspots on top of the standard disclosure, to give users more of the social feel that they value, and more information about what the 'crowd' is doing and what it values. It would tap into users' interest in crowd-wisdom and give them a desired sense of what 'most people' care about and think through disclosures.

The Smoking Warning Label
This design provides a very short and blunt advisory that tells users that they should pay attention to the content. Its message is that they could face negative consequences if they don't understand and use the information.

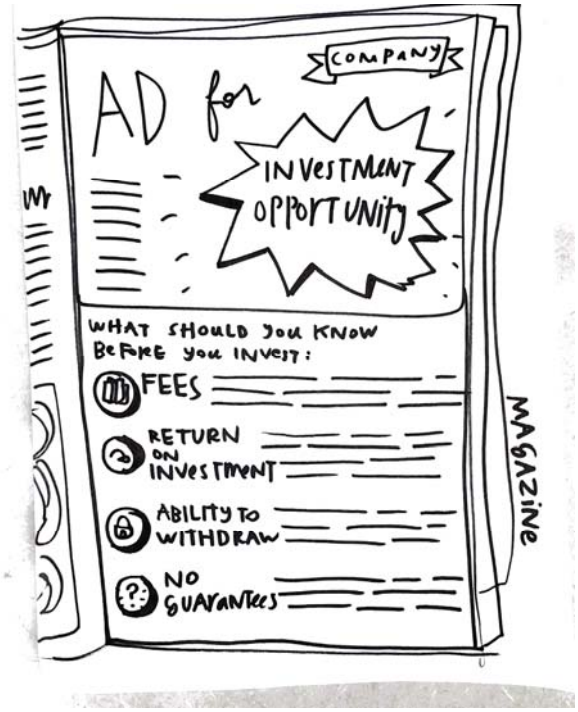
These labels can give priority to the more consequential disclosures. They can be big-flag warnings, that visually shout at the user "This Could Potentially Harm You, Pay Attention!".

Online, the label could pop-out. It could require a click-through to move past it. In print, it could take a defined amount of real-estate on the page.

The Nutrition Label (online version)
This concept provides a standardized layout for all of the items being disclosed. The composition is organized with headings and standard locations for each item. Across any product, the same information type will be in the same place. The disclosures are standardized across the industry, and the composition features more categorization and summaries that help the user get a snapshot more easily.

Online, either on a mobile phone or on a desktop, the nutrition label could be presented through a button/dialog box that explicitly asks the user to question "Is this right for you?" or "What should you know before you

choose this?" Then, upon click of this dialog, the user would see the standardized layout of categorized disclosure terms.



The Nutrition Label (print version)
Similar to the online version above, the print version of a disclosure nutrition label would have a standardized set of icons and layout for all disclosure terms.
This would take a substantial section of the advertisement's real estate, in font-size that would be 12pt or above, and with visual icons that would draw users' attention to the terms. The terms would not be presented as 'footnotes' or 'fine print', but rather as a central part of the overall communication, presenting the key points (and not all points) about the terms and conditions of this financial product.

4. The future of disclosure design

Mind-shifts for policy-makers, lawyers, and other organizations communicating disclosures, terms, and conditions

Observing some of the key dynamics and preferences of how lay people interact with disclosures, it is clear that those composing disclosure communications need to embrace new mindsets. These mind-shifts can open new opportunities for how the communications can be structured, and can increase awareness of what will connect with the target audience.

Thinking of disclosures as modules, not as entireties. Policies, fine prints, and contracts may exist as singular things, but their contents are modules that can be extracted and presented more selectively and discretely. Users would prefer not to have a singular disclosure – a long document, a separate page, a footnotes section. They would rather have modules of the disclosure be presented to them at a more relevant and direct way.

Considering the disclosure as a communication experience, not a text document. Reducing a disclosure to sentences, paragraphs, and documents of text is just one option in how to communicate the disclosure contents to a person. The text being published is not a successful disclosure. It only exists (successfully) when a person reads it, understands it, and knows how to apply it to their own situation.

It is a multi-step communication experience. Regulators and companies should understand that a user does not simply make a decision, and need a disclosure at this decision moment. Rather, the user goes on a journey of many actions in order to make an investment decision. The most common path we saw was as follows: exposure to the idea, orientation to the core concepts and offerings, research into possible options, choice of one option, purchase of that option, and maintenance/revision of that investment.

Disclosures need not happen just at the one step of the purchase of an investment option. In fact, according to most of our testers, they might be more valuable in the run-up to this purchase decision (when the user is weighing options against each other, before she has begun to focus in on a single product) or in the honeymoon period after purchase (when the user questions 'what did I just buy?' and 'am I sure this is a good fit for me?').

Seeing the disclosure as an experience that can happen at many different moments helps expand the concepts about what ways to make effective communications. It requires going beyond one-time presentation of text 'magic words', and having other techniques and materials for communicating the content at a series of touchpoints.

The visual presentation of a disclosure is an important signal to the audience. How a disclosure looks has a strong effect on whether and how people engage with it. Visual design choices – including the size of font, the type of font, the amount of white space, the placement on a page or other interface, use of text, images and other media – signal to audience if the content is "for them" or not. If the visual design is not oriented around and tested with the intended audience, then there is a strong likelihood that it will be a crucial factor in potential users' non-engagement with the disclosure. The traditional visual designs of disclosures, with dense, serif-font, and small-point text, tends to signal

that it is not something meant for the average reader. Our testers indicated that this visual presentation makes it seem like something meant only for lawyers, regulators, or a consumer that was more invested than they were. They did not consider themselves to be in the target audience based on the visual design, and thus chose not to engage with the disclosure.

Design Principles that can improve user experience

1. More human and less abstract communication

Human touch. It should feel like a real person is conveying this information, and that it is related to human situations. This means taking it out of abstract phrases and jargon, and making it more conversational, and human-to-human. It could involve using the word 'you' more into the text. It can also involve much more active language, and less passive language.

Readable and relatable information. The company should engage the user with straightforward messages and very clear, distinct headlines that announce the value of the content. It should be at a maximum 8th grade language level.

Scenario and persona-based. Help a person understand what the effects of the disclosures are by humanizing it to actual or possible life situations. This can be by explicitly explaining different scenario outcomes that result from these disclosures. Or it could be relating these disclosures to fictional characters (personas) that can tell stories about how the disclosures or the terms underlying them affect them.

2. Better visual presentation

Core visual design rules. Disclosures should adhere to basic good rules of visual design. This includes eliminating distracting information. Use generous white space, giving space between different categories of information. Use fonts that are large (12 point font minimum), and distinguish among different parts of the text using different font-sizes, bold and italics, and color.

Balance between data-rich visuals and text. Though generally more visuals can be a good approach to more effective communications, when visuals are rich with data (like charts, graphs, and other visuals that are conveying a complex set of data), this principle does not hold true. Many of our users were overwhelmed by the graphs and charts that meant to explain to them something about the financial product they were considering. These users would have preferred text descriptions, which would be more legible to them, than complex, data-rich graphs, which they did not feel equipped to interpret correctly. Rookie investors need either more simplified visuals, clear text annotations, or avoidance of these complex visuals. Otherwise the charts and graphs reduce their

engagement with the communication, making them feel lost and and not the intended audience.

Prominence and immediacy. Do not bury the disclosures. Do not put them in footnotes (that the user must click or scroll to encounter). Do not put them in separate policy documents (that the user must click or navigate to encounter). Put them – at least the core of their messages and the information that is the most crucial for the user to understand – in places of hierarchy on the interface. They should be given front and center placement, so that it is clear to users that the disclosures deserve their attention and that it is easy to give this attention.

Some of the disclosed content that is of particular concern (i.e., fees) should be given special hierarchy. Using icons, large fonts, strong colors, prioritized placement on the communication, and/or distinct backgrounds (like a pop-up), this information should be flagged as of particular importance – that a user should read it, if nothing else. There could be a special block at the top of any communication that has the most user-valued disclosures, summarized.

3. Give Valuable Interactivity

Strong guidance. The company should take a guiding role in terms of leading users to the key information in the disclosures, and modeling how to interact with it. The expectation should not be that people will simply find the disclosed information on a website, app, or print communication because it is present there. Rather, the company should take the position that they are 'guiding the person through' the disclosures actively, using markers and signals, and also required interactions.

Interactive based upon the user's needs and preferences. The information should respond to the inputs, details, and preferences of the person that is looking at it. Rather than give a standard, full disclosure to a person, allow the person's response (and also, perhaps, the data you know about this person from their digital trail) to customize what to show them.

Easy Comparisons. Allow the user to understand what this disclosure means in context – particularly by allowing them to understand how it compares to other similar offerings. Ideally, the user will be able to easily compare many different products/services/policies' same terms and disclosures.

Analogies and Other Fields to be drawing from

Our design work also uncovered several sources of inspiration that regulators and companies can draw from, in order to create more effective disclosures. These analogies

came from user recommendations about what kinds of disclosures they find useful and engaging, and our own research into effective disclosure models. The most influential analogies we uncovered were as follows.

1. Credit card explanatory statements, as distributed by companies in outreach mailers and also after having signed up for a card, giving clearly designed and categorized information in one or two pages about the terms of the card.[23]
2. Nutrition labels, that give standardized categories of what kinds of information the consumer should pay attention to, in identical formats, to allow for easy cross-comparison and guidance to the user about what factors to focus upon.[24]
3. The USPTO's trademark icons, that give standard, visual representations to use across different communications and platforms – hopefully making difficult concepts more familiar and approachable using pictograms.[25]
4. The SEC's structured data standard for disclosures, that allows it and other third parties to aggregate disclosure information, compare it against each other, search it more easily, and build user-facing tools on top of it.[26]

Models we propose FINRA, financial companies, and interested third-parties pursue for user-friendly disclosures

As discussed in this report's initial discussion, we recommend that those interested in making stronger, more engaging disclosures consider investing in more ambitious new designs, as we have categorized in four Tiers. These tiers define categorized strategies to use to improve disclosure, from incremental to ambitious. As a supplement to those tiers,

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[23] Several federal government agencies have collaborated to create more standard consumer-facing notices around credit cards. Some of the reports on the findings of these print-based and online disclosure redesigns can be found at the Federal Reserve's site, which presents a compendium of agencies' reports on better notices:
http://www.federalreserve.gov/pubs/bulletin/2011/articles/designingdisclosures/default.htm

[24] The FDA established the "Nutrition Facts" label that is now ubiquitous, though it has recently revised its designs to have some information, like calories and serving size in more prioritized fonts and bolder type.
http://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/LabelingNutrition/ucm385663.htm

[25] The USPTO held an 'iconathon' to create standard intellectual property symbols, that could be accessed widely via the popular icon resource the Noun Project. The symbols that were selected from the hackathon are available at https://thenounproject.com/USPTO/.

[26] The SEC has an Office of Structured Disclosure that aims to make the data that is submitted to the SEC and that is published by it more accessible and easy to use. This means that the data is tagged and saved in standardized ways, that allow for machines to read it and analyses to be run of it, across actors and categories. More information is available at https://www.sec.gov/structureddata

here we dive into greater detail about some of these proposed strategies, including those more specifically tailored to FINRA and its aim of improving lay people's ability to understand the financial products they are purchasing and finding the right match for their risk preferences and other situational factors.

Visual facelift of disclosure communications based on design principles

One of the least-intensive new models is to improve the visual design of the disclosure text, but improving its composition layout, the use of illustrations and visuals, the choice of font and size, and other visual choices that can signal to the audience that the disclosure matters and that can make it easy for them to understand. The key points of the facelift are giving more categorization and navigation through the use of prominent headers, white space between categories, and graphic illustrations to mark the differences among them. The description of Tier 1 types of interventions in the Introduction provide explicit strategies for visual improvement of disclosures.

Visual Representations of the Terms of the Disclosures. Whether through simple icons, pictograms, or other illustrations, users respond positively to visuals accompanying disclosures. The graphics draw their attention, and then give them an initial shortcut to understand what the text contains. The visual representation can instigate greater engagement and comprehension of the disclosure, even if the visuals are relatively simple (like the stripped-down black 'investicons' proposed in our final concept proposals).

More Interactions on websites and app communications

Tiering Information. The amount of content communicated in one interface to the user should be very limited. One rule would be to have a single message, with a small set of statements that explain it. Another term for this rule is 'snackable' design. Rather than give a user full plate or even a buffet of information – with huge portions and many types all at once – the goal is to give the user small chunks, one at a time. Users should be able to snack on content, consuming one message on the interface, before moving to another.

Customization of the disclosure to the person. Could we use the data that we know about this user and their peers, to show them customized communications that apply specifically to them? This could be based on their specific age, wealth, credit rating, goals, and other personal factors, or it could be based on averages for people in their demographic.

Lightweight, meaningful friction. Can we make the disclosures more engaging by using some requirements and force? In order to move past the disclosures, the user would have to sign off with initials, or to answer some quiz questions. These friction points would have multiple purposes. One is to forcibly slow people down on their process, to make

them tune in to the disclosure at least for the moment it takes to complete the required task in order to move on. The second is to show that this disclosure moment is meaningful enough – and possibly risky enough – to require a deliberate step of its own. This may flag it as a priority to a user, letting them know that they should be paying it more attention.

More standardized presentation and machine-readable format of disclosure content

Standardizing the presentation and data format of the disclosure information. One theme across all the ideas and user research is that users would benefit from more standardized presentations of disclosures. Whether this be done through standard visual formats (like a nutrition label), iconography and headings (like the investicons), or otherwise, a standardized way to present disclosures will help people recognize, navigate, and use the disclosure communication.

In addition to standardizing the visual presentation, the disclosures can also be standardized in terms of the data format in which they are disclosed to regulators (and the public). Rather than being offered in natural language on the company's chosen communication, the information about the different investment products can also be collected into a single disclosure, saved in a machine-readable format that is standard to all financial companies' disclosures. This machine-readable version of all the products' disclosures can be submitted to the regulator for its review, as well as made available to the public, for third-party developers to use in building tools that help customers analyze and choose among investment options.

Smart Disclosure. In this type of initiative, the regulators would require, or incentivize, the companies to disclose their key terms and practices in machine-readable formats, encoded in standard ways with all the terms put in standard ways. These machine-readable disclosures can then be drawn upon by governmental and third-party developers, who want to make user-facing applications that empower people with the ability to sort and compare offerings, and intelligent tools that can sift through the fine print for them.

Tools companies could use regularly as alternatives to the status quo of footnote-and-small print disclosure formats

Disclosures Embedded in Choice-Centric Dashboards. Where are the target users currently looking? Often, they look at the settings dashboards, in which they are able to turn preferences on and off for their device or application. What if we embed the choices in the disclosures and the information contained in them into a central place, and

encourage the user to 'take control'. Rather than give static terms that seem immutable (and thus more likely to be ignored as something out of the user's control, and an unfortunate given), give the user active choices to make. For example, have the user set what kind of fees they would tolerate, and then provide them with a curated set of options to choose from – or principles to abide by – to move them closer to a decision around what financial investment to make.

Comparison Matrices. The various options and factors would be laid out in a matrix table — with the options on the x-axis as row titles, and the key factors on the y-axis as column titles. The matrix would then show the user how the various options compare on the factors. The individual boxes can be colored to show positive vs. negative, to make the comparison more glance-able.

Interactive, Step-by-Step Explainers of Key Terms. This design stages the modules of the disclosure, so that it is not presented in whole but rather step-by-step. It provides more focus on individual terms, so that users are more likely to pay attention to each key point's main message, if not also their details. It also forces the user to slow down and focus on the disclosure, rather than ignoring it altogether or glancing over it.

Story-based disclosures and Role Modeling. Story-based disclosures present the user with narratives that describe people like them, or people that they could aspire to be,. These narratives dive into how these other people use and react to the disclosures. The value of the narrative is giving possible role models for the user, modeling what kind of things to pay attention too, and decisions to make, and how to best make these decisions.

Narratives humanize the disclosures, and give clear ways to identify with them. Users can benefit by being able to see, and even potentially adopt, the decisions that role models in these narratives make. That way the user doesn't have to do too much complex and heavy thinking, but rather can choose which role model best fits them and then follow through on the role models decisions in their own situation.

Conversational versions of the disclosure. In this redesign of a standard text disclosure, the terms are not listed out one-by-one. Instead, they are revealed through a question-and-answer format, in response to a particular question or use case. In the low-tech version of a conversational disclosure, a FAQ (frequently-asked-question) presents common questions that a typical user would have about the contents of the communication, and then responds to each question with explanations. The text is thus not a monologue from the company or the regulator, but rather is more a back-and-forth conversation. This model can increase engagement, by making it more clear what question the disclosure text is answering, and also dividing up the content into more meaningful bite-size sections.

Increased awareness of regulator as trusted third party

In addition to specific disclosure concepts, our class also arrived at a number of insights about FINRA's relationship to its lay public and to the companies it regulates.

Building Stronger Regulator Brands. Consumers are interested in reliable, neutral third-parties giving them clear information about a decision they're contemplating. Regulators like FINRA are poised to play this role, as experts in the domain who are also interested in consumer protection as a fundamental mission.

Presence on existing online social networks and fora. Rather than building new question-and-answer sites, a regulator or other body can engage users on sites that they already frequent when exploring financial investments and other decisions. Sites like Quora and Reddit have high usage by professional millennials, where they are asking for peers' and experts' input on issues they are experiencing. A regulator like FINRA could consider devoting regular time to respond to users' queries on these sites about financial investment and decision-making, thereby establishing FINRA's brand and also distributing quality, consumer-empowering information to users where they are specifically requesting it, and so are more likely to be receptive to it.

5. Final Thoughts

One of the central tensions running through this disclosure redesign work is whether the role of the regulator (in this case, FINRA) should impose stronger requirements for good design on the financial companies making the disclosure, or be involved in designing cross-company disclosure models that the companies would then be responsible mainly for populating with content.

Not all financial actors are ill-intentioned to consumers, but the regulation must still prevent those that are from abusing consumers' trust. We are wary of proposing disclosure-related regulation just to stop ill-intentioned actors, especially if it restricts the creativity that better-intentioned, well-resourced actors can use to create more effective disclosures. That means any policy must have the dual purpose: bringing up the bottom while not capping the innovative types of disclosures the actors at the top might want to explore.

That said, we do encourage regulators like FINRA to take a stronger role in proposing standardization among all disclosures, so that there is a consistent, familiar way for users to understand crucial terms about financial products before they make investments. Standardization of data standards, in how the companies report the disclosure content to FINRA or to another third-party, will also allow for the creation of the interactive smart

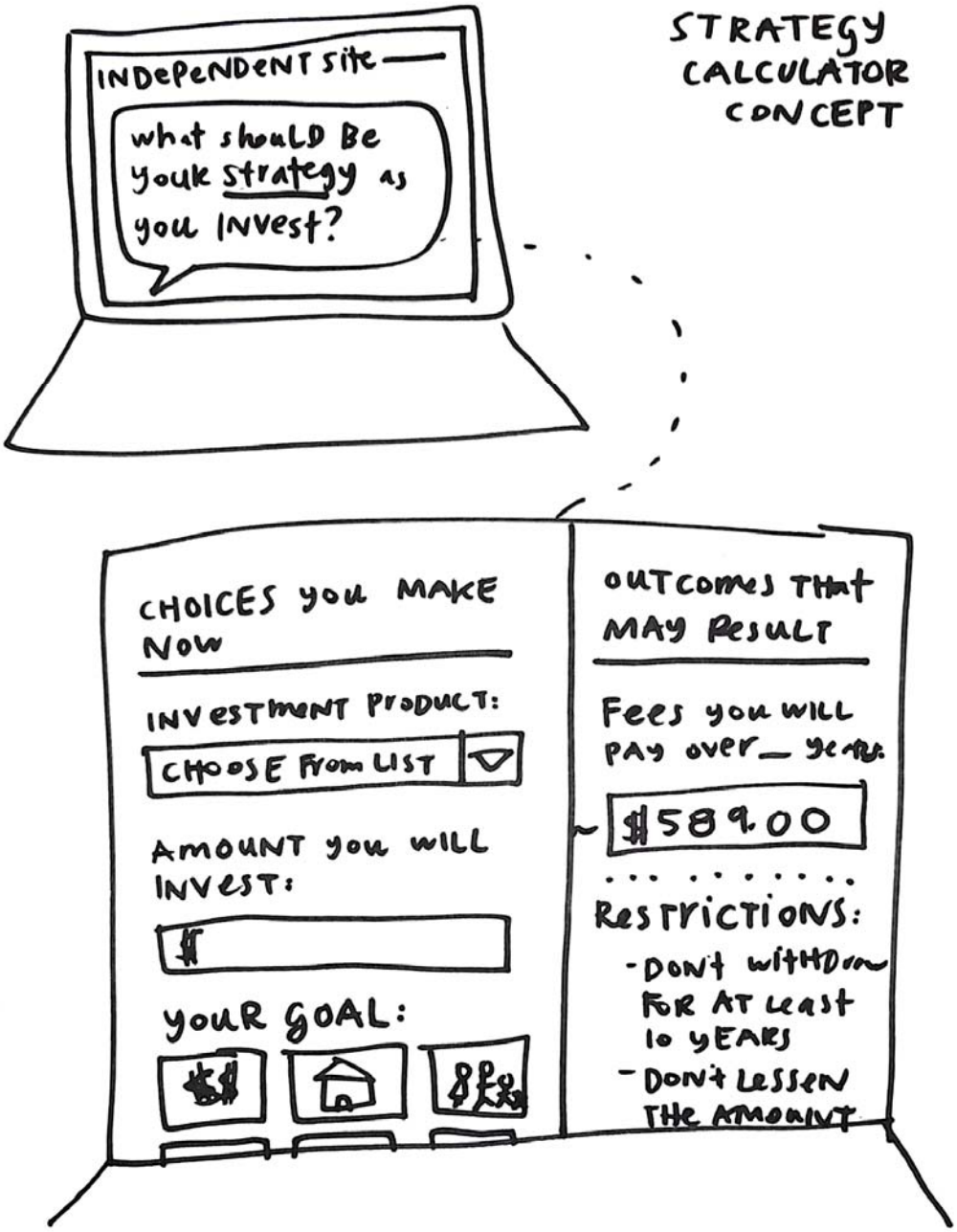
tools, that allow users to compare and discover trends and preferences. Our target millennial audience demonstrated a strong interest in the creation of these smart, interactive, online tools, and the regulator could facilitate others' creation of them through standardization of structured data reporting.

Even if FINRA and other regulators do not decide to create standard disclosures, ideally they will publish 'model disclosures' that embrace the principles and strategies laid out here, particularly around clearer visual composition and greater interactivity. These official examples could induce companies to invest more in their disclosure design, raising the bar for what 'sufficient disclosure' seems to be, and bringing this in line with what engages and informs lay people. They could also become defaults, so that even if they are not required explicitly, they could lead to greater standardization of disclosure communications, with companies following the models in order to comply with the regulators and also to avoid having to invest in their own design process.

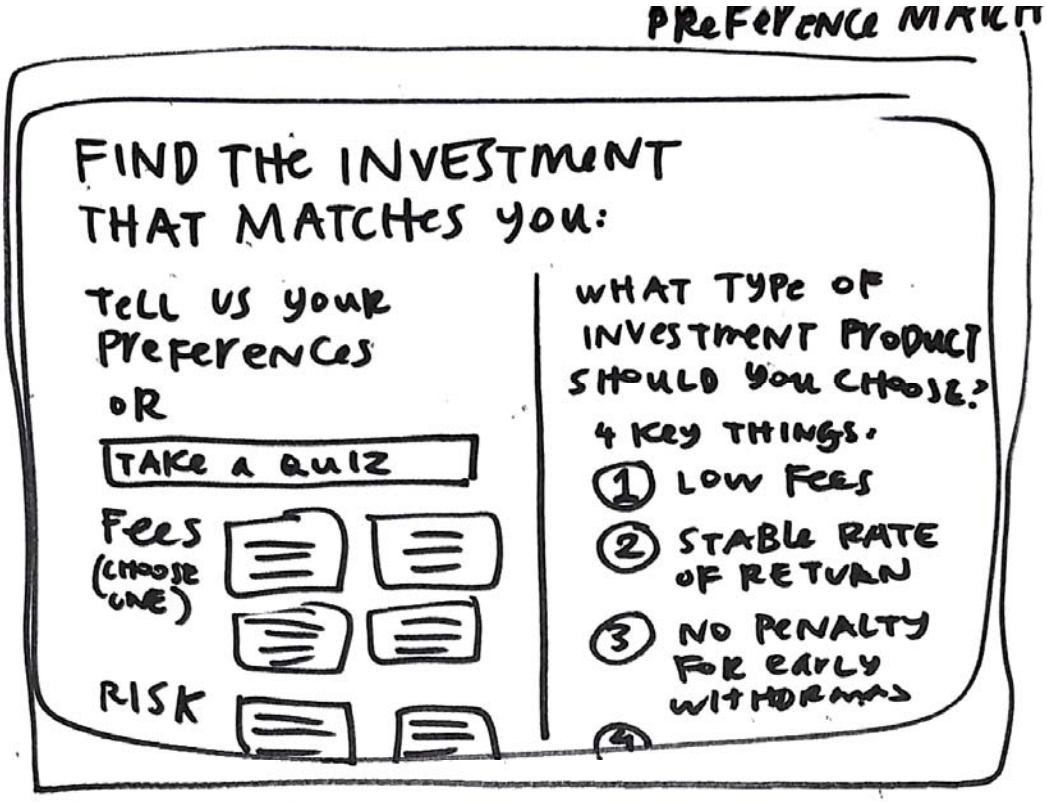
As more government agencies and companies realize that the status quo models of disclosure do not achieve their intended effects of informing and empowering consumers, there is a need for regulators to model more visually coherent, interactive, and standardized means of disclosing crucial terms and conditions to companies. We urge them to use Tier 1 strategies of plain language and visual design as a 'floor' that all companies must abide by, but we also urge them to initiate conversations, develop example models, and require standardized, structured data disclosures that would allow for more ambitious tiers of new disclosure designs to flourish. If disclosure are truly going to engage users' attention and equip them with knowledge to make smarter decisions, then regulators and companies need to think beyond the standard paragraphs of legalistic text, and experiment with richer, more interactive experiences that communicate the disclosure content in ways that do not feel like "fine print" or "footnotes".

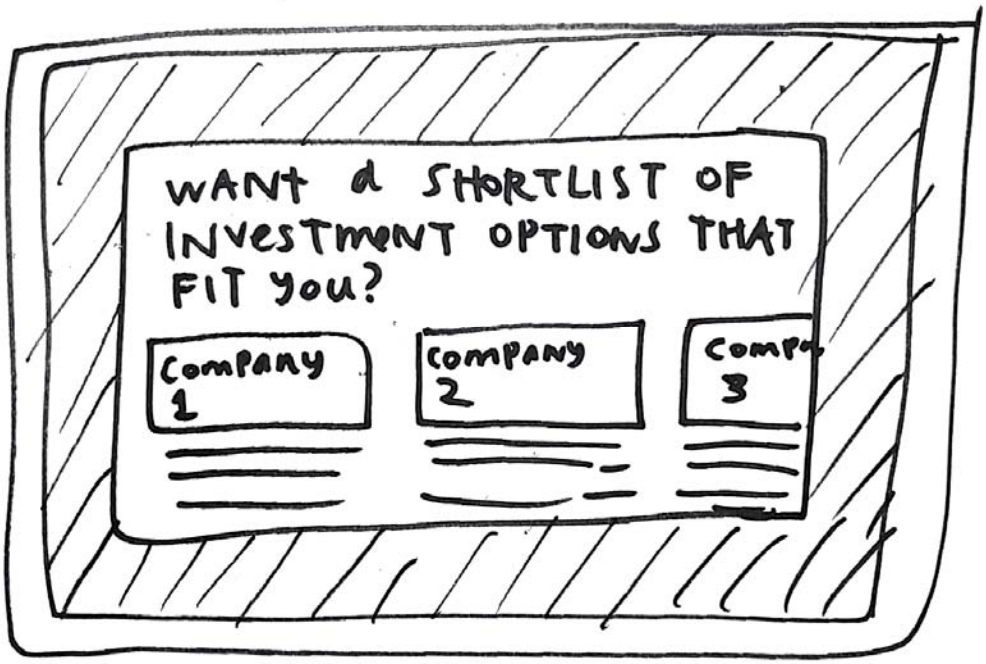
Appendix 1: Images of Concept Designs

Strategy Calculator Concept



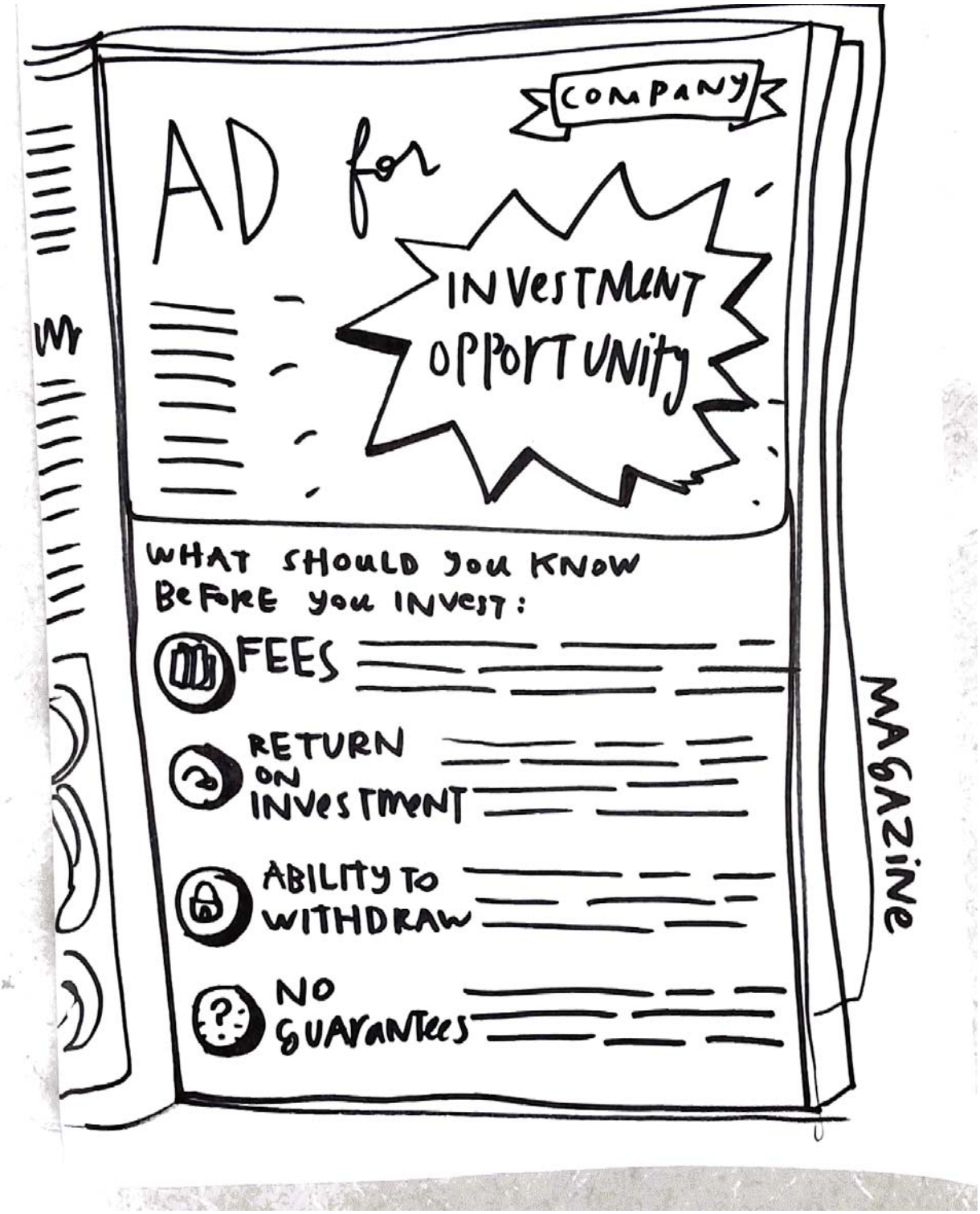
Preference Match



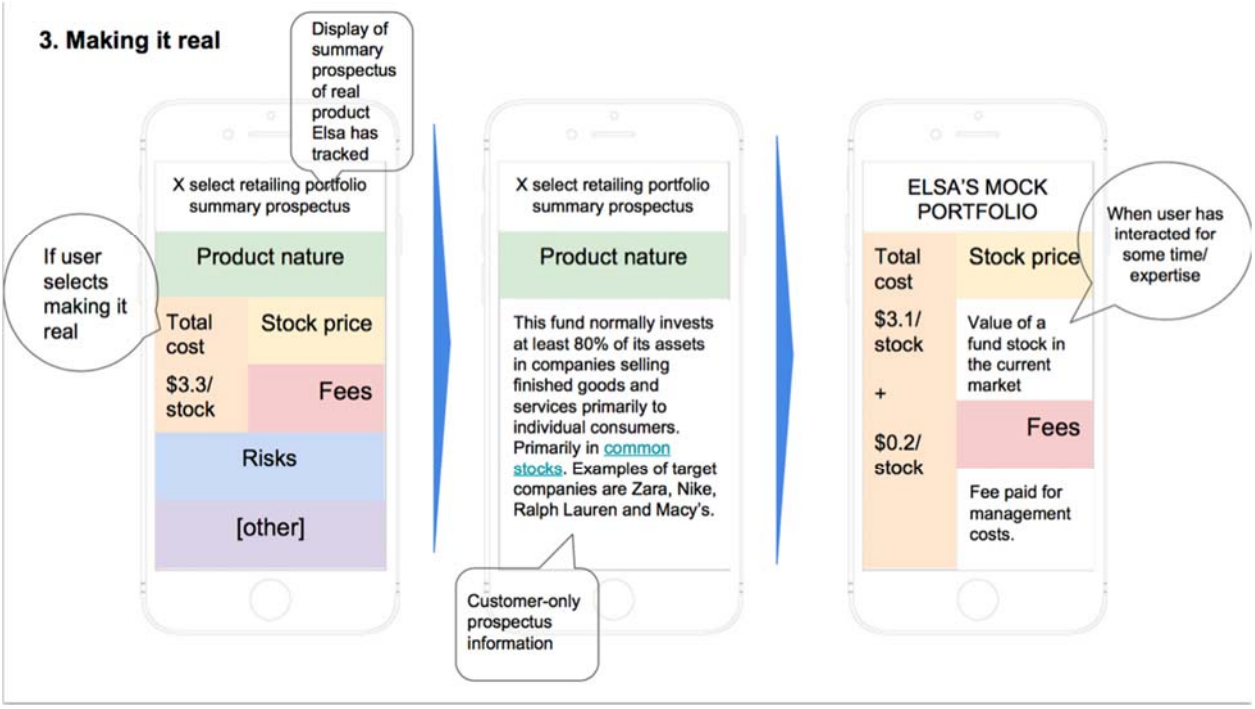


Disclosure Nutrition Label (online version)

Disclosure Nutrition Label (print version)



App-based Disclosure Nutrition Label



Social Flags on Disclosures

The "Mutual Funds" area at the top of each page allows access to mutual fund holdings with individual and joint Fidelity non-retirement accounts. Individual stock positions, ETFs and 529 funds are not available through this view. For the full list of your holdings visit Portfolio Summary.

Mutual Funds are priced as of the previous business day's market close when the market is open. Mutual fund positions are priced as of the official market close (typically 4p.m.) and prices are generally available between 5 p.m. and 6p.m.

1. No Transaction Fee Fidelity funds are available without paying a trading fee to Fidelity or a sales load to the fund. However, the fund may charge a short-term trading or redemption fee to protect the interests of long-term shareholders of the fund. Shares are subject to the fund's management and operating expenses. See Expenses & Fees for more information.

76% of investors read this section before purchasing

2. The funds on the Fund Picks From Fidelity® list are selected based on certain selection criteria. Fund Picks From Fidelity is not a personalized recommendation or endorsement of any fund for an investor's individual circumstances.

3. Fidelity may deduct a small balance maintenance fee of $12.00 from a fund balance with a value less than $2,000. Fund positions opened after September 30 will not be subject to the fee for that calendar year. This fee will not be deducted from fund positions opened after January 1 of that calendar year if those positions use regular investment plans. Refer to the fund prospectus for details.

4. Initial minimum investments into group retirement accounts such as Fidelity Simplified Employee Pension-IRA, Keogh, Self-Employed 401(k), and Non-Fidelity Prototype Retirement accounts are $500 or higher. There is no minimum for additional investments in any type of Fidelity fund you already own.

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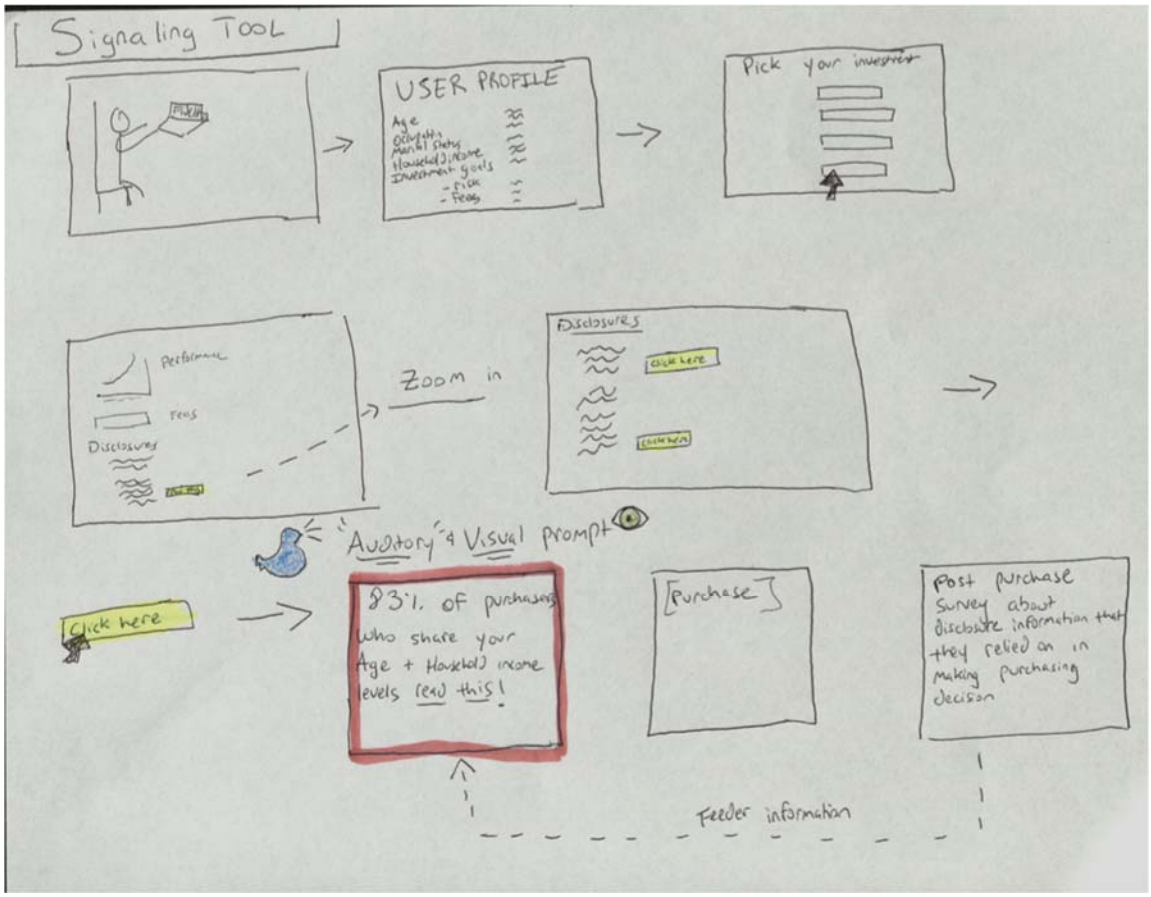
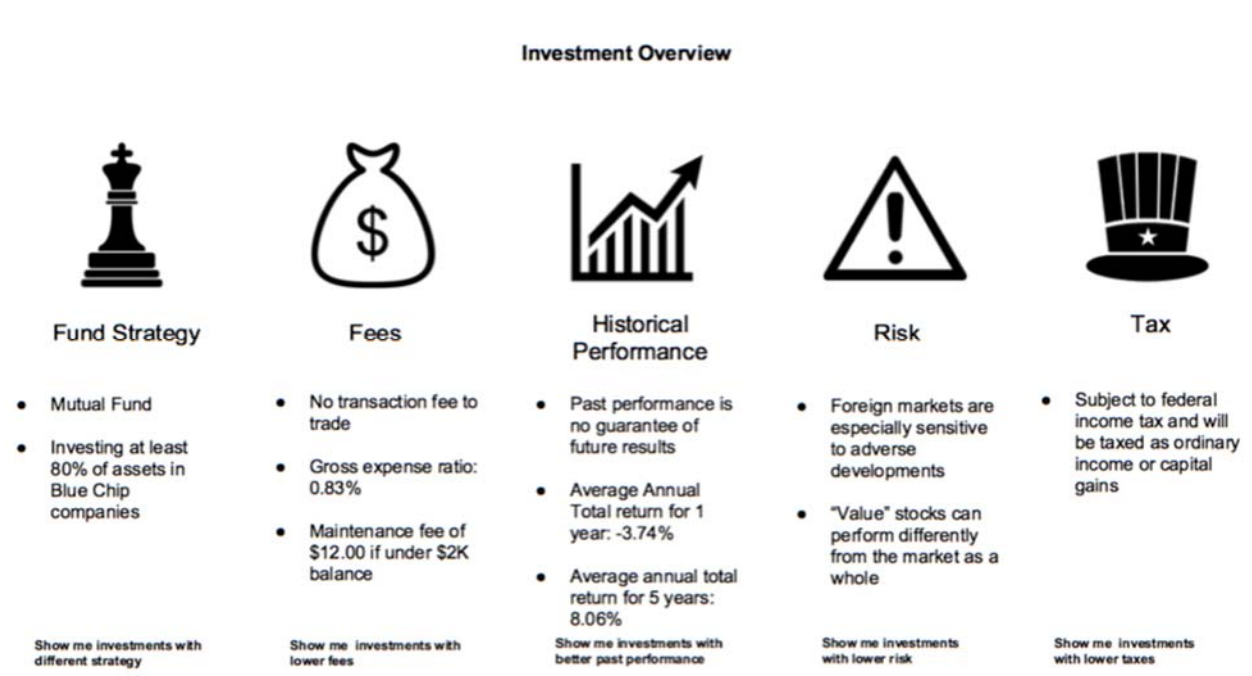
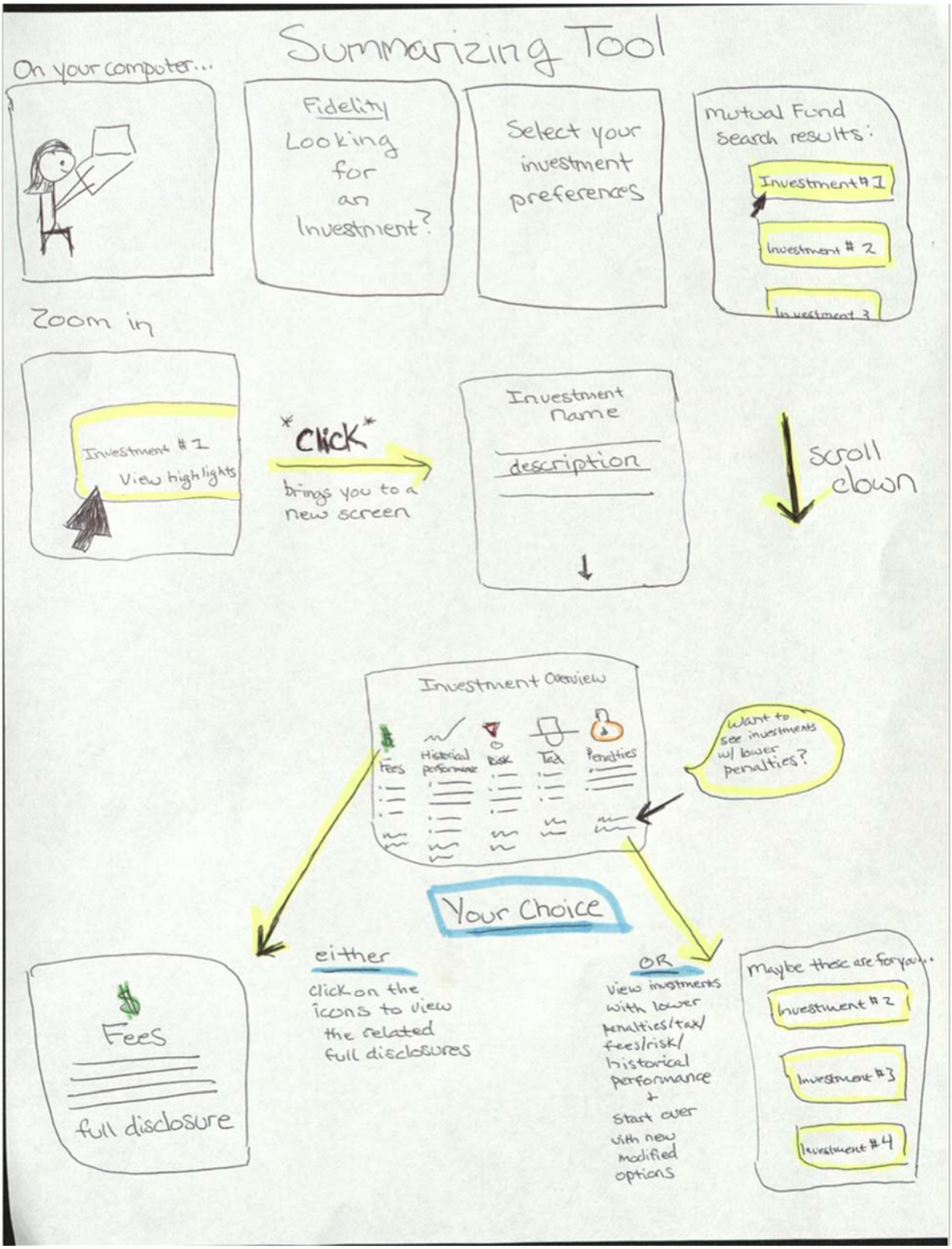
Before investing, consider the investment objectives, risks, charges and expenses of the fund or annuity and its investment options. Contact Fidelity for a free prospectus and, if available, summary prospectus containing this information. Read it carefully.

The last 10 purchasers of this investment read this section of the disclosure

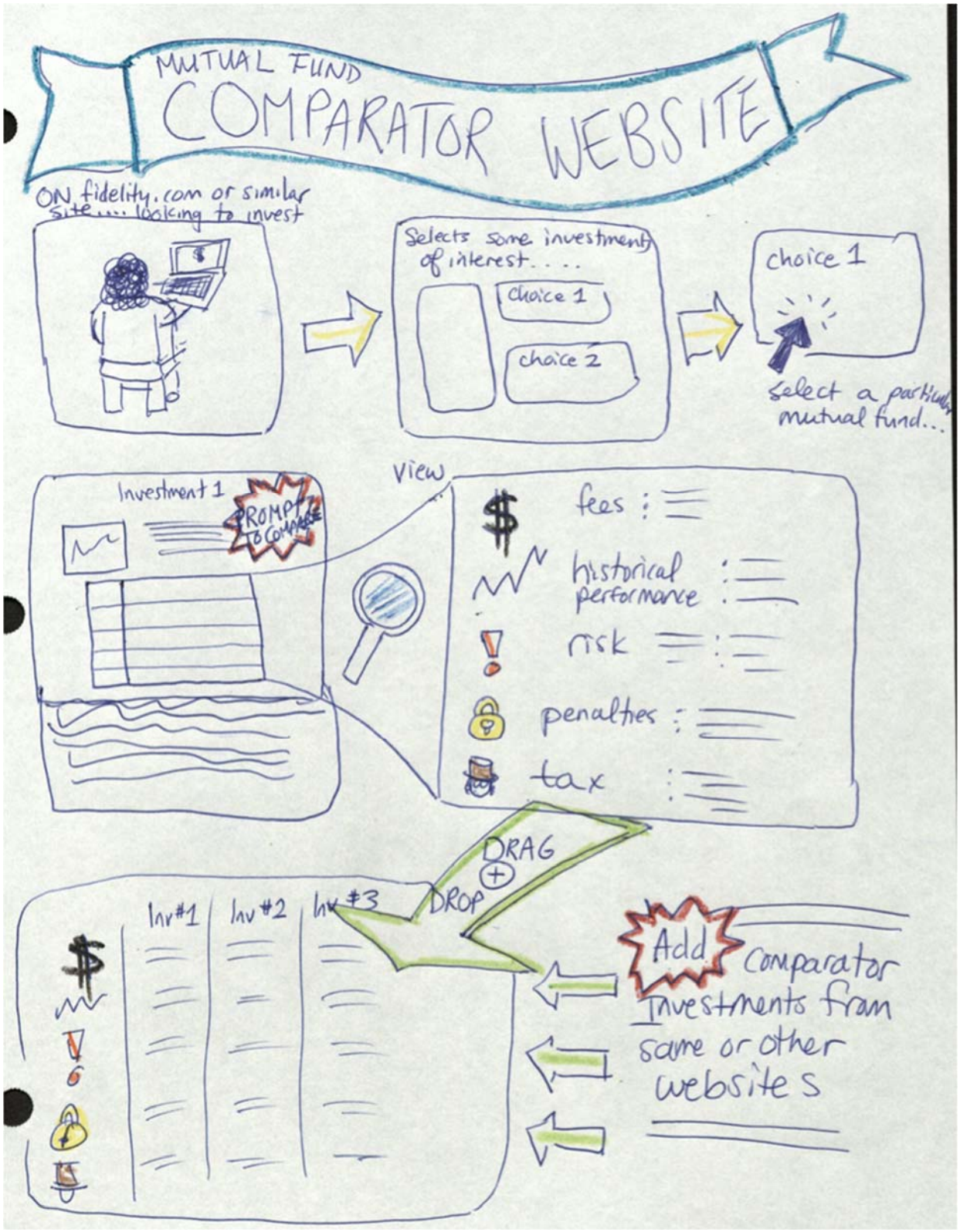


Investicons and Table Format





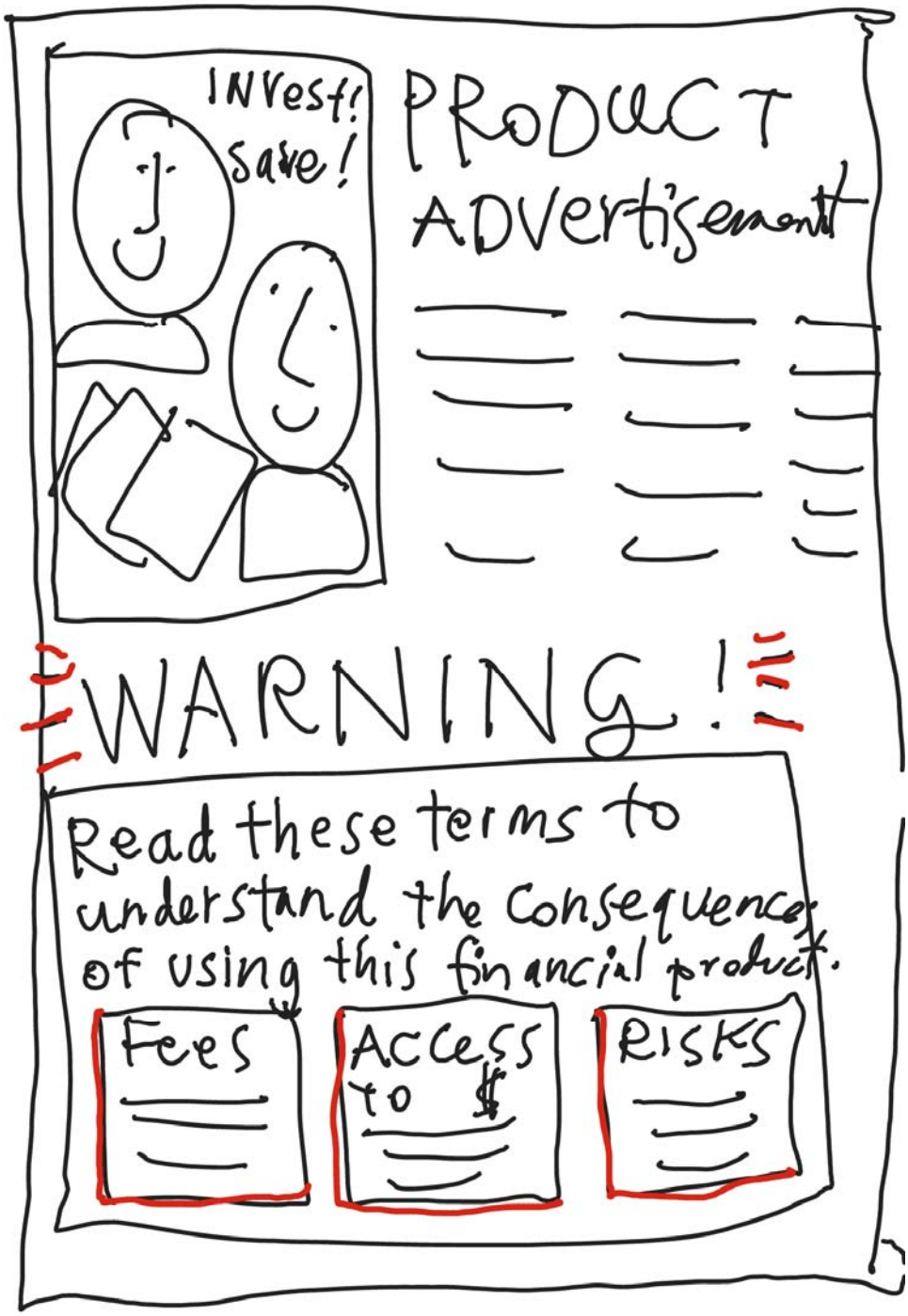
Comparator Tool: Interactive Web tool



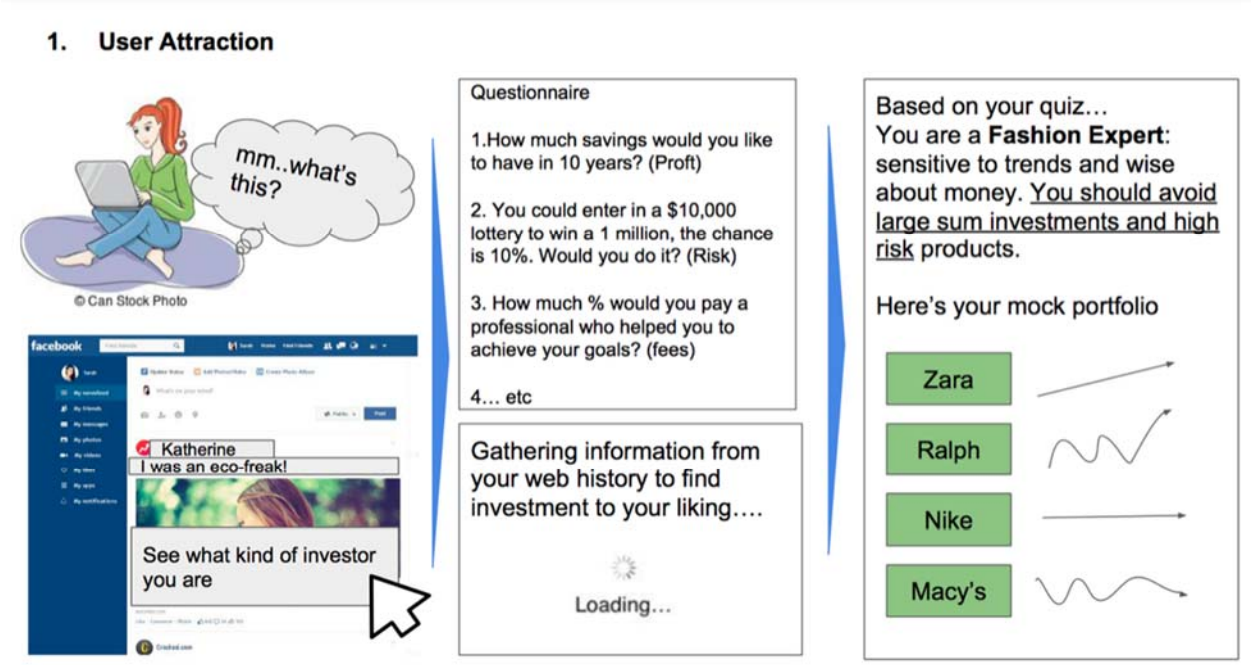
Comparator Tool: Table Form

	Investment "XYZ" from Fidelity	Investment "ABC" from Charles Schwab	Investment #3
	• Mutual Fund • Investing at least 80% of assets in Blue Chip companies	• Mutual Fund • Investing at least 65% of its assets in stocks, primarily common stock	
	• Average Annual Total return for 1 year: -3.74% • Average annual total return for 5 years: 8.06% • Past performance is no guarantee of future results	• Average Annual Total return for 1 year: -0.49% • Average annual total return for 5 years: 11.39% • Past performance is no guarantee of future results	
	• Foreign markets are especially sensitive to adverse developments • "Value" stocks can perform differently from the market as a whole	• Technology securities may experience significant price movements caused by disproportionate investor optimism or pessimism.	
	• No transaction fee to trade • Gross expense ratio: 0.83% • Maintenance fee of $12.00 if under $2K balance	• No transaction fee to trade through Schwab.com; trades placed through a broke will be charged $25 • Gross expense ratio: 0.71%	
	• Subject to federal income tax and will be taxed as ordinary income or capital gains • "Value" stocks can perform differently from the market as a whole	• Tax cost ratio for year 1: 3.80% • Tax cost ratio for year 5: 1.63% • Tax cost ratio figures based on highest Federal income tax bracket. State and local taxes are not included.	

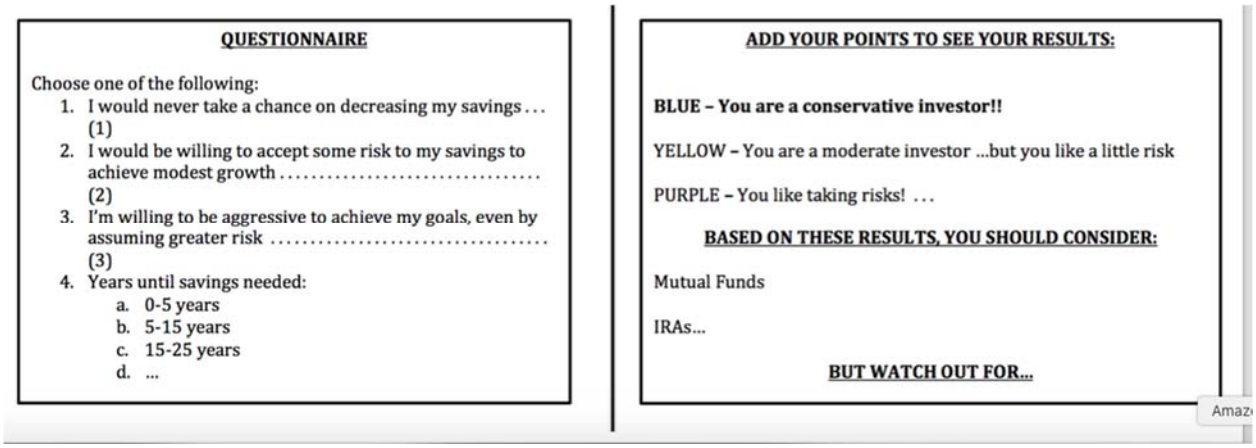
Smoking Warning Label



Self-Profiling Questionnaire (on Facebook)



Self-Profiling Questionnaire (on FINRA)



QUESTIONNAIRE

Choose one of the following:

1. I would never take a chance on decreasing my savings . . . (1)
2. I would be willing to accept some risk to my savings to achieve modest growth . . . . . (2)
3. I'm willing to be aggressive to achieve my goals, even by assuming greater risk . . . . . (3)
4. Years until savings needed:
   a. 0-5 years
   b. 5-15 years
   c. 15-25 years
   d. ...

ADD YOUR POINTS TO SEE YOUR RESULTS:

BLUE – You are a conservative investor!!

YELLOW – You are a moderate investor ...but you like a little risk

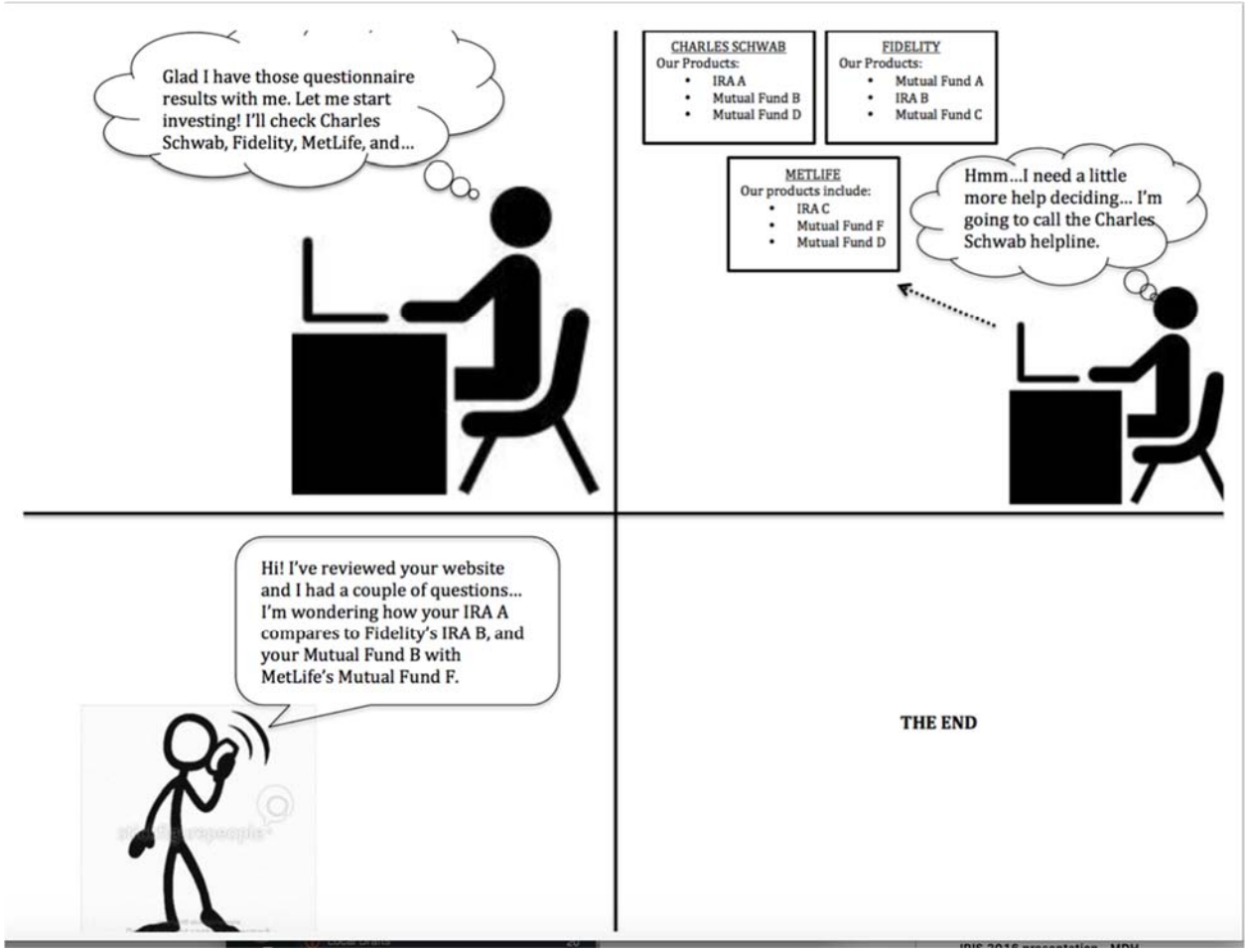
PURPLE – You like taking risks! . . .

BASED ON THESE RESULTS, YOU SHOULD CONSIDER:

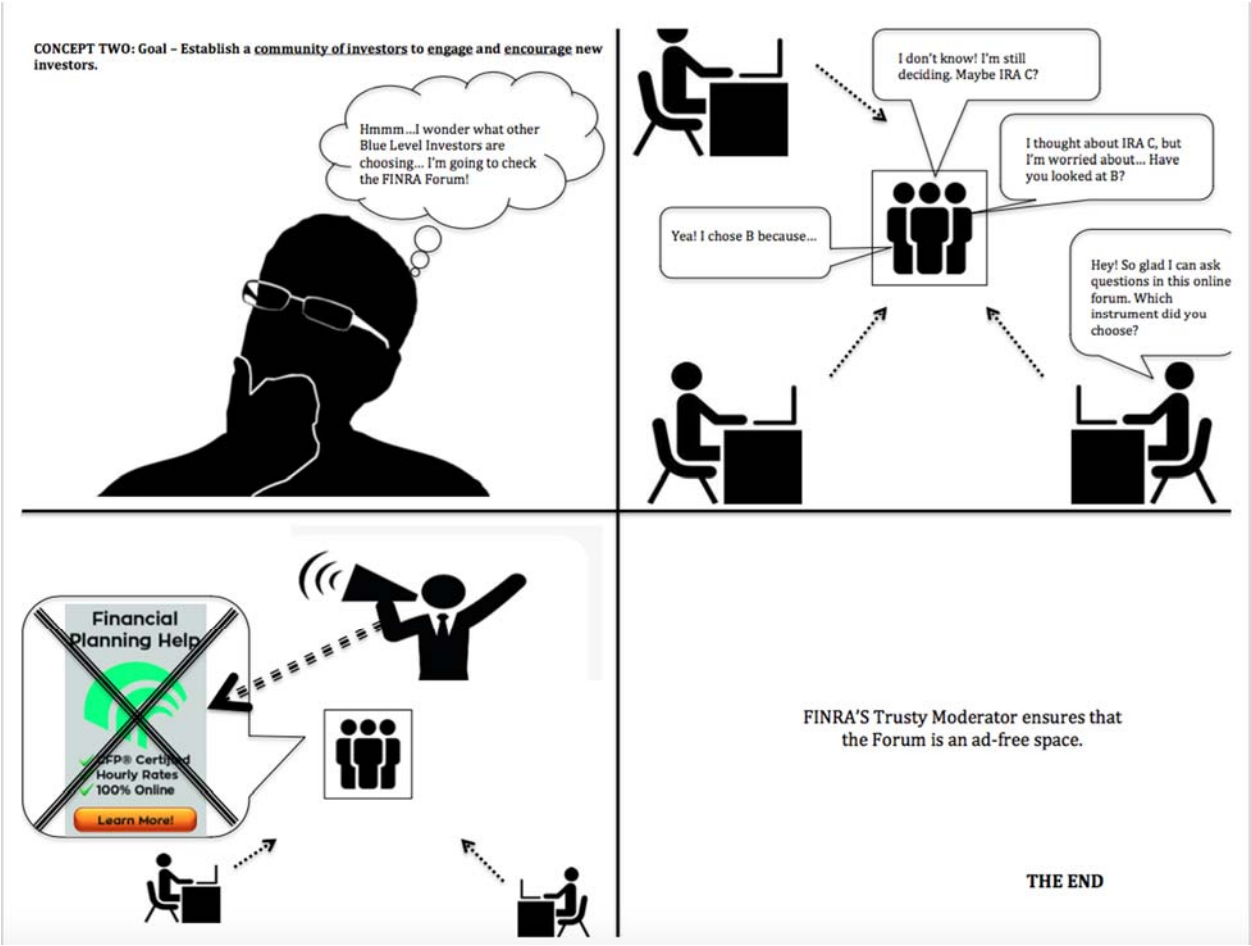
Mutual Funds

IRAs...

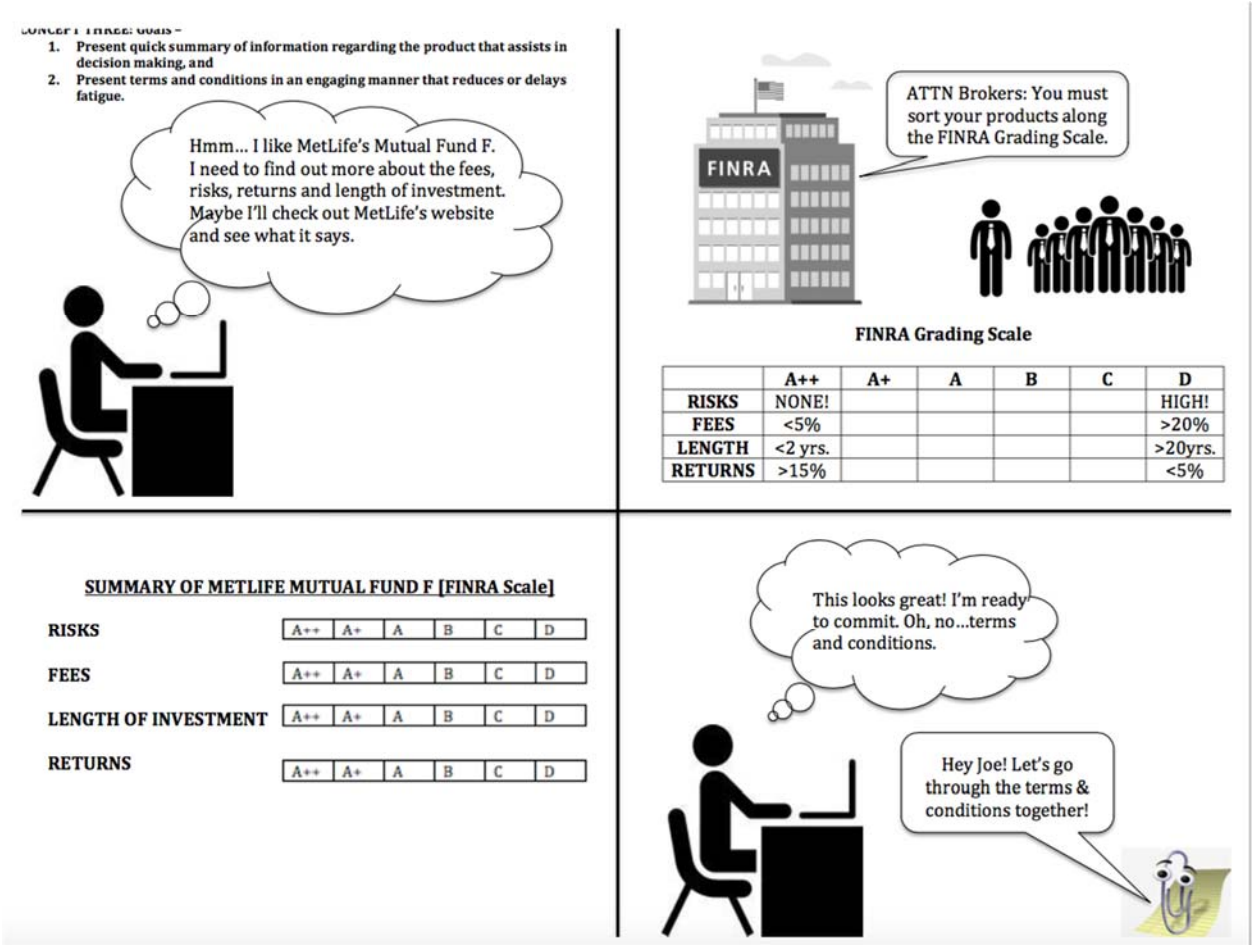
BUT WATCH OUT FOR...



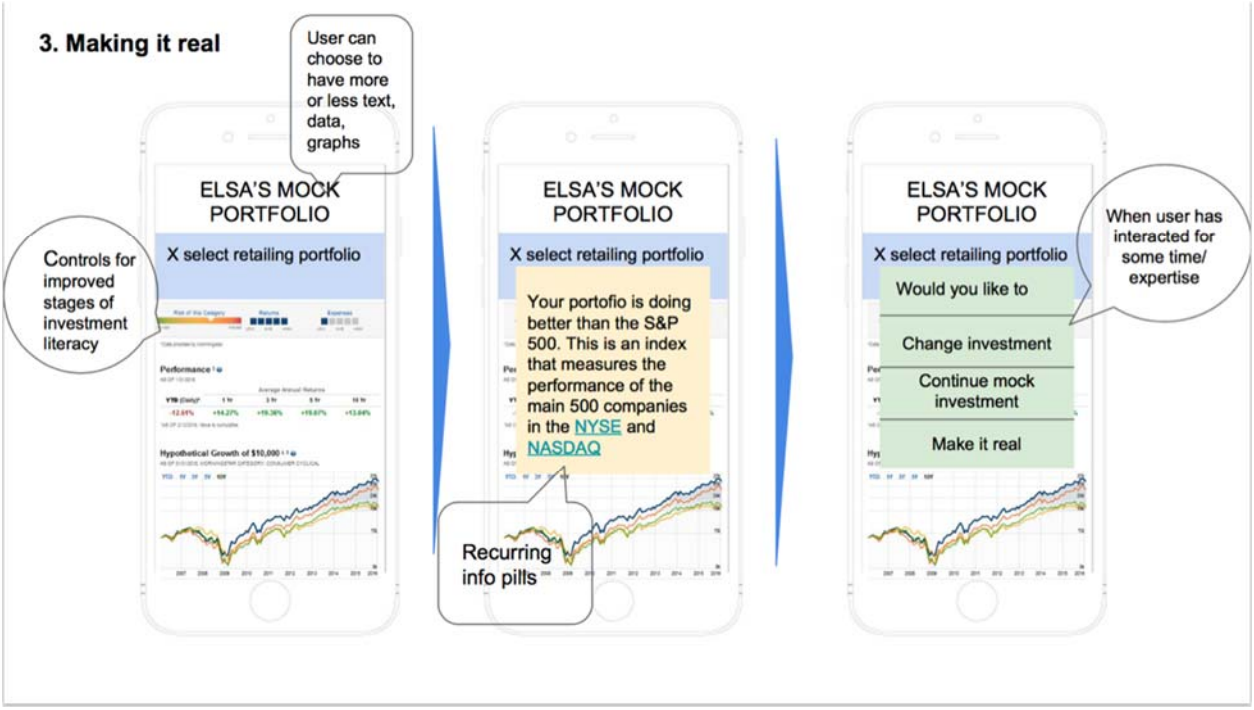
Online forum for investors, sponsored by Regulator



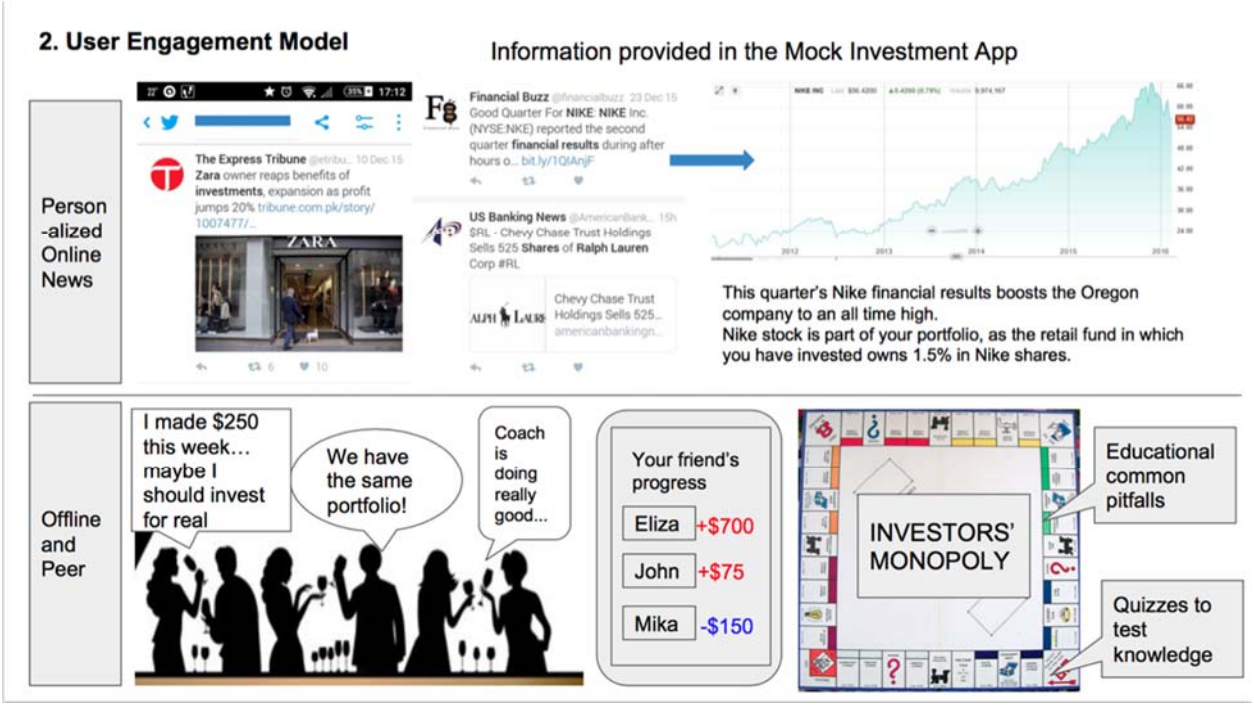
Grading Scale from Regulator



Investment Game App



Social Events and Group Investing



Appendix 2: Images of Process

Exploding the Fine Print

Winter Quarter 2015
Stanford Law School, Policy Lab

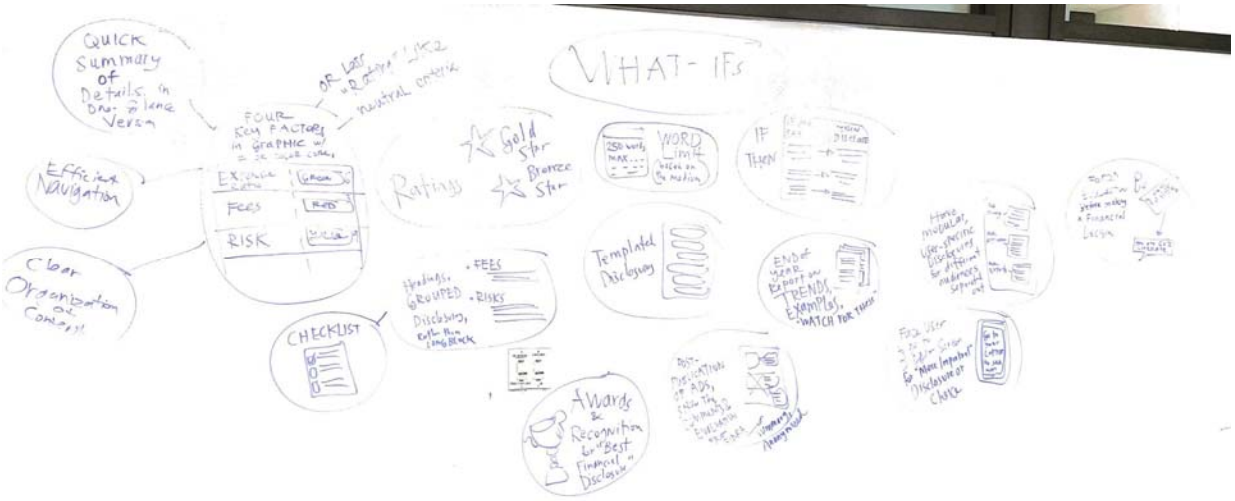
We are redesigning how laypeople experience terms, warnings, and other detailed disclosures from companies.

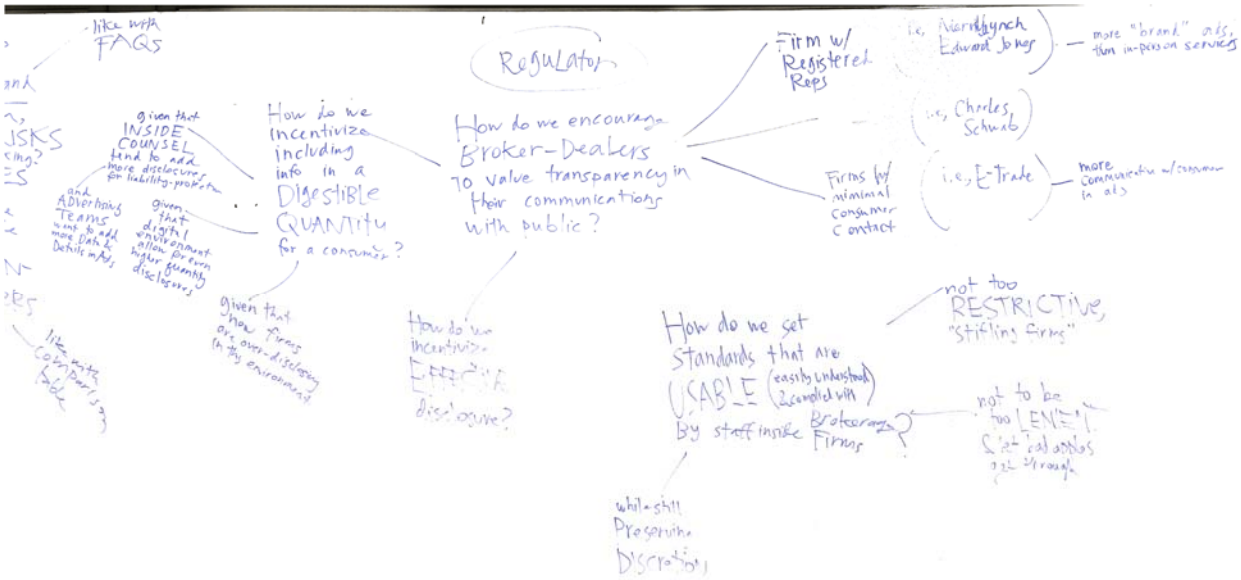
This quarter we are shifting from the company's perspective to the regulator's.

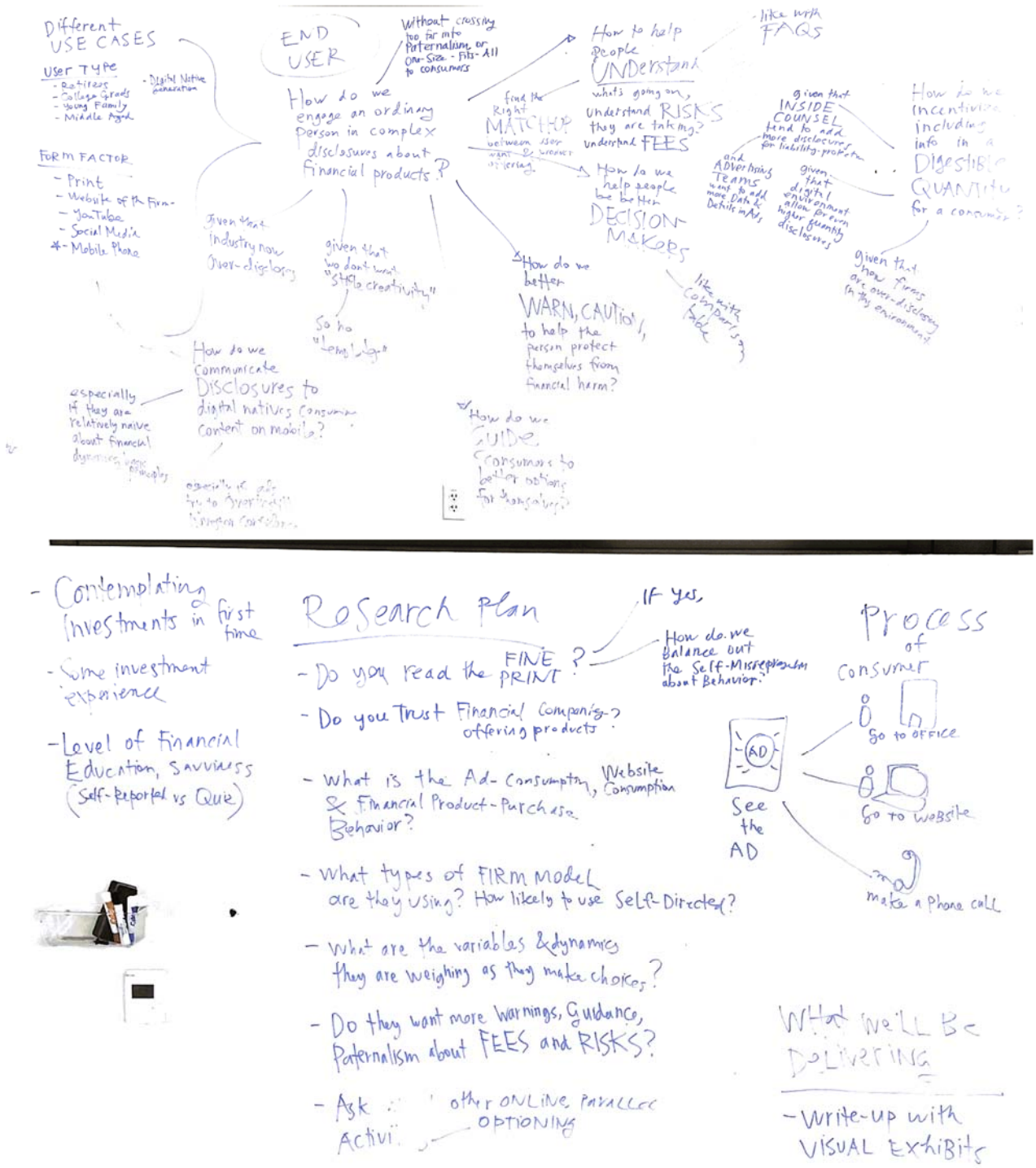
What are 21st century standards for engaging & empowering consumers as they use online financial services?

What are new modes of communicating these terms, that aren't standard legal text, that are more interactive, meaningful & engaging?

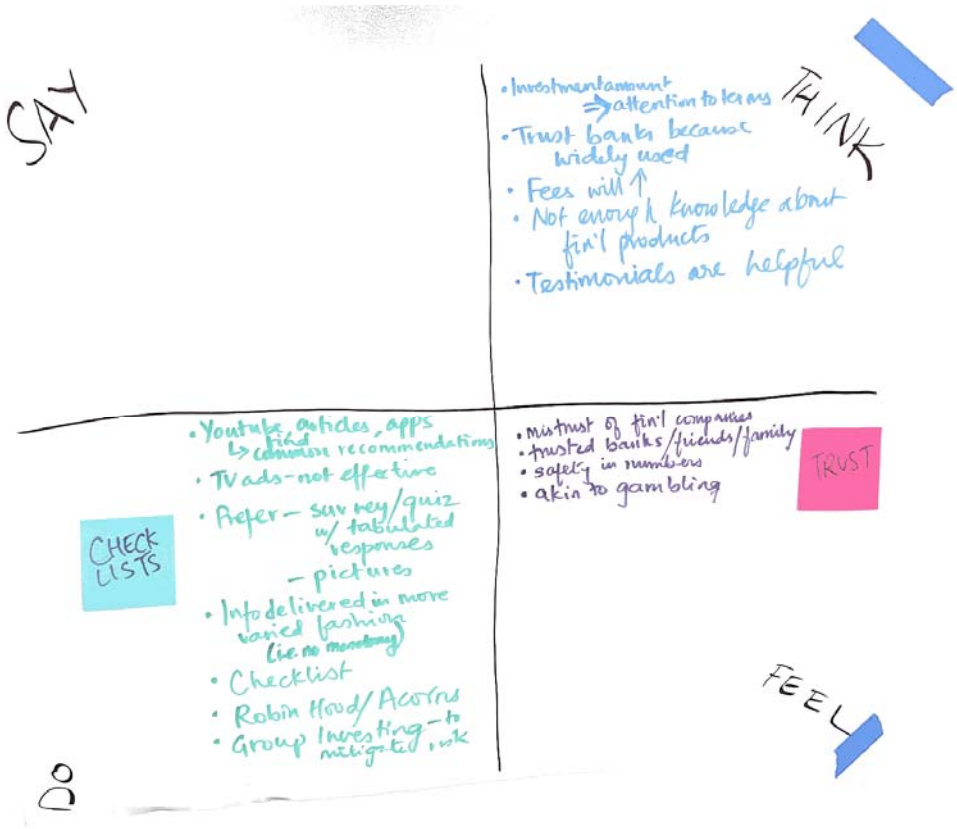
Defining the Terrain and planning out design process

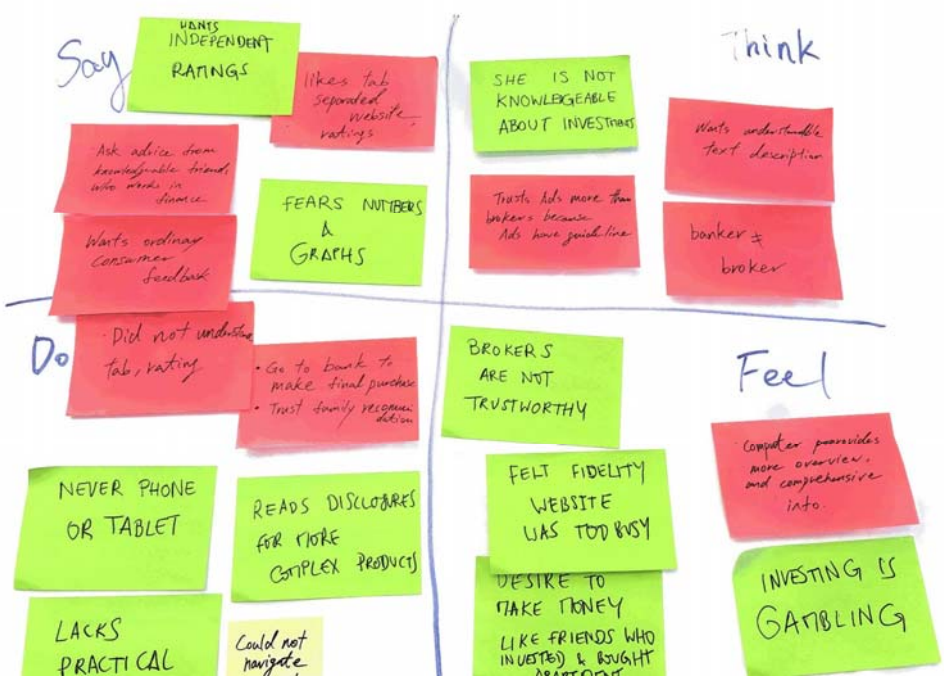



like with FAQs
Regulator
How do we encourage Broker-Dealers to value transparency in their communications with public?
Firm w/ Registered Reps
i.e. Merrill Lynch Edward Jones
more "brank" ads, than in-person services
i.e. Charles Schwab
Firms w/ minimal consumer contact
i.e. E-Trade
more communication w/ consumer in ads
How do we incentivize including info in a DIGESTIBLE QUANTITY for a consumer?
given that INSIDE COUNSEL tend to add more disclosure for liability-protection
and Advertising Teams want to add more Data & Details in Ads
given that digital environment allow for even higher quantity disclosures
given that now firms are over-disclosing in this environment
How do we incentivize EFFICIENT disclosure?
How do we set Standards that are USABLE (easily understood & complied with) by staff inside Brokerage Firms?
not too RESTRICTIVE, "stifling firms"
not to be too LENIENT
while still Preserving Discretion



Synthesis of User Research findings


SAY
THINK
• Investment amount ⇒ attention to terms
• Trust banks because widely used
• Fees will ↑
• Not enough knowledge about fin'l products
• Testimonials are helpful
• Youtube articles, apps
↳ find common recommendations
• TV ads - not effective
• Prefer - survey/quiz w/ tabulated responses
- pictures
• Info delivered in more varied fashion (i.e. no monotony)
• Checklist
• Robin Hood/Acorns
• Group Investing - to mitigate risk
CHECK LISTS
• mistrust of fin'l companies
• trusted banks/friends/family
• safety in numbers
• akin to gambling
TRUST
FEEL
DO


Say
WANTS INDEPENDENT RATINGS
likes tab separated website ratings
Ask advice from knowledgeable friend who works in finance
Wants ordinary consumer feedback
FEARS NUMBERS & GRAPHS
Think
SHE IS NOT KNOWLEDGEABLE ABOUT INVESTMENTS
Wants understandable text description
Trusts Ads more than brokers because Ads have quick line
banker ≠ broker
Do
Did not understand tab, rating
• Go to bank to make final purchase
• Trust family recommendation
NEVER PHONE OR TABLET
READS DISCLOSURES FOR MORE COMPLEX PRODUCTS
LACKS PRACTICAL
Could not navigate
Feel
BROKERS ARE NOT TRUSTWORTHY
FELT FIDELITY WEBSITE WAS TOO BUSY
DESIRE TO MAKE MONEY
LIKE FRIENDS WHO INVESTED & BOUGHT
Computer provides more overview and comprehensive info.
INVESTING IS GAMBLING

Say

- fees + penalties to buy-sell + risk level
- identified interest in understanding how MKTs work, macro trends
- Said she was "beginner," but probably more moderately exp.

Think

- Wants to amass savings to put deposit on house and be secure if loses job
- Thinks disclosures are about regulators, not helping consumers

Do

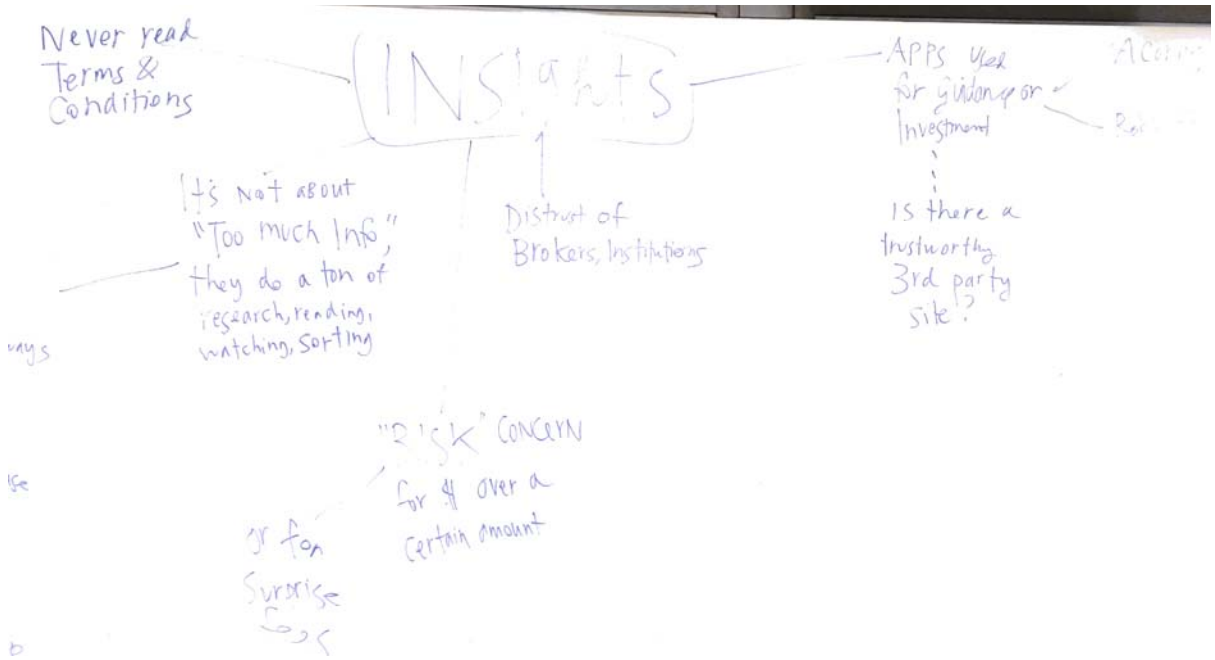
- 401(k) investing
- Govt incentives ~ market regulation in NZ
- short + long term planning
- Google searches. Found from pre-selected pal reads prospectuses, reads info sent by bank
- Uses laptop to invest

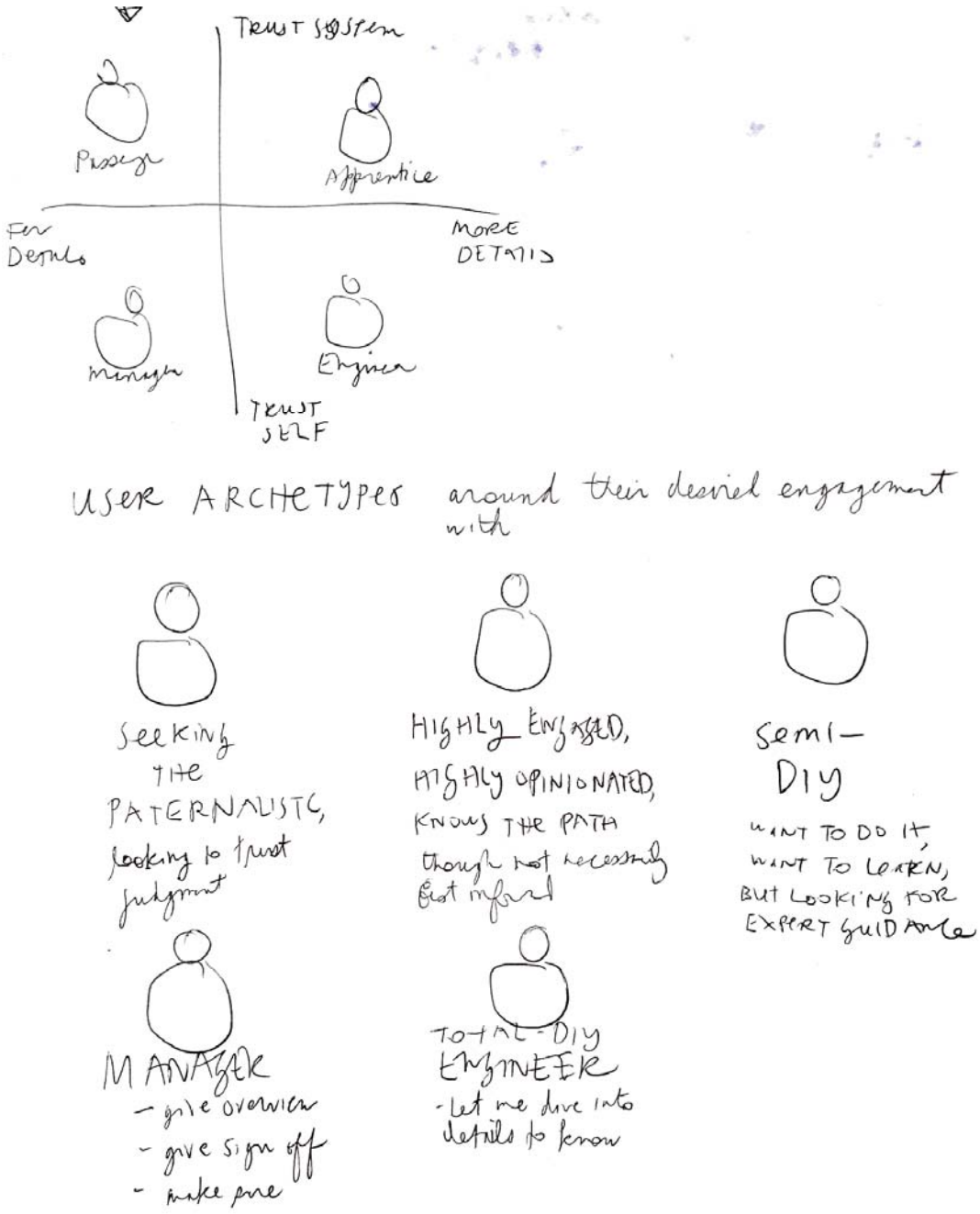
Feel

- Worry about liquidity, safety net
- looking for "fantasy" when making investment
  - w/ financial security
  - w/ investment vehicle
- Wants to be socially responsible investor
- Wants ad's imagery + title to appeal to her profile so that she feels investment objectives will be honored.

Questions for The Teams To Decide On (choice next week)

1. What type of person do you want to focus your design work on?
   - Level of Experience
   - Level of $ to invest
   - Demographics
     - Age
     - gender
     - income
     - education
     - profession
2. What moment in the user's "investment journey" do you want to focus on?
   - E.g.,
   - Initial Learning
   - Making Sense of Options
   - Shopping for an Investment to Make
   - Deciding to put $ in certain vehicles
   - Education
   - Decision-Making
3. Why does this persona have value as your focus?
   - for FINRA
   - for broader learnings

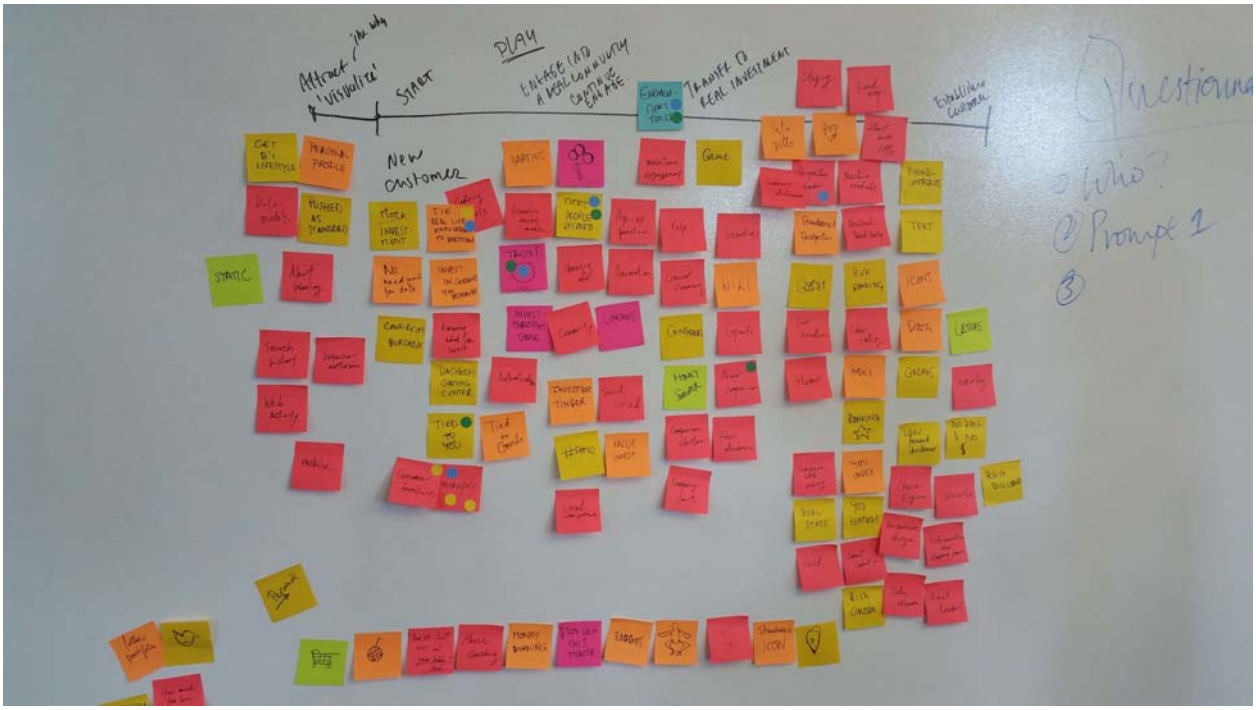

Never read Terms & Conditions
INSIGHTS
Apps used for guidance or Investment
It's Not about "Too much Info", they do a ton of research, reading, watching, sorting
Distrust of Brokers, Institutions
Is there a trustworthy 3rd party site?
"RISK" CONCERN
for $ over a certain amount
or for Surprise



Brainstorm, initial concepts

How might we help a procrastinating woman looking for fun to build her financial strategy.


1
10
SAY
FINRA
Short description of FINRA
TONE
FLASH LIGHTS
LINK to FINRA
BIRD CHIRP
Visual
Youtube video
RANKED Preference
GENERALIZED preference
TOP 3
CELEB PRIORITIES
CHECK LISTS


Attract 'Visitors'
START
PLAY
ENGAGE (AD & NON-COMMUNITY CONTINUE ENGAGE)
TRANSFER TO REAL INVESTMENT
Establishing Customer
New Customer
Questioning
Who?
Prompt 1
3

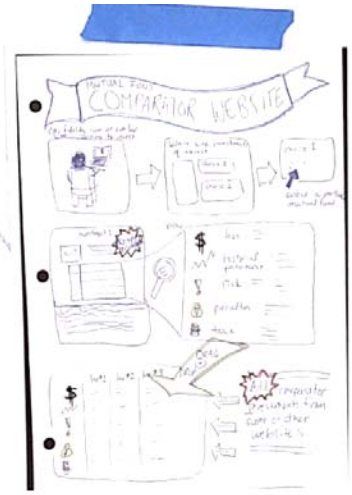

USER PROFILE
Rank Concerns
List of Concerns
Short descript of FINRA
FINRA ?
Youtube video
FINRA who is it?
FINRA OFFICIAL SEAL
BANK ADS?
BANK INFO
CAMPUS DRIVE
OUTPUT/PROCESS
GENERALIZED prefs
COLOR CODE
Premium Features
Have a Q? Helpline
Give away
REWARD
TONE LANGUAGE/ACCENTS
We are your buddy going through this together
RANKED Preference
ON BALANCE
OPTION B 60%
RISK
FEES
RATE OF RETURN
Big shapes
Limited time, exclusive/personal advice
FLASH LIGHTS
NUTRITION LABEL?
BIRD CHIRP
Vibrate or flash lights
Fees first 2 years
TOP 3 Menu
Output Based on Aggregate & Most Concern
CANDY CRUSH
Headlines
Chat
TRUST/COMMUNITY
FORUM
Other people are looking
6 people looking at this
You're not alone Sample profile.
REMINDER
REMIND GOALS
Don't get your treat
Testimonial/Sample Profile
CELEB PRIORITIES
People also looked at ...
X % of people with same goals chose Y


RANDOM
Patronizin but funny
Make it visual
Stack of dock
QUICK BYTES
STAND UP/ VIDEO
MORE VISUAL
Help reader Prioritize what to Read/learn
Personlize with a specific personal vision
How to trim whole experience into 5 min
Louis C.K
JIMMY FALON

Testing and results


Engagement
Comprehension
Decision
Engagement
Comprehension
Decision
Engagement
Comprehension
Decision
Engagement
Comprehension
Decision
Comprehension
Decision
Comprehension
Decision


Engagement Scores:
5-6 - questionnaire
1
5
, 6
Comprehension
5-6
6
, 1
Decision
3-4
1
6
, 1
Would not engage with book but liked questionnaire
likes risk correlation aspect of questionnaire
"Years until" question not helpful but questionnaire otherwise engaging
wants more of a push - what you "should" do
Engagement Scores:
3, 4 (Feedback)
, 5
Comprehension
3 , 4
Decision
3 , 4
How are ppl screened? How are for-my organized
helpful to have institutional moderator
Biggest challenge is reliability



make this clearer

Engagement 2, 6, 4 5

Comprehension 5, 7, 4 6

Decision 4, 6, 4 6

Engagement 6, 5, 5

Comprehension 6, 5

Decision 6, 6, 4

Practically, is this possible?

"This drawing confuses me"

I want really short disclosure + big graphics

I want this as simple as picking between credit cards

Don't want to go to each site to buy/log

Really neat, Display how to fingers and what instruments are left selected

A consolidated site

List off products, + drag & drop

SID discloses color to sophisticated investors, so this is a welcome change

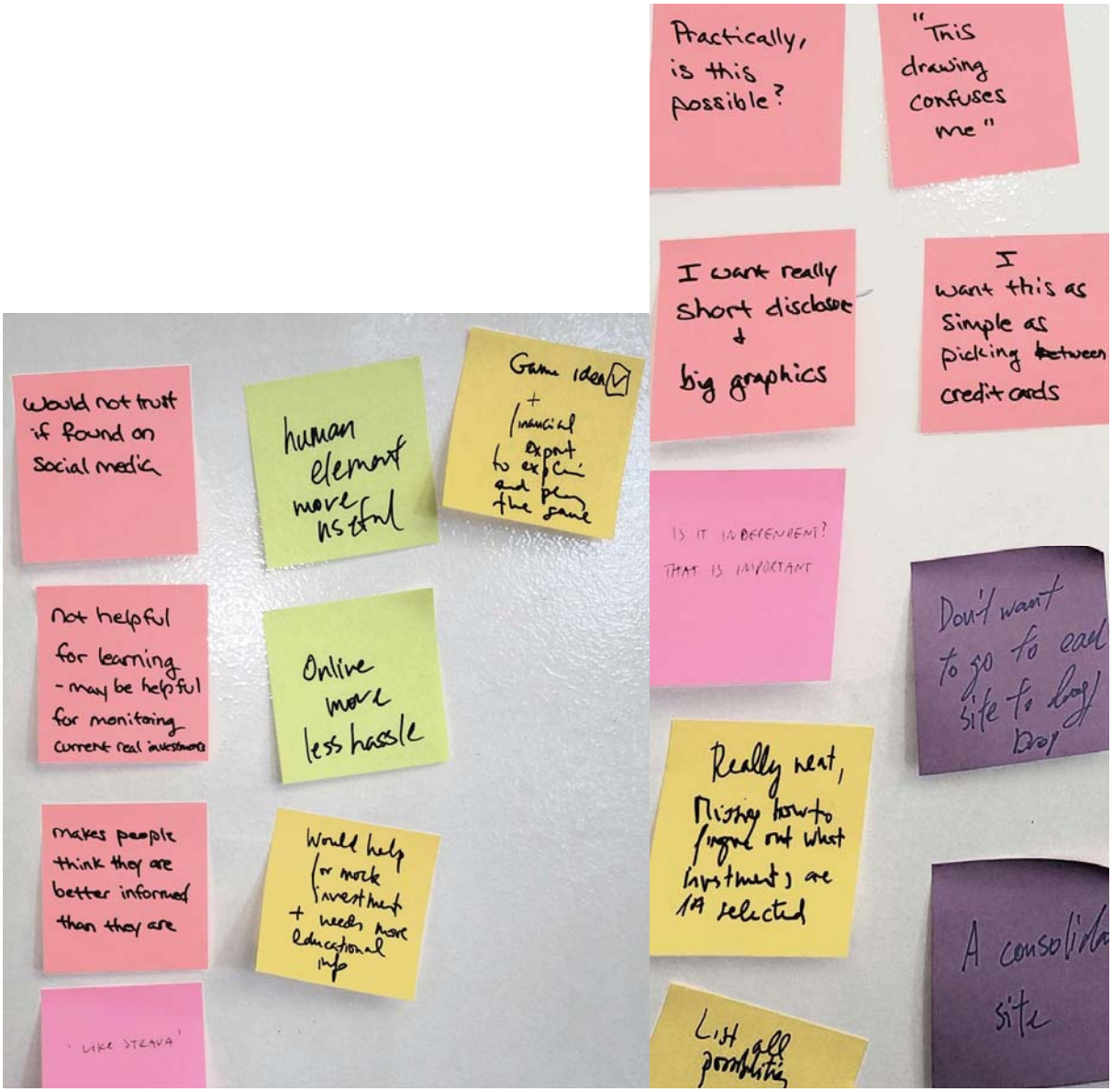
More readable, inviting

helpful if you could see how changes to one item affect other items (ie tax only)

Feel like I've seen it before

useful


Would not engage with booth but liked questionnaire
likes risk correlation aspect of questionnaire
"Years until" question not helpful but questionnaire otherwise engaging
wants terms like FINRA defined
wants more of a push - what you "should" do


Practically, is this possible?
"This drawing confuses me"
I want really short disclosure + big graphics
I want this as simple as picking between credit cards
Would not trust if found on social media
human element more useful
Game idea + financial expert to explain and play the game
IS IT INDEPENDENT? THAT IS IMPORTANT
Not helpful for learning - may be helpful for monitoring current real investments
Online more less hassle
Don't want to go to each site to buy
Really neat, Missing how to figure out what investments are 1A selected
makes people think they are better informed than they are
Would help for more investment + needs more educational info
A consolidated site
'LIKE STRAVA'
List all possibilities