

Solium › Shareworks

Mobile Strategy



Client Presentation

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prepared for

Solium

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At Shareworks, we help companies offer stock and equity plans for employees. We help participants manage their awards and equity stock portfolio.

Our mission: to create a mobile experience that gives our participants a sense of how much money they have, what the numbers mean, and help them figure out what to do next.

1.0

Goals

- Understand how Shareworks users currently interact with the application.
- Understand where a Shareworks mobile app would fit within the spectrum of the user's current finance apps.
- Produce a prioritized list of features that gets Solium to think differently about what they need in a mobile app.

2.0

Methods

- Research on motivation and mobile best practices in finance applications.
- Review of Shareworks demonstration site and key personas.
- Interviews with 3 current Shareworks participants, focused on primary tasks, frequency and context of usage.
- Feature review of other mobile finance/investment apps

3.0

Meet Steve.



Steve is between the ages of 30 and 60, and is working for a publicly traded company. Steve also owns a smartphone and/or tablet, that he prefers to use when at home or on the go.

Steve typically only gets one award a year although he is just as likely to be enrolled in a Share Purchase Plan, depending on the company. He is not a sophisticated investor, but can generally make his way through the transaction process.

3.1

Meet Steve.



Steve needs to:

- know how much he has
- know when he has a new award, and how to accept it
- check the status of a transaction
- access statements & tax documents
- know what he can do with his money
- transfer money to an account

3.1

Meet Steve.



Steve worries about:

- understanding what all these numbers mean
- what will happen to his money if the stock price changes
- whether his data is secure
- how to get money transferred to his bank account

SECTION 2.0

Taking Shareworks Mobile

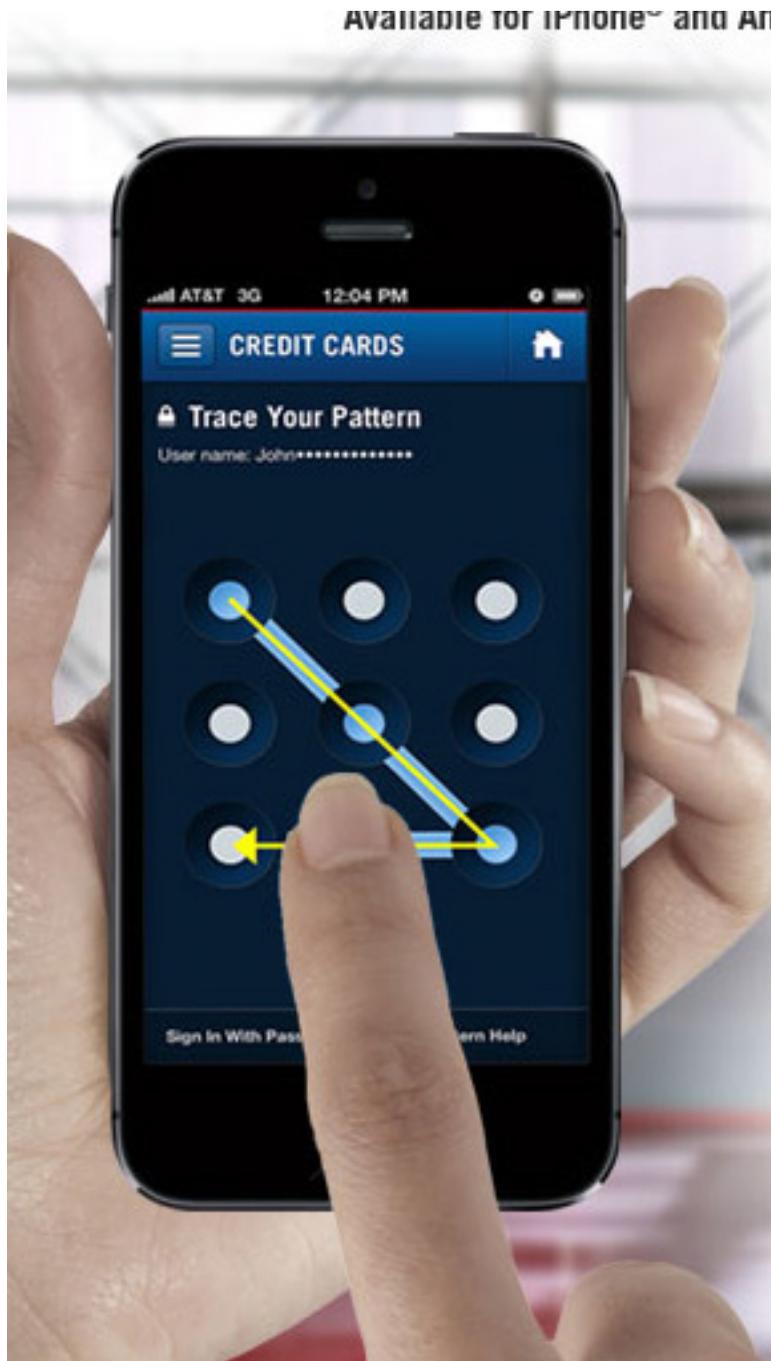
In order to have a great mobile experience with Shareworks, *Steve needs to:*



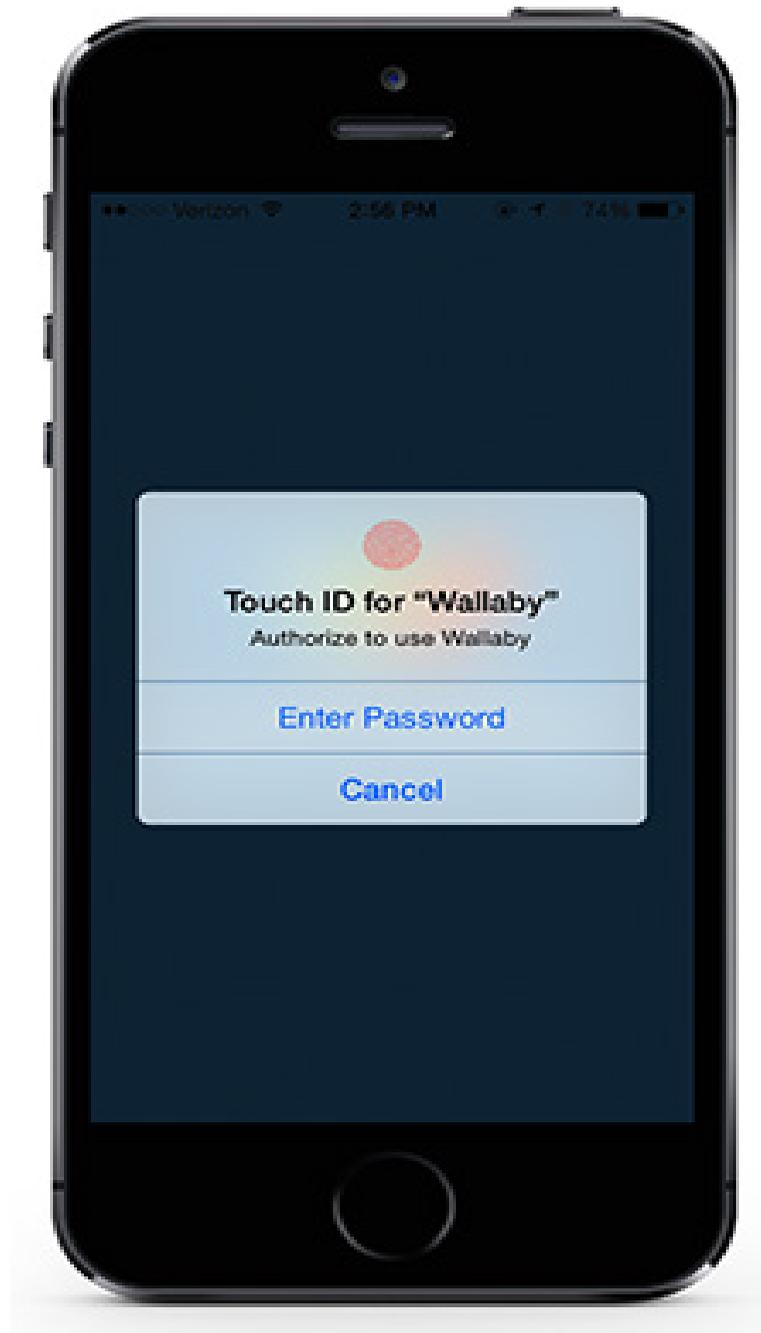
PRINCIPLE #1

**TRUST AND SECURITY
ARE THE BACKBONE OF
A SUCCESSFUL MOBILE
FINANCIAL EXPERIENCE.**

Secure login options



Capital One: SureSwipe

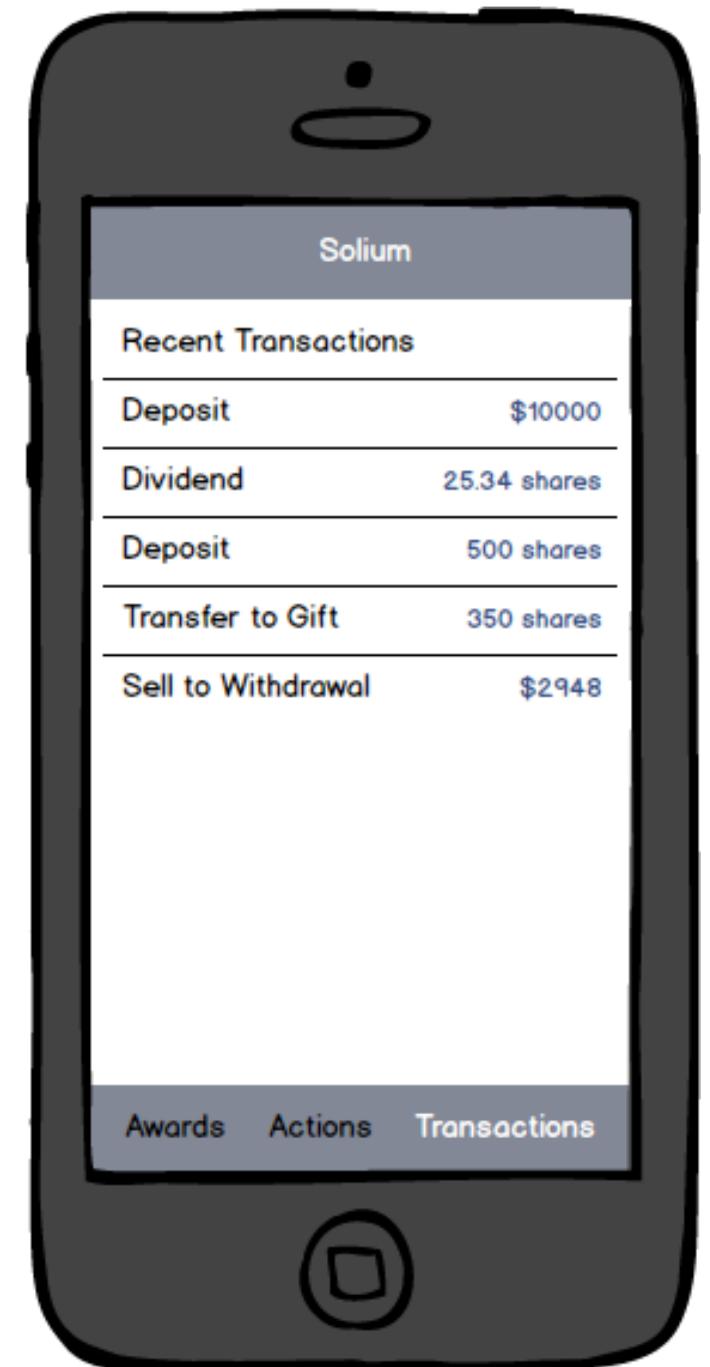
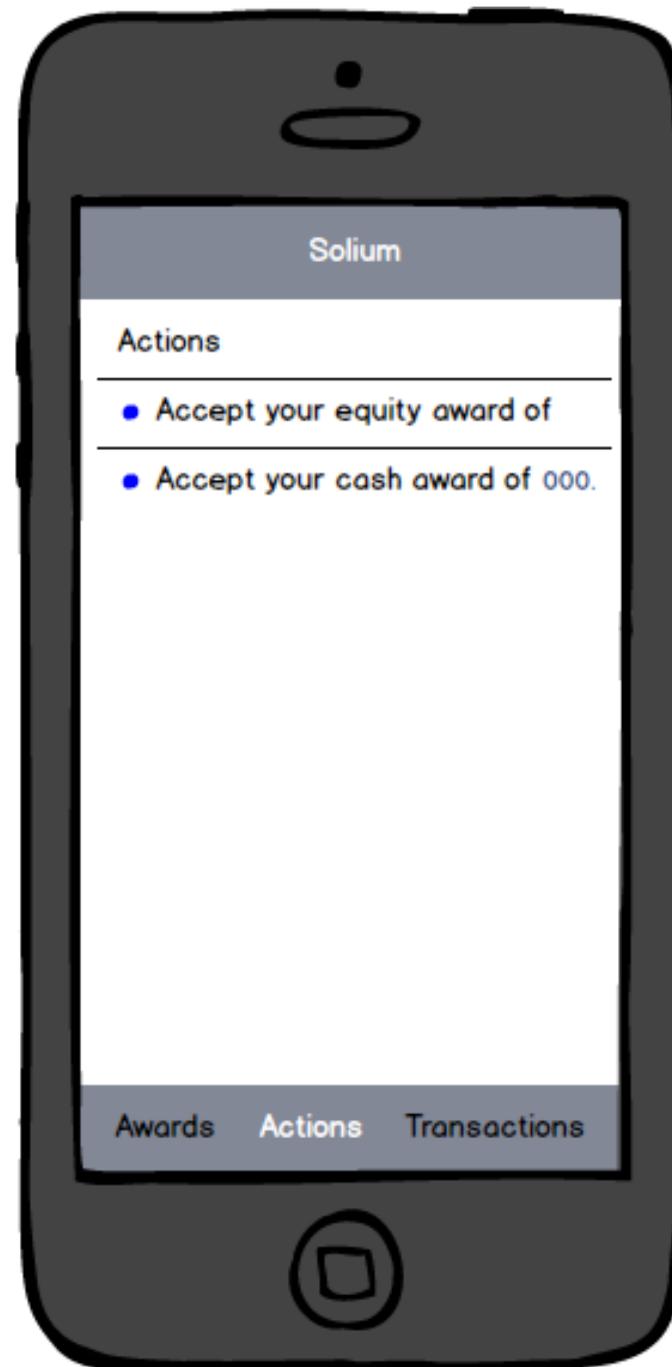
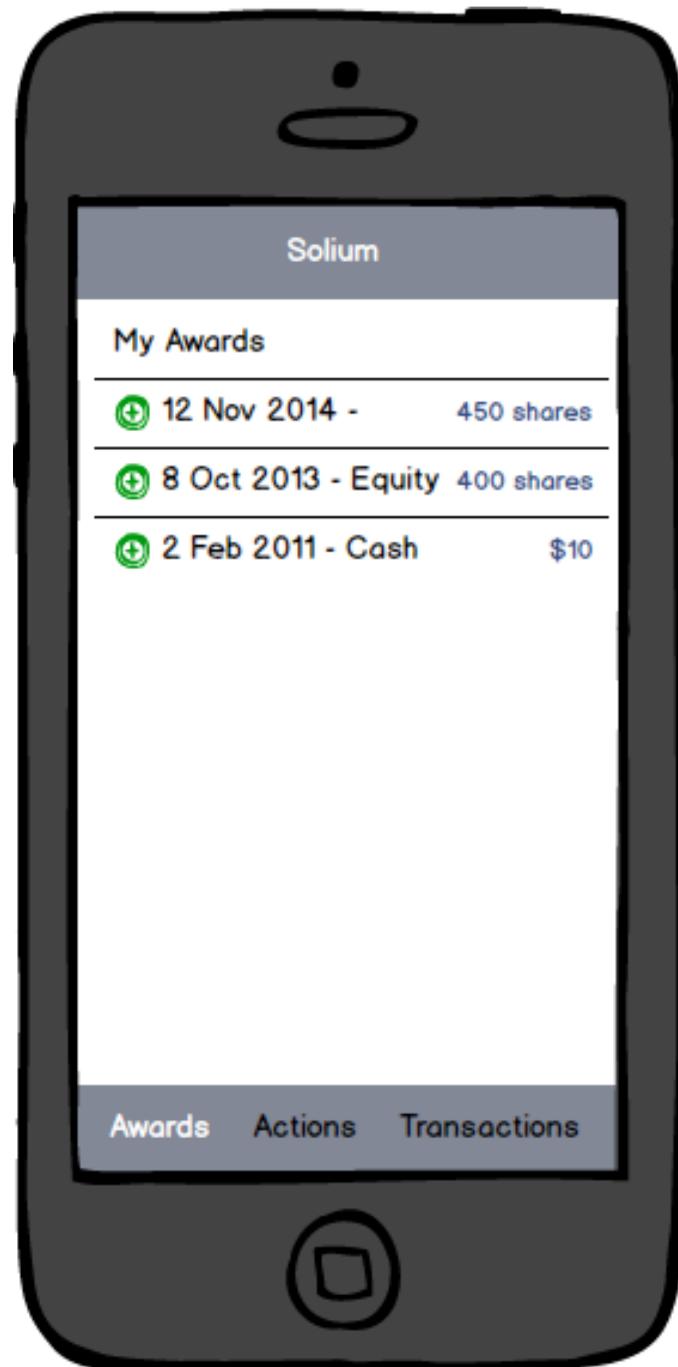


Wallaby: Touch ID

PRINCIPLE #2

**HELP ME UNDERSTAND
WHAT I'M LOOKING AT, AND
WHAT I CAN DO WITH THE
INFORMATION.**

Example Wireframes



PRINCIPLE #3

**FOCUS ON THE TASK
AT HAND. KEEP
EXTRA CONTENT TO
A MINIMUM.**

Example Wireframes



PRINCIPLE #4

**HELP ME KNOW THE RIGHT
TIME TO TAKE ACTION.**

PRINCIPLE #5

CULTIVATE A SENSE OF PLAY.

SECTION 3.0

Feature analysis

3.0

This feature list consolidates the recommended features listed in Section 2. The chart on page 20 prioritizes these features in a 2 by 2 matrix to facilitate internal decisionmaking.

Feature List

The following features have been suggested as part of this research. Note: some features that crossed two principles have been consolidated.

Security and Trust

- ST1. Prominent security disclosure
- ST2. Allow custom username
- ST3. Discrete logout button
- ST4. Touch ID Login
- ST5. Notification of logout

Clarity of Information

- CI1. Focus on total value of shares, and cash available
- CI2. Clear next action on home screen
- CI3. Clear way to drill down
- CI4. Integration with other apps

Task Orientation

- TO1. Ready access to documents and statements
- TO2. Download to Dropbox
- TO3. Securely send information to other people

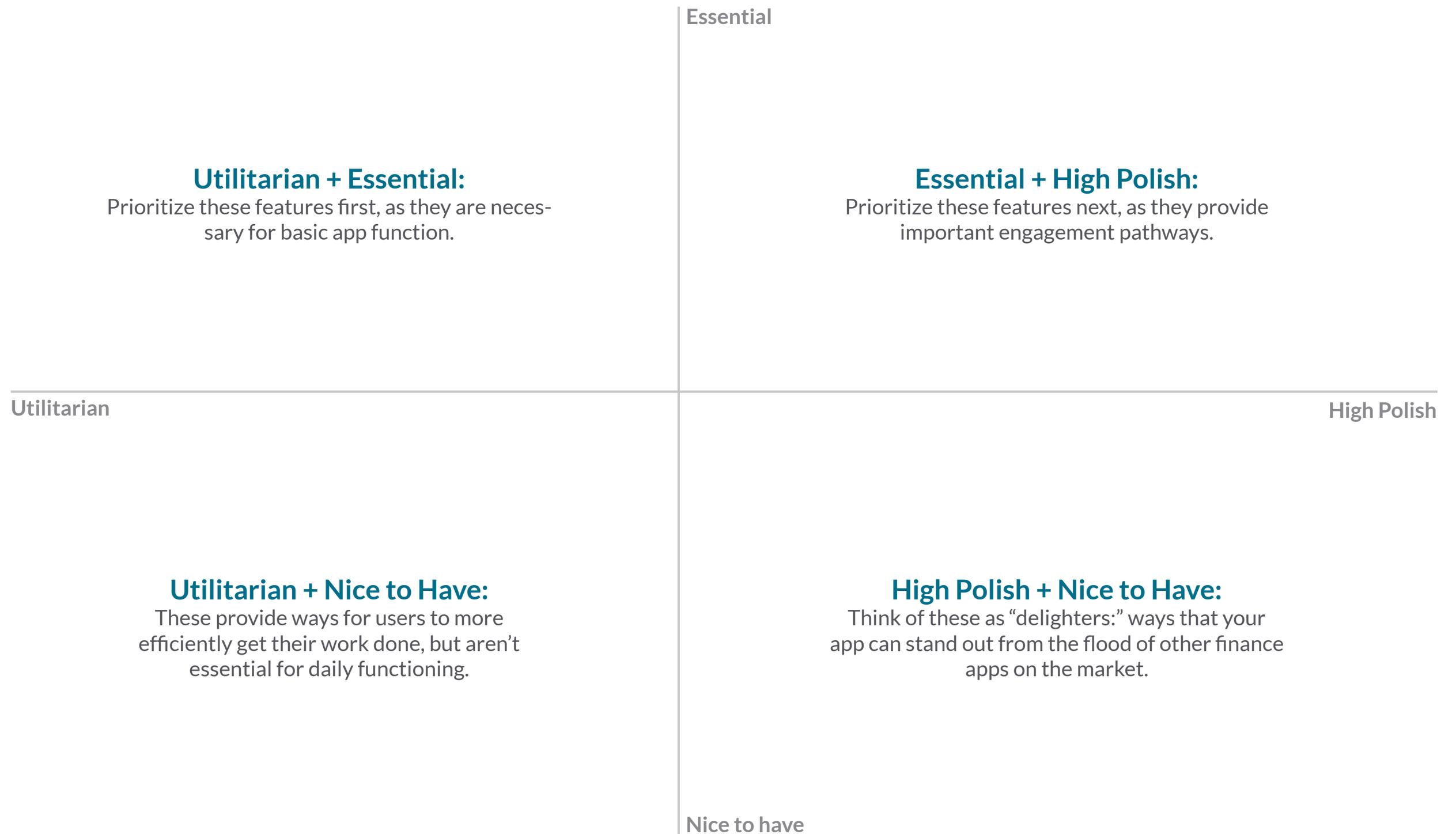
Clarity of Next Action

- CNA1. Admin-defined notifications
- CNA2. User-defined notifications
- CNA3. Prompt to convert currency
- CNA4. Notifications link to action

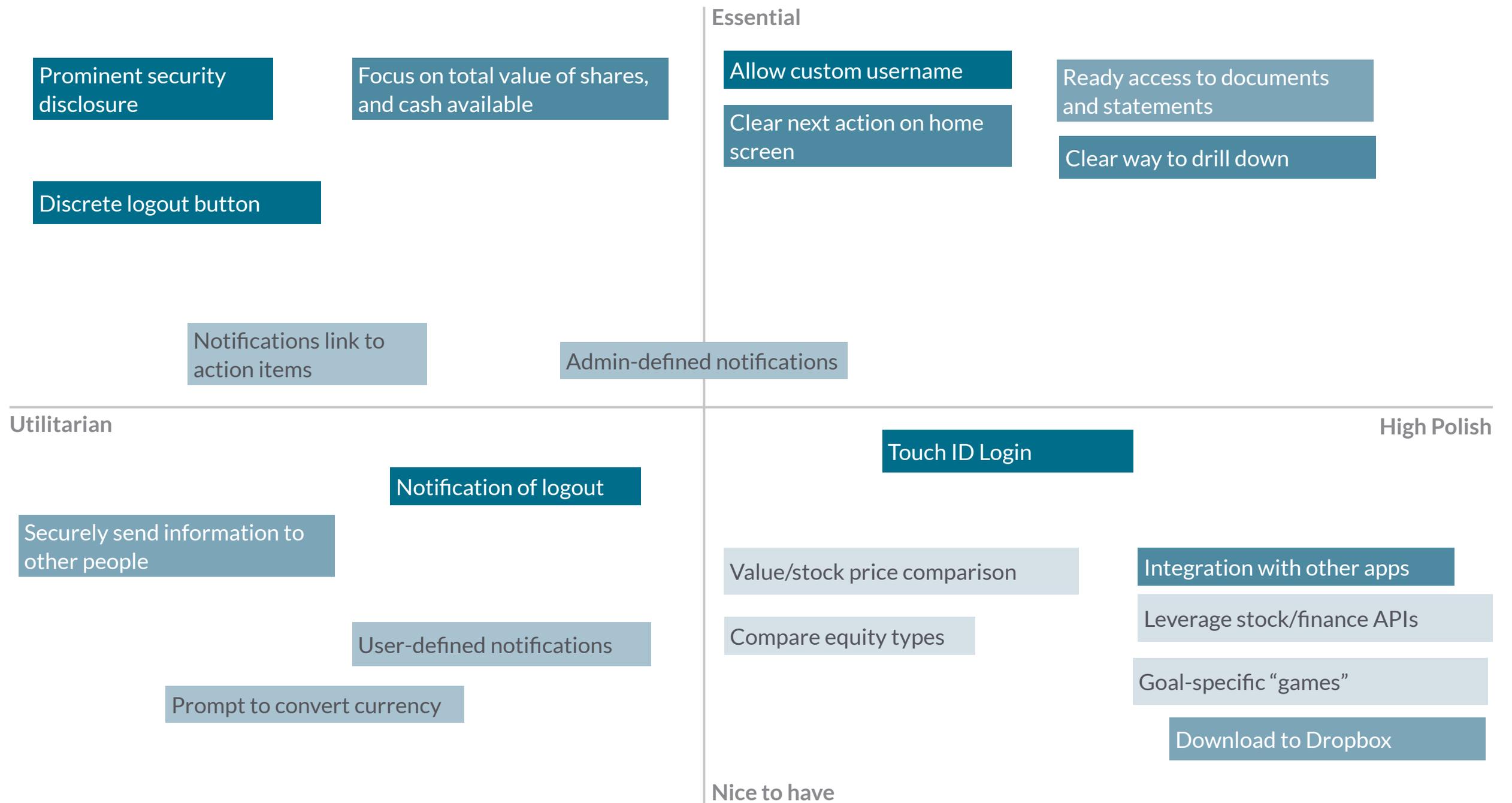
Sense of Play

- SP1. Goal-specific “games”
- SP2. Value/stock price comparison
- SP3. Compare equity types
- SP4. Leverage stock/finance APIs

3.0 Feature Priority Overview



3.0 Feature Priority



Legend: **Security and Trust** Clarity of Information Task Orientation Clarity of Next Action Sense of Play

APPENDIX A

Feature Detail

The app must provide extra assurance that the participant's data is secure.

The portability and cloud-based nature of mobile computing makes security more important than ever. This is particularly true of situations that involve a user's sensitive financial information. In usability tests of mobile finance applications, we saw participants repeatedly stress the importance of logging out after completing their banking.

The Charles Schwab investment app includes a security policy in their opening screen. Other financial apps use TouchID (Chase, Mint), app-specific PIN codes (Mint), automatic logout on app close, or a "SureSwipe" shape password (Capital One) to protect their users' data.

Essential features to improve security and trust:

1. Security disclosure should be featured prominently on home screen.
2. Participant should be able to log in with an easily rememberable username and password (not their participant ID).
3. Participant should be asked whether they would like to log out upon closing the app (including pressing the Home button). Alternatively, they should be automatically logged out within 5 minutes of closing the app.

Additional features to improve security and trust:

4. Consider using Touch ID (on iPhone) to make logging in more efficient.
5. Consider providing a notification after the fact that the participant has been logged out, to reinforce trust.

DESIGN PRINCIPLE IN ACTION

The app must focus on an overview of the participant's rewards, and the next actions required or suggested. Additional information can be drilled into, but should not be primary.

For the majority of participants, Shareworks is only one source of income. To get a complete picture of their finances and investments, the information they receive from the mobile app must be integrated into all the other numbers that represent their finances. While this is especially true of Stanley, our "power investor," even Steve has to contend with a 401(k) or IRA, as well as a checking and possibly a savings account.

To help Steve make sense of his awards, we must not only help him understand the value of his shares, but also what actions are available to him, and the tax implications of making transactions.

Essential features to improve clarity of information:

1. Focus attention on two primary values: The total value of the participant's shares, and the cash they actually have available for transactions.
2. Make available and upcoming actions clear from the home screen.
3. Allow users to drill down for details if required, by touching any value on their screen that has a right angle (▸) next to it.

Additional features to improve clarity of information:

4. Consider integrating with other financial apps, such as Mint, to allow Steve to seamlessly view his current awards in aggregate with his other accounts.
5. Find ways to make it easy to send needed information securely to other professionals, e.g. accountants or financial planners, employed by the participant.

The app must allow participants to quickly perform their most important actions.

People use mobile devices in all sorts of places. A user is just as likely to do something on their phone in line at Tim Horton's as they are to use it lying in bed, riding a bus, or sitting in front of the television.

By providing the ability to get in, do what you have to do, and get out quickly, Solium can help participants more quickly and securely gain access to their financial data. This will increase trust in the app, and help participants continue to make sense of their whole financial picture.

Essential features to improve task orientation:

1. Put the combined value of shares front and center, but allow the user to drill down for details.
2. Provide ready access to statements, tax information and other documents.
3. Minimize the amount of additional content, such as articles or marketing content, within the app.

Additional features to improve task orientation:

4. Consider allowing users to download documentation to Dropbox.
5. Consider allowing users to send documentation, such as tax information, via email, OR a secure link. (note: this feature may be limited due to regulations).

The app can add value by delivering information at the right time to help make Steve's decisions clear and frictionless.

Part of helping Steve understand his financial picture is helping him quickly take action on items that need his attention. By leveraging native mobile behaviors such as push notifications and geolocation, we can enhance the experience and give Steve more power over his finances.

TD Insurance's mobile app allows users to make a claim and track it directly within the app, using Geolocation to track where accidents occurred, and providing push notifications when an action is required on the participant's claim.

Additional features that may clarify when to take action:

1. Allow administrators to set push notifications of important action items for participants, e.g. limits, vesting periods.
2. Allow participants to set their own desired notifications, e.g. "send me a push if the stock hits X".
3. Consider using Geolocation to prompt participants if they want to see the value of their shares in a different currency, e.g. USD, Euro or British Pounds.
4. Ensure that push notifications land the participant in the exact location they'll need to take the needed action.

DESIGN PRINCIPLE IN ACTION

The app can improve engagement by allowing for easy-to-use modeling, projection and other hypothetical scenarios to let users imagine different strategies and outcomes for their Shareworks equity.

Our research suggests that participants are most likely to think about their finances during specific times: commuting, before bed at night, or relaxing in front of the television.

The Modeller in Shareworks Desktop gave them a fun way to see the value of their awards grow or change in concert with changes in the market.

As we move to the mobile experience, we want to bring that sense of fun into the app, and give participants a way to engage with their money. Unlike the Desktop experience, though, time is short—30% of mobile sessions last less than a minute.

Additional features that may help cultivate a sense of play:

1. Consider task-specific “games” that relate to participants’ life goals, e.g. buying a house or a car.
2. Help participants get a quick sense of how the value of their awards changes based on changes in stock price, as they can do in the Modeller.
3. Allow comparisons between stock options and/or restricted awards
4. Consider leveraging other stock or financial APIs so participants can compare their options with the rest of their portfolio.

*Meeker, Mary (2014). 2014 Internet Trends Report.
Retrieved from <http://www.kpcb.com/insights/2014-internet-trends> on November 30, 2014.*

APPENDIX B

Literature Research

4.0

Self Determination Theory (Deci, Ryan, 2000)

At the most basic level, people are motivated by three things:

1. **Autonomy:** A sense of control over how perform a given task.

This means our product must fit in with the user's current lifestyle and work process, and make their lives easier—not harder.

2. **Efficacy:** A sense that we are fully capable of doing what we need to do.

This means our product must respect the user's intelligence, and make them feel like they are in control of their money—so they can worry about more important things.

3. **Relatedness:** a sense that we are part of something bigger, and that others have our back.

This means our products must lend a hand when the user is frustrated or confused, and treat them like the human beings they are.

When we believe we're good at what we do, we are more motivated to do the things we need to do.

When we feel we can get help when we need it, we're more likely to get help—and more likely to get things done.

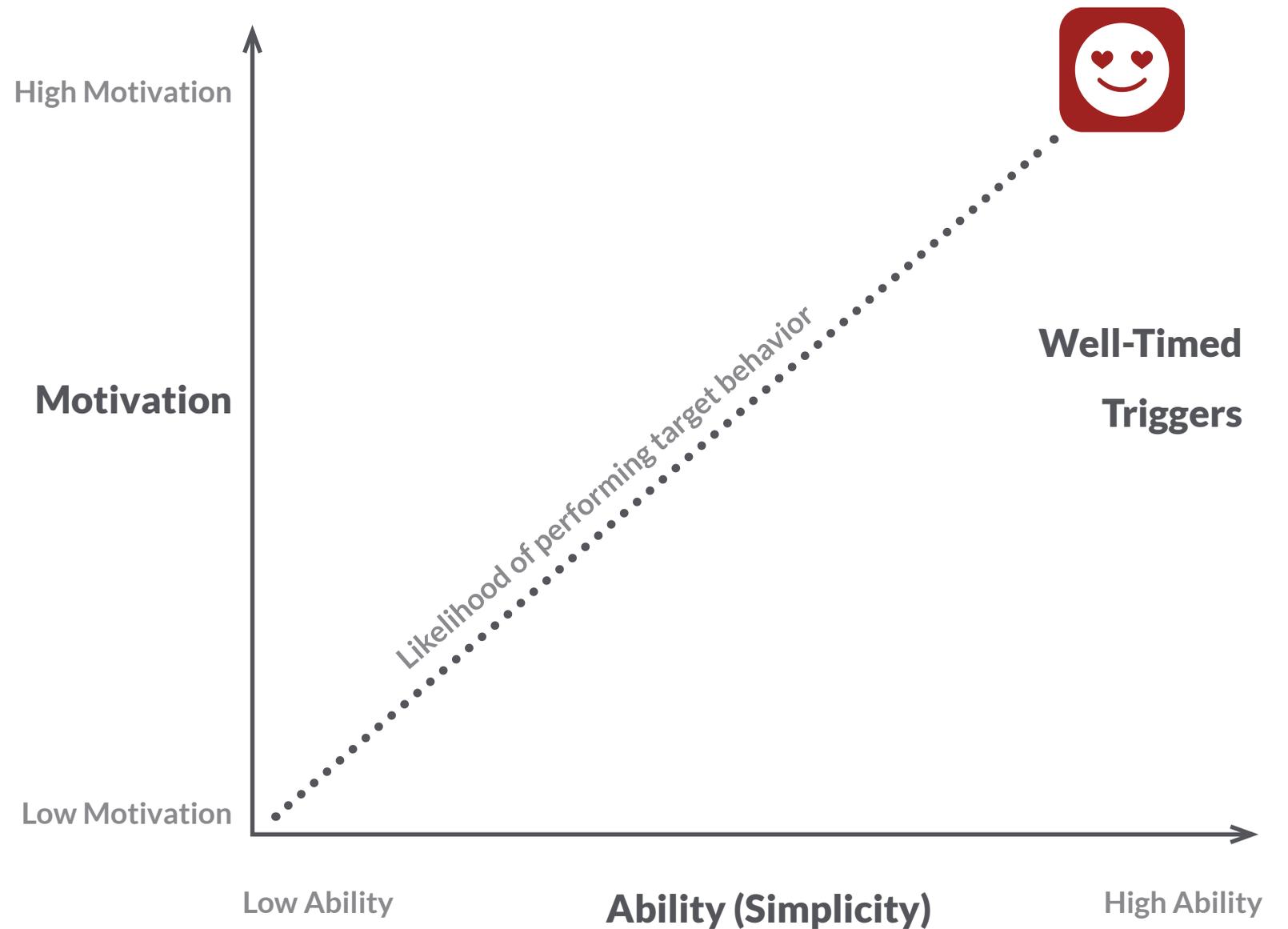
Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary educational psychology*, 25(1), 54-67.

4.0

BJ Fogg (2009) says three things are needed to achieve a target behavior. First, a person must be *motivated* to do the behavior. Second, they must *have the ability* to do the behavior. Finally, and most importantly, they must *be triggered* to do the behavior.

When these three elements happen at the same time, our products stop being tools, and start making a positive impact on our customer's lives.

Persuasive Tech (Fogg, 2009)



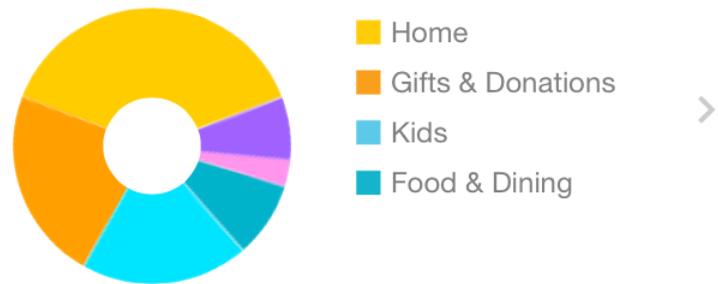
Fogg, B. J. (2009, April). A behavior model for persuasive design. In *Proceedings of the 4th international conference on persuasive technology* (p. 40). ACM.

APPENDIX C

Mobile Finance Review

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☰ **Overview**

SPENDING November 2014



SPENDING June – November 2014



NET INCOME June – November 2014



🔄 1 account needs your attention!
 Tap here to fix. ✎

●●○○ AT&T 6:21 PM 🔋 75%
< Overview **Spending**

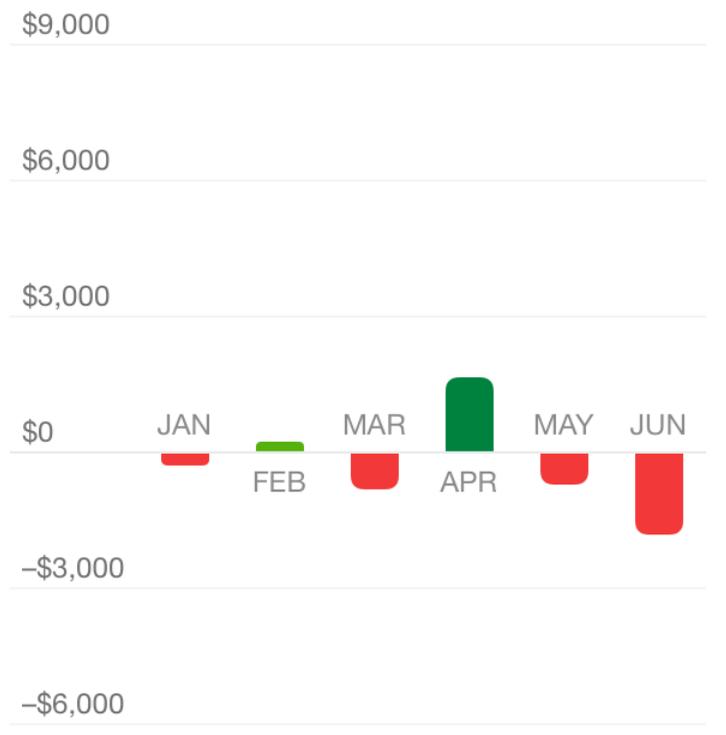
November
\$4,693



📄 38 Transactions

●●○○ AT&T 6:21 PM 🔋 75%
< Overview **Income**

April
\$1,582



📄 131 Transactions

Charles Schwab

AT&T 6:22 PM 75%

Market Overview Log In

Market Overview Market News Quotes Watchlist

Top Indices

DJIA	17,612.20	-2.70 (-0.02%)
S&P 500	2,038.25	-1.43 (-0.07%)
NASDAQ	4,675.14	+14.58 (+0.31%)

View All Indices

Market Movers

Updated: 11/12 07:22 PM ET

Home Accounts Trade Quotes More

AT&T 6:23 PM 75%

Back Log Out

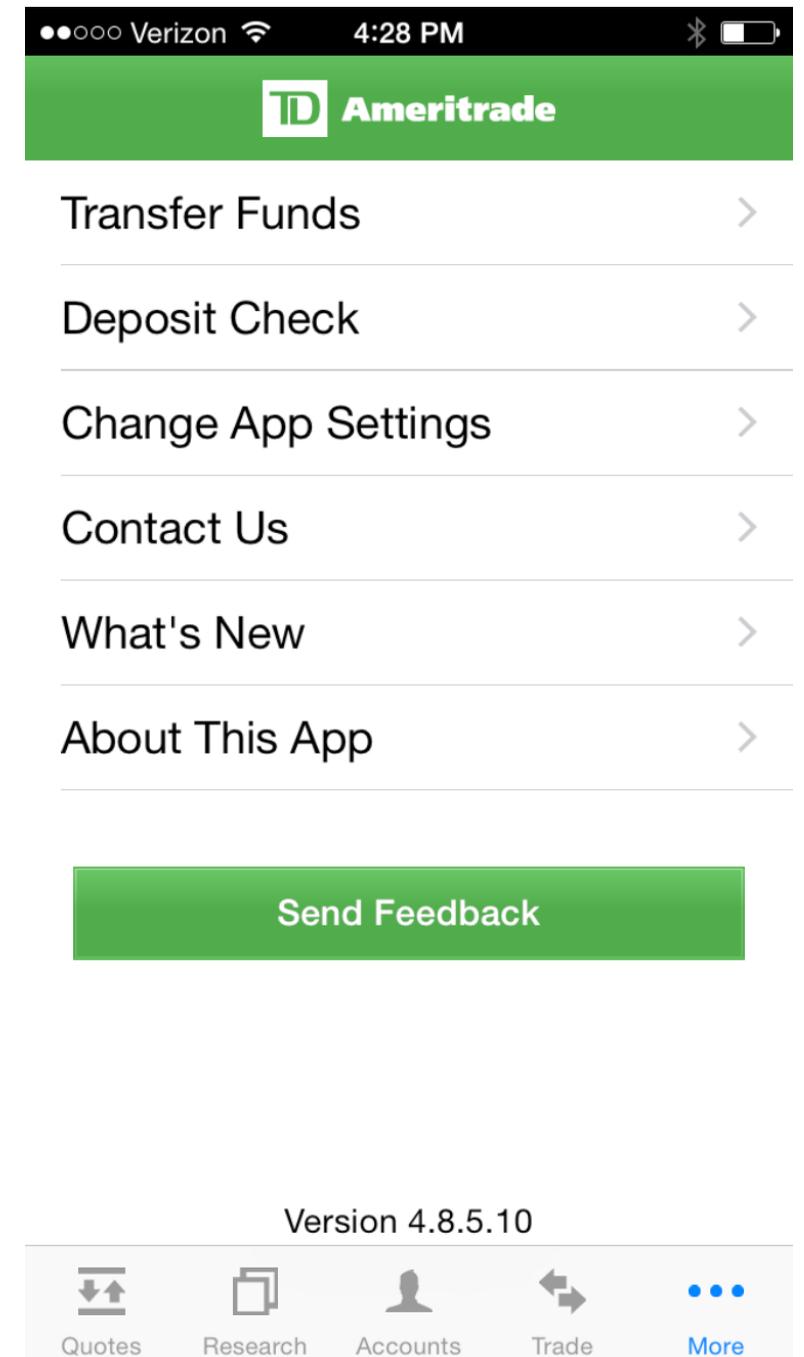
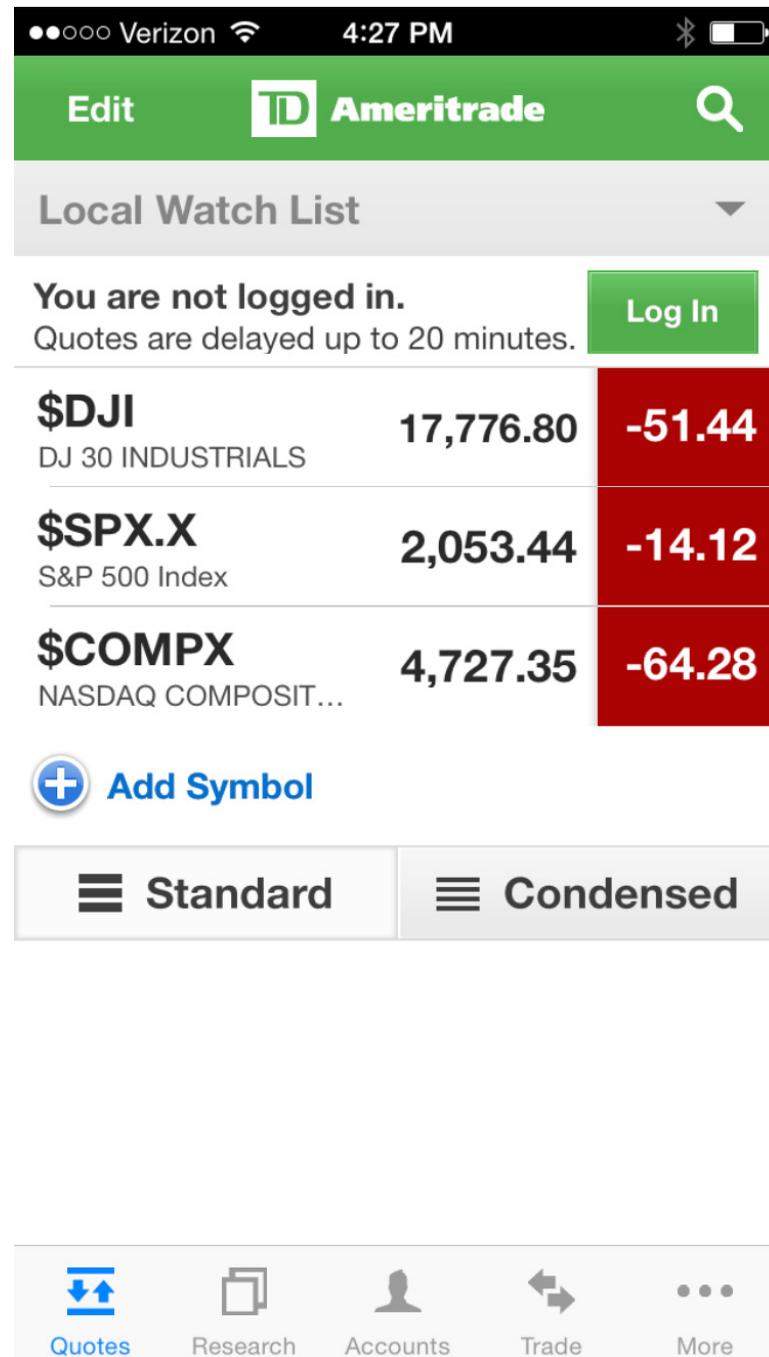
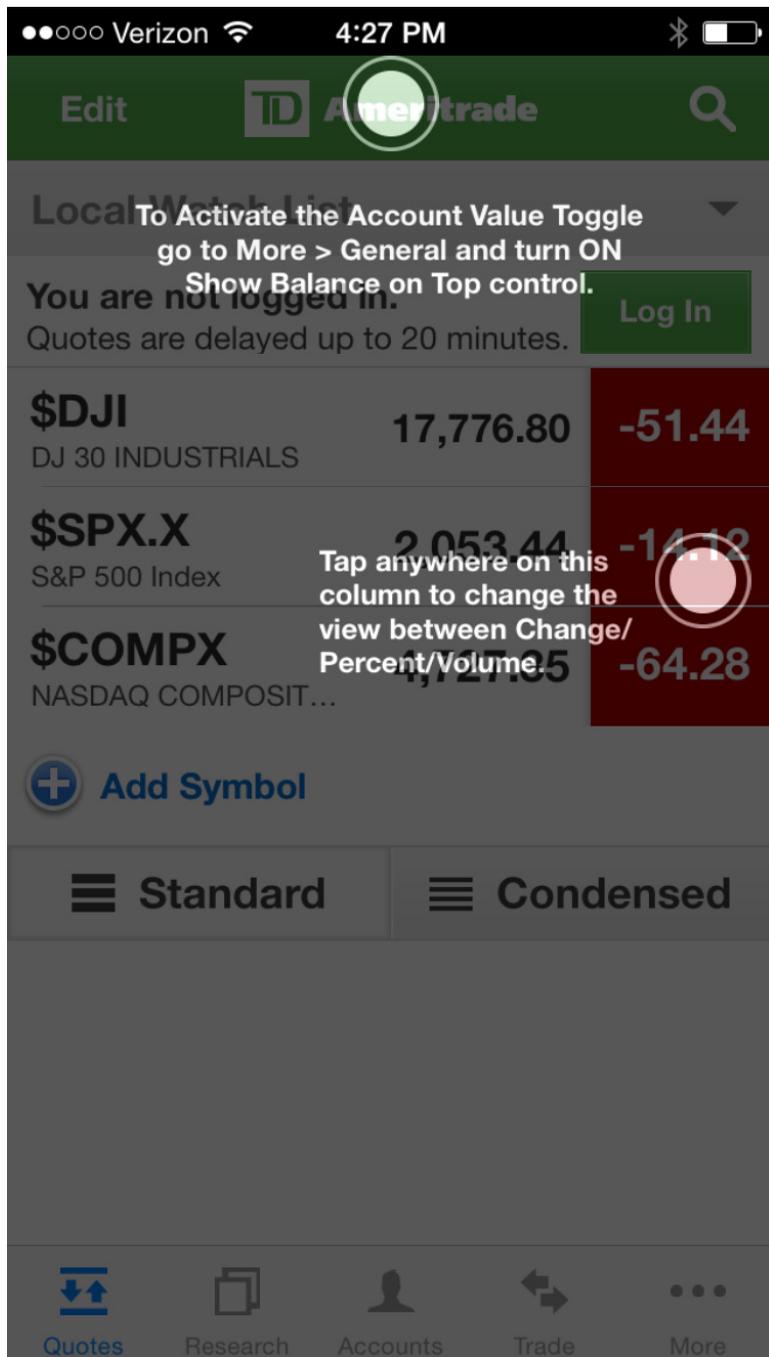
EQUITY AWARD ACCOUNT DETAILS

Exercisable Equity Awards Value	\$2,997.75
ESPP Share Value	\$46,177.29
Total	\$49,175.04
Unvested Award Value	\$20,088.00

Updated: 11/12 07:22 PM ET

Home Accounts Trade Quotes More

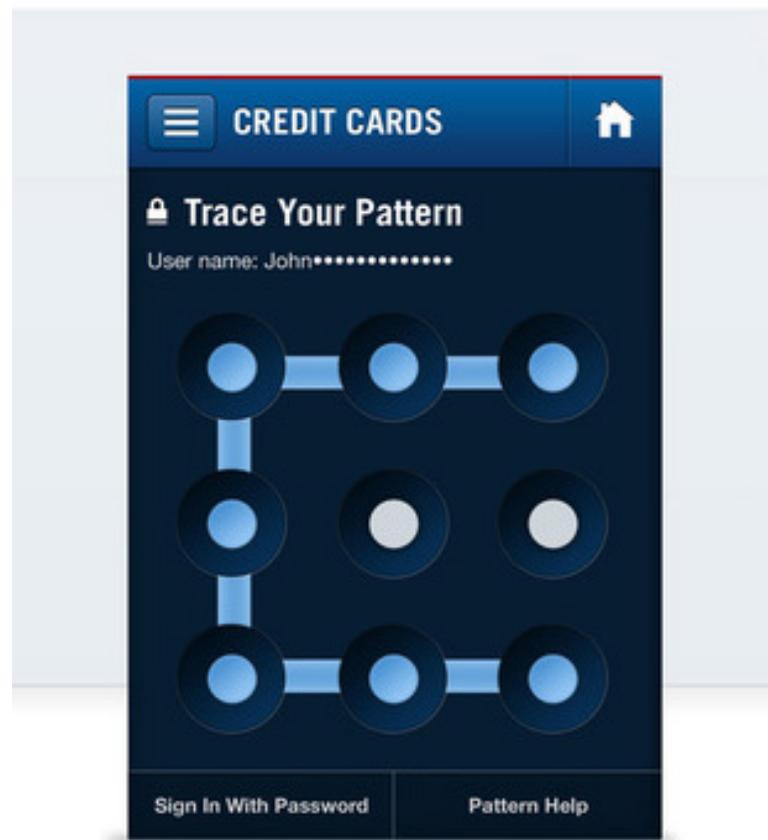
TD Ameritrade



Capital One

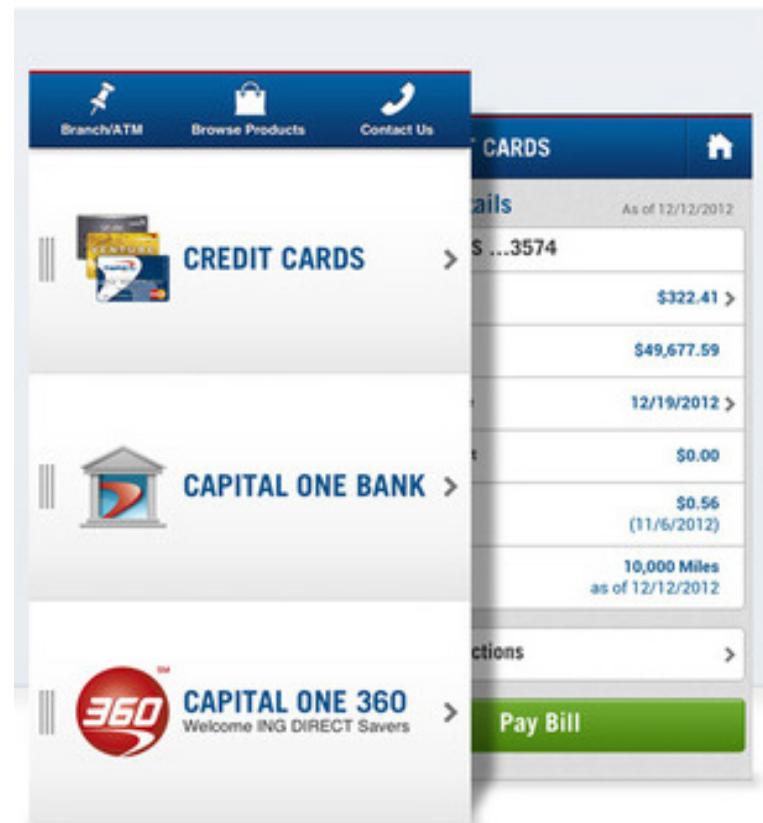
No Password Typos

Easy access to your credit card account with SureSwipeSM.



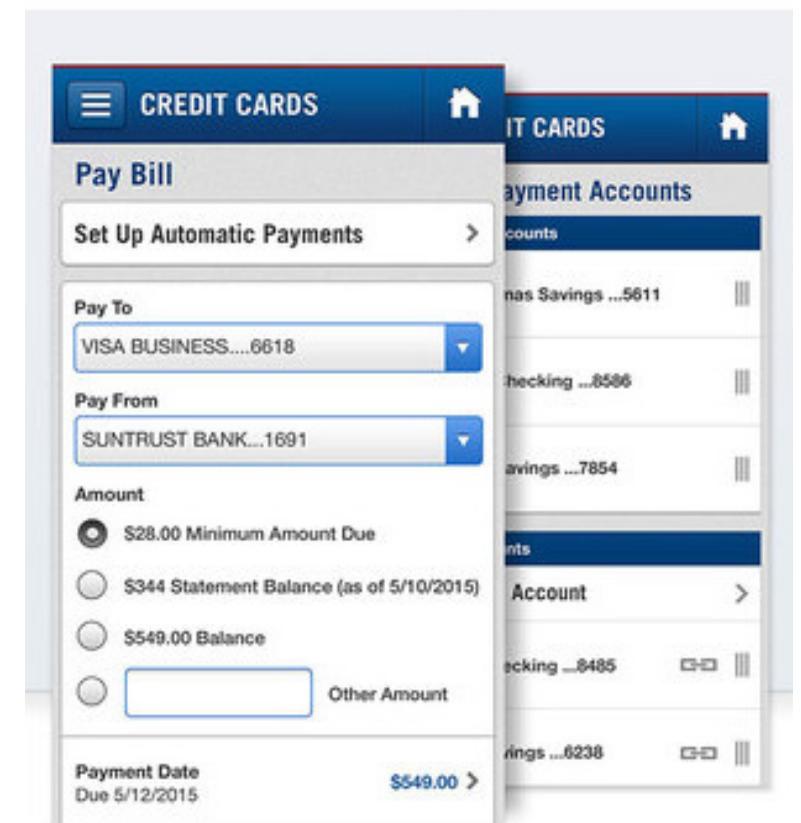
Secure & Convenient

View balances and recent activity, make payments, move money, and more!

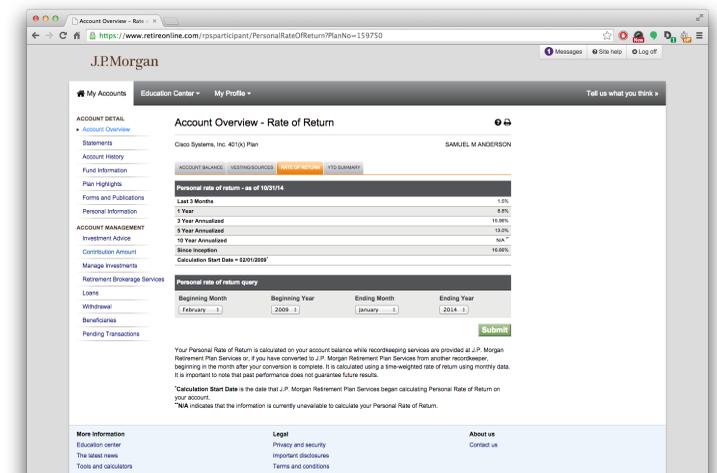
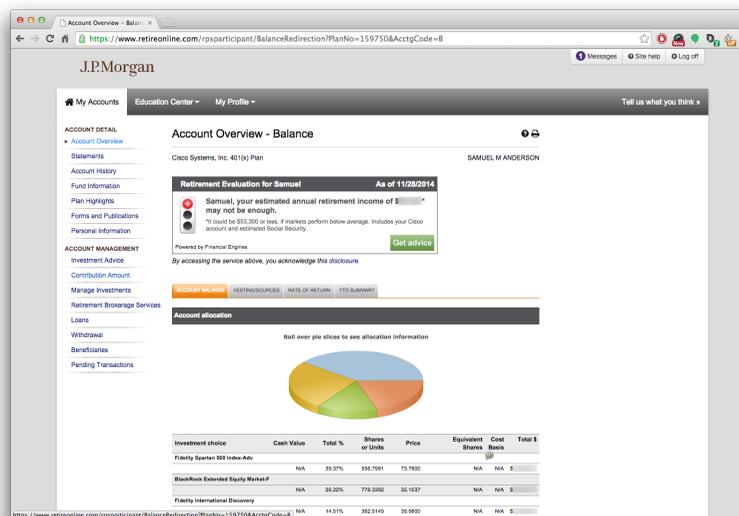
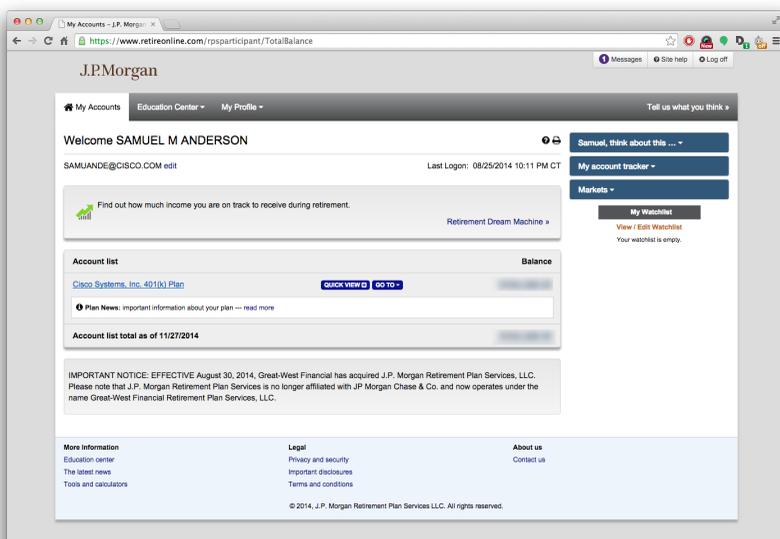
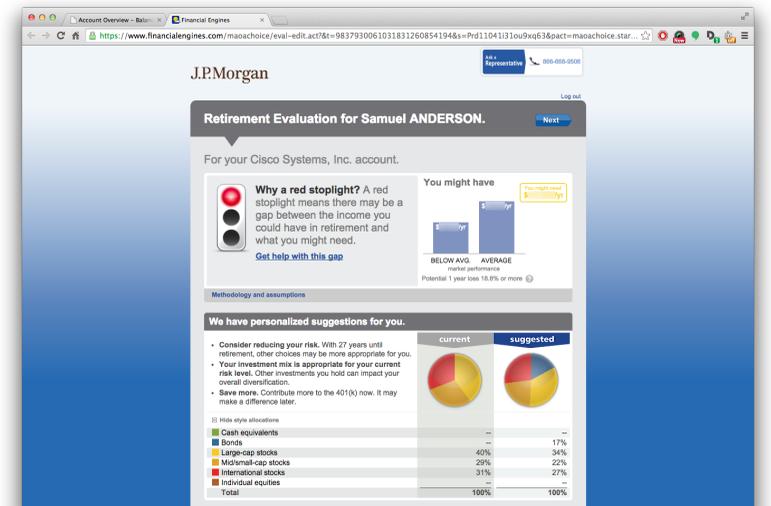
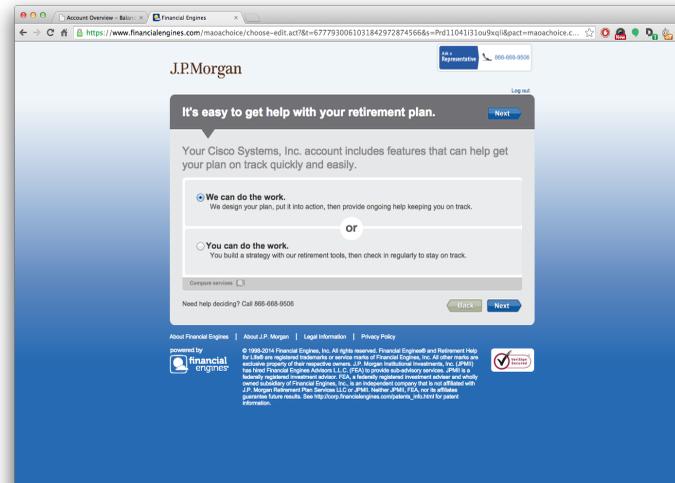
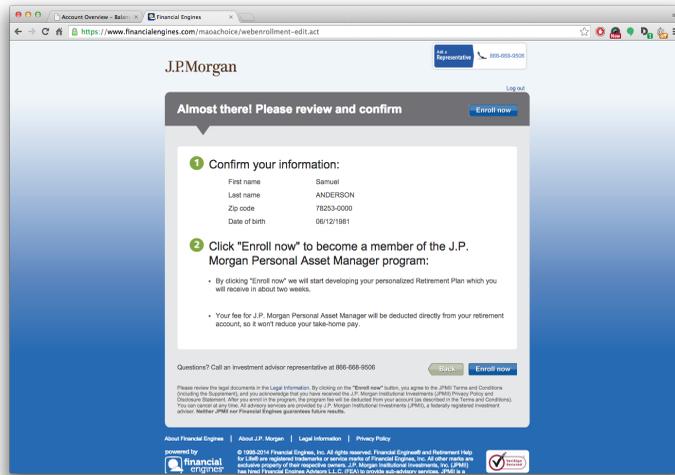


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JP Morgan Chase



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