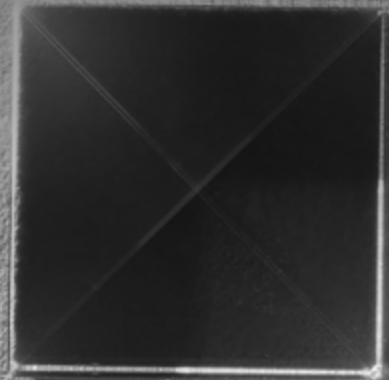


THE CAPCO INSTITUTE
JOURNAL
OF FINANCIAL TRANSFORMATION

ALTERNATIVE MODELS

Designing digital
experiences in wealth

RAZA SHAH | MANISH KHATRI
NIRAL PAREKH | MATTHEW GOLDIE



ALTERNATIVE CAPITAL MARKETS

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CONTENTS

ALTERNATIVE MODELS

- 08** **Bitcoins, cryptocurrencies, and blockchains**
Jack Clark Francis, Professor of Economics & Finance, Bernard Baruch College, CUNY

- 22** **Designing digital experiences in wealth**
Raza Shah, Principal Consultant, Capco
Manish Khatri, Senior Consultant, Capco
Niral Parekh, Managing Principal, Capco
Matthew Goldie, Associate Consultant, Capco

- 32** **Token offerings: A revolution in corporate finance**
Paul P. Momtaz, Ph.D. Candidate, Anderson School of Management, UCLA
Kathrin Rennetseder, Consultant, Financial Advisory, Deloitte
Henning Schröder, Assistant Professor of Corporate Finance, University of Hamburg, and Hamburg Financial Research Center

- 42** **Future-proofing insurance: Asia insurers gearing up for digitization**
Isabel Feliciano-Wendleken, Managing Principal, Capco
Edith Chow, Principal Consultant, Capco
Matthew Soohoo, Consultant, Capco
Ronald Cheung, Consultant, Capco

ALTERNATIVE RISKS

- 58 **Seeing around the cyber-corner: What's next for cyberliability policies?**
Karin S. Aldama, Partner, Perkins Coie LLP
Tred R. Eyerly, Director, Damon Key Leong Kupchak Hastert
Rina Carmel, Senior Counsel, Anderson, McPharlin & Conners LLP
- 66 **Life after LIBOR: What next for capital markets?**
Murray Longton, Principal Consultant, Capco
- 70 **An implementation framework to guide system design in response to FRTB requirements**
Olivier Collard, Principal Consultant, Capco
Charly Bechara, Director of Research & Innovation, Tredzone
Gilbert Swinkels, Partner, Capco
- 78 **Cyber risk for the financial services sector**
Antoine Bouveret, Senior Economist, European Securities and Markets Authority
- 86 **Will cryptocurrencies regulatory arbitrage save Europe? A critical comparative assessment between Italy and Malta**
Damiano Di Maio, Financial Regulation Lawyer, Nunziante Magrone
Andrea Vianelli, Legal and Compliance Manager, Amagis Capital
- 94 **AI augmentation for large-scale global systemic and cyber risk management projects: Model risk management for minimizing the downside risks of AI and machine learning**
Yogesh Malhotra, Chief Scientist and Executive Director, Global Risk Management Network, LLC

ALTERNATIVE MARKETS

- 102 **U.S. law: Crypto is money, property, a commodity, and a security, all at the same time**
Carol R. Goforth, Clayton N. Little Professor of Law, University of Arkansas
- 110 **Behavioral basis of cryptocurrencies markets: Examining effects of public sentiment, fear, and uncertainty on price formation**
Constantin Gurdgiev, Trinity Business School, Trinity College Dublin (Ireland) and Middlebury Institute of International Studies at Monterey (CA, USA)
Daniel O'Loughlin, Trinity Business School, Trinity College Dublin (Ireland)
Bartosz Chlebowski, Trinity Business School, Trinity College Dublin (Ireland)
- 122 **Interbank payment system architecture from a cybersecurity perspective**
Antonino Fazio, Directorate General for Markets and Payment Systems, Bank of Italy
Fabio Zuffranieri, Directorate General for Markets and Payment Systems, Bank of Italy
- 134 **Has "Economics Gone Astray?" A review of the book by Bluford H. Putnam, Erik Norland, and K. T. Arasu**
D. Sykes Wilford, Hipp Chair Professor of Business and Finance, The Citadel



DEAR READER,

Welcome to edition 49 of the Capco Institute Journal of Financial Transformation.

Disruptive business models are re-writing the rules of our industry, placing continuous pressure on financial institutions to innovate. Fresh thinking is needed to break away from business as usual, to embrace the more rewarding, although more complex alternatives.

This edition of the Journal looks at new digital models across our industry. Industry leaders are reaching beyond digital enablement to focus on new emerging technologies to better serve their clients. Capital markets, for example, are witnessing the introduction of alternative reference rates and sources of funding for companies, including digital exchanges that deal with crypto-assets.

This edition also examines how these alternatives are creating new risks for firms, investors, and regulators, who are looking to improve investor protection, without changing functioning market structures.

I am confident that you will find the latest edition of the Capco Journal to be stimulating and an invaluable source of information and strategic insight. Our contributors are distinguished, world-class thinkers. Every Journal article has been prepared by acknowledged experts in their fields, and focuses on the practical application of these new models in the financial services industry.

As ever, we hope you enjoy the quality of the expertise and opinion on offer, and that it will help you leverage your innovation agenda to differentiate and accelerate growth.

A handwritten signature in black ink, appearing to read 'Lance Levy', with a stylized, cursive script.

Lance Levy, Capco CEO

DESIGNING DIGITAL EXPERIENCES IN WEALTH

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ABSTRACT

With the significant increase in mobile processing power over the last decade, intelligent, well-designed mobile applications have become the norm, and the wealth and investment management industries need to follow suit if they are to hold relevance. This article highlights how design thinking can enable curators of digital experiences to harness a human-centered approach to app design, thus maximizing the wallet-share of millennials. It breaks down the key areas needing attention during design, and showcases research suggesting how design and communication are essential in capturing a transient wealth and investment generation.

1. INTRODUCTION

Traditionally, wealth and investment management (WIM) firms have prided themselves on building strong customer relationships and delivering bespoke services through trusted personal advisers. We see this fiduciary-based relationship and trust continuing. However, businesses will need to adapt to changing customer expectations.

The younger generations are experiencing newer, more seamless, and personalized digital experiences in most aspects of their lives, and they are experiencing an unprecedented wealth transfer;¹ hence WIM organizations need to be at the top of their games to be successful. They need to provide best-in-class online, mobile, and face-to-face services to attract and retain these clients.

And, they are not only in competition with their old established peers. There are now nimble fintech players that are also trying to get in on the act and growing their

market share, particularly in the increasingly significant millennial market. To help combat this, we believe that WIM organizations need to turn their attention to the latest and most innovative ways to stand out from the crowd, and suggest that developing a “design thinking” culture could be a critical differentiator.

Design thinking is an innovation methodology that focuses on understanding people's real problems and rapidly exploring a range of creative solutions. It accelerates the definition of high level, tangible requirements through close collaboration, rapid prototyping, and testing with end-users ahead of agile delivery. Having this methodology in place when creating your user experiences provides you with confidence that what you are designing and building is definitely what your customers need. In this article, we highlight the critical principles for business leaders and digital teams to consider when designing the user-experience (UX) for WIM services of the future.

¹ Research estimates that the figure for intergenerational wealth transfer in 2017 already crossed the £69 billion (over U.S.\$90 billion) mark in the U.K. and in ten years' time this is expected to increase to £115 billion (over U.S.\$150 billion) annually, an increase of 67% (Source: <https://bit.ly/2lEdwsF>).

2. ONBOARDING AND LOGIN

Client onboarding is the first interaction the customer may have with your brand and so it is of paramount importance for setting the tone for the rest of their experience with your enterprise. Unfortunately, many processes today are time-consuming, clunky, and inefficient, which is a far cry from what could happen should a design thinking approach be in place.

Typically, a financial institution will collect documents and individually engage credit reference agencies to verify customer identity against other independent data sources on their behalf. However, it does not have to be this way, and by using the fundamentals of design thinking the onboarding process can be made significantly less painful.

2.1 Simplification

To generate a good experience right from the start, WIM firms should encourage customers to sign-up and create accounts via a single interface, such as a smartphone app. Being forwarded onto other channels through a mobile app is not streamlined, and with an increasing amount of

neo-banks offering a straightforward onboarding process it is important that WIM organizations follow suit. It is also important for the process to include basic sign-up questions, stripping away anything that is superfluous and reducing the number of steps in the process to the absolute minimum. With the demand for mobile banking increasing at an unprecedented rate, ensuring the process is limited to a single device and interface will be key in making the process as genuinely mobile as possible.

2.2 Time-saving

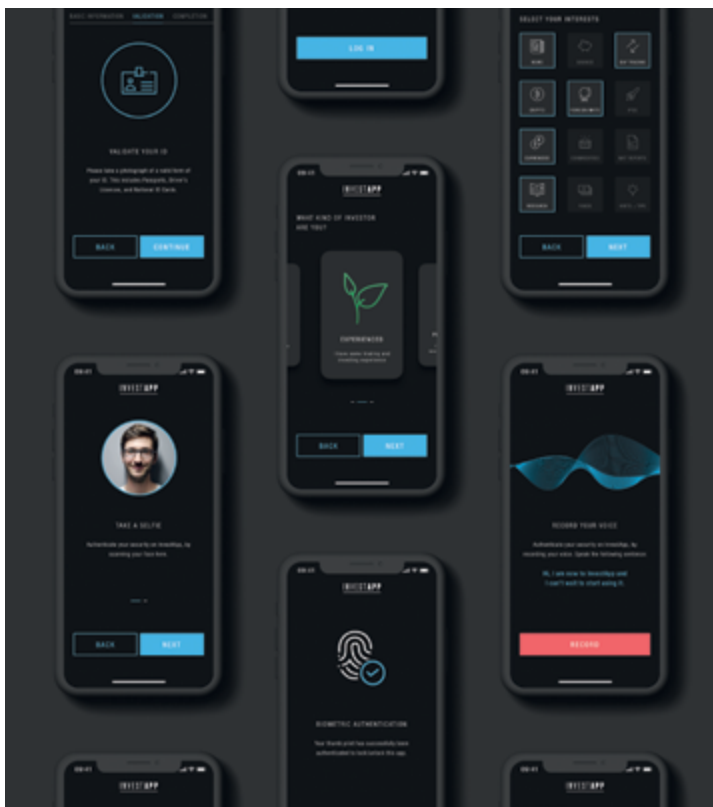
Social logins are a great time saver that are appreciated by most consumers and benefit from the fact that digitization has enabled a quick and easy flow of information. No one wants to waste time filling out lengthy registration forms anymore. Javelin Strategy & Research and Jumio found that 38% of millennials abandoned their mobile banking applications because the process took too long [Jumio (2018)]. There are already examples of how this is being incorporated into digital platforms, such as Pinterest allowing you to log in with either your Facebook account or Google Mail, and industry relevant examples such as eToro, which has the same features. Other elements, including the auto-scanning of ID cards using a smartphone camera, can also be useful in saving time when uploading identification information, and are becoming more prominent in UX-led app designs.

2.3 Biometric authentication

Facial, fingerprint, and voice recognition, as well as other biometric technologies, are starting to replace the onerous methods of using multi-factor logins and passwords. Jumio (2018) found that 27% of millennials have left mobile banking because they forget their password and 22% felt authenticating themselves was time consuming – something that need not happen. Not only can biometrics bring about a faster and smoother onboarding experience, they can also provide greater levels of security than traditional PIN numbers or security questions once onboarding is completed. However, devices employ different standards, so it is critical to consider how a standardized interface would work as an experience for all investors.

2.4 Gamification

The onboarding process should be as easy and engaging as possible, and gamifying the experience or breaking down the onboarding process into digestible chunks, like





elements of a computer game, can make the process seem shorter. In addition, like a game, the onboarding process should allow for the process to be continued at a later time as well. With busy, modern lifestyles, the thought of having to set aside a lot of time for an onboarding process will be off-putting for consumers and needs to be a consideration for the process designers.

2.5 Referrals

Using referrals during the onboarding stage is a great way to get your own customers to become ambassadors of your app and help grow your user-base with little input or effort. To make the step more appealing to customers, monetary incentives for successful referrals should be considered – something already implemented by many other apps. However, above all else, the process needs to be straightforward and not time consuming. Regardless of offers and monetary incentives, the most likely way

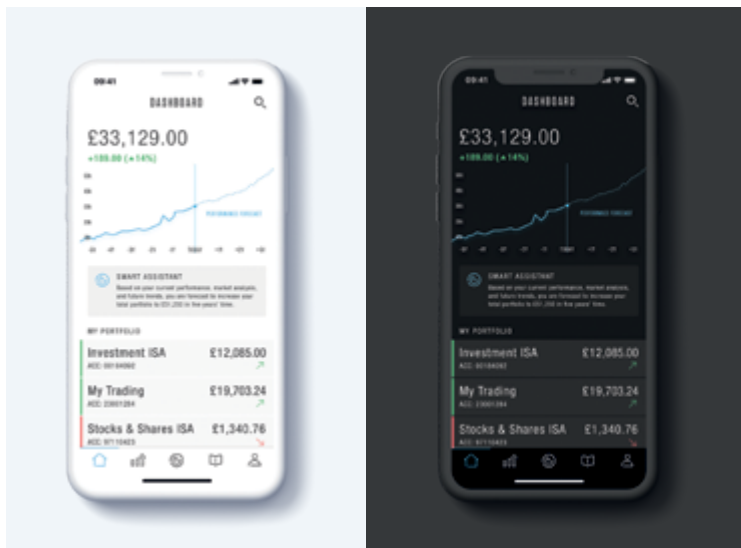
for a customer to proceed with a referral process will be if it contains a single, straightforward step. However, striking a balance is key. Some users find it off-putting if interfacing with a financial services platform is too easy, giving the impression that the platform is not fully secure. The challenge is to enable a thorough onboarding service that has complex operations happening beneath the surface of a streamlined, beautiful, user-friendly interface. To do this, prioritizing elements of the process that are slightly lengthier will be key in the balancing act. For example, keeping the referral process to a minimum number of interactions and steps, whilst having a multi-biometric authentication process, will help the user feel the process is secure, but straightforward. As Steve Jobs said: “Simple can be harder than complex: you have to work hard to get your thinking clean to make it simple” [BBC (2011)].

3. ACCOUNT VALUATION AND PERFORMANCE

Visualization should be the primary consideration when it comes to user experience on apps and web-platforms. The human brain processes visual information much more effectively than textual data, so it is imperative complex data is represented in a clean and concise way. The significant increase in mobile processing power and screen display quality has meant that many successful apps now lead with a design-led user experience. Quapital is an example of how the humble savings account can be elevated from the stereotype of a dry, functional subject, to something engaging and beautiful to use and look at. Importantly, though, the design does not come at the expense of convenience and functionality.

Consumers should have easy access to their wealth dashboards once the login process is completed, focusing on account valuation and performance to keep them engaged. Key information depending on specific scenarios should always be displayed to the user on a default screen for maximum convenience. For instance, in an investment app, the user will want to know how much they have invested overall, how much their investment has increased or decreased by, and likely a visual representation of actual/percentage changes too. This information should be laid out as simply as possible and should be the first thing the user sees, summarizing the key elements of their investments before they go to other areas of the app to delve deeper into them.

Allows users to personalize their app experience and receive tailored content and advice specific to them



Visualization tools like infographics help tell the user the story of their finances by visually representing tedious, tabular data in an interactive, attention-grabbing visual and will help with the usability of an app. Adding interactivity to dashboards enables engagement with the data, especially with the help of sliders that can be used to foresee future positions through data analytics. This can provide powerful knowledge to the user, while providing an element of gamification in the process, and will be a significant factor in increasing the frequency of user interaction. The pension fintech, PensionBee, includes an interactive and user-friendly pension calculator to work out the required annual savings needed to receive your desired annual pension amount after retirement. By providing an interactive platform that combines all of the customer's pensions, the user becomes much more aware of their financial situation – increasing the

likelihood that they will set themselves financial targets. In this instance, the interactive, user-focused design could lead to not just more frequent engagements with the app, but also an increase in monetary contribution as the user seeks to achieve personal financial goals that they may have previously been unaware of. WIM firms should consider a similar approach.

4. PERSONALIZATION OF SERVICES

Investors' goals, values, and preferences are influenced by their demographic segment, life stage, household balance sheet, and specific tax circumstances. Millennials may be saving for a down payment on their first home, whereas retiring Baby Boomers are focused on extracting equity from their home to fund retirement income. To design the best UX for financial products and services, we need to get to know our users better and identify what sets them apart from each other. A good way to identify the needs and motivations of users is by creating personas for each group. A persona is a representation of a certain segment or audience who will be using your products or services, outlining a high-level view of this specific user. Included in personas you will typically find a photo/icon of the user, a biography, wants/needs, pain points/frustrations, brand associations, and goals/aspirations. They can be a great way to create consensus among your team members in how and who your products and services should be positioned to, helping focus future marketing initiatives. A survey by Smart Communications (2018) found that nearly two-thirds of respondents are likely to switch vendors if communication expectations are not met. Combined with the fact that 45% of U.K. respondents specifically cited communications that are not relevant to them as influencing their decision to change vendors, and the ability to personalize marketing from personas becomes even more apparent.

The U.K. mobile-only bank, Monzo, takes personalization one step further through using customer payments data to provide personalized offers and advice. By analyzing daily commute costs, for example, Monzo's algorithms are able to suggest savings to customers, such as telling them to switch from a pay-as-you-go travelcard to an annual one. This also helps the bank in terms of building trust with the customer. Once the relationship involves personalized recommendations that will directly help the user, the app/service goes beyond a platform for solely managing money to something that is appreciated

by the consumer. The ability to be personalized needs to be considered by WIM firms. It does not necessarily have to be immensely complicated – even being able to customize the look and feel of a trading or investment app provides a level of micro-personalization that puts the user in control of their own UX. It is easy to overlook how often we already personalize things on a small scale; our mobile devices already have individual displays, sounds, layouts, apps, cases, and physical design. Money is an incredibly personal thing, so having the ability to customize how we interact with it should be high on the design agenda.

The areas and amount of personalization will differ depending on the brand in question. The City Index app, for example, allows users to drag and drop service icons to the bottom navigation pane, allowing them to choose which services they want easy access to from their navigation bar. This is a more functional approach to customization. Atom Bank, however, allows you to create a personalized name and logo for the app, such as Jenny's Bank or Peter's Bank, as well as a personal color palette – removing large elements of the brand from the product. This customization is far more targeted at the individual

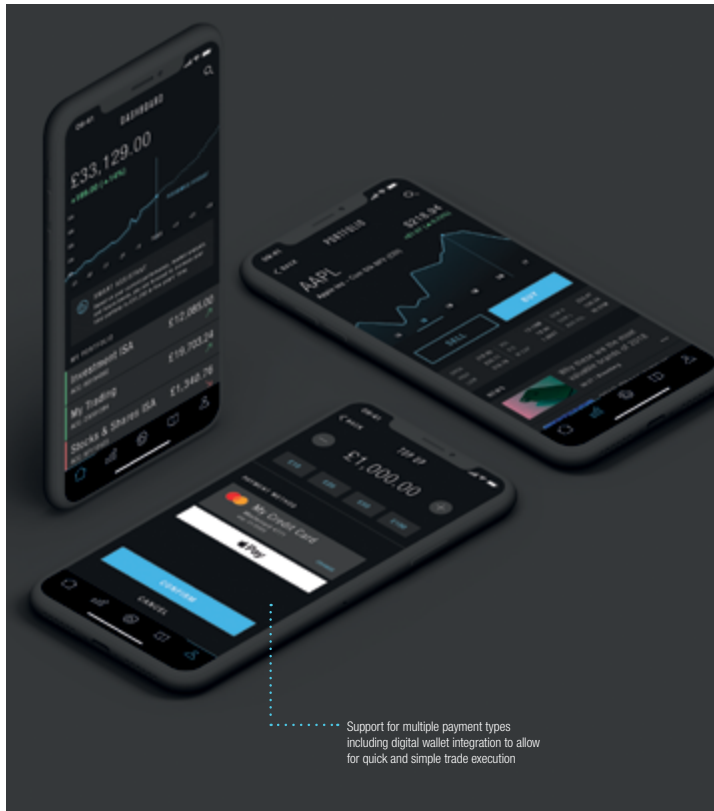
at a personal level, and less towards the functionality of the product. Looking at these different examples, it is no coincidence that neo-banks, which offer the highest levels of customization and personalization, are proving far more popular with millennials than any other age group. The ability to have an app looking and working how the user wants is growing in necessity, particularly if the product wants to appeal to what is becoming an increasingly significant millennial market.

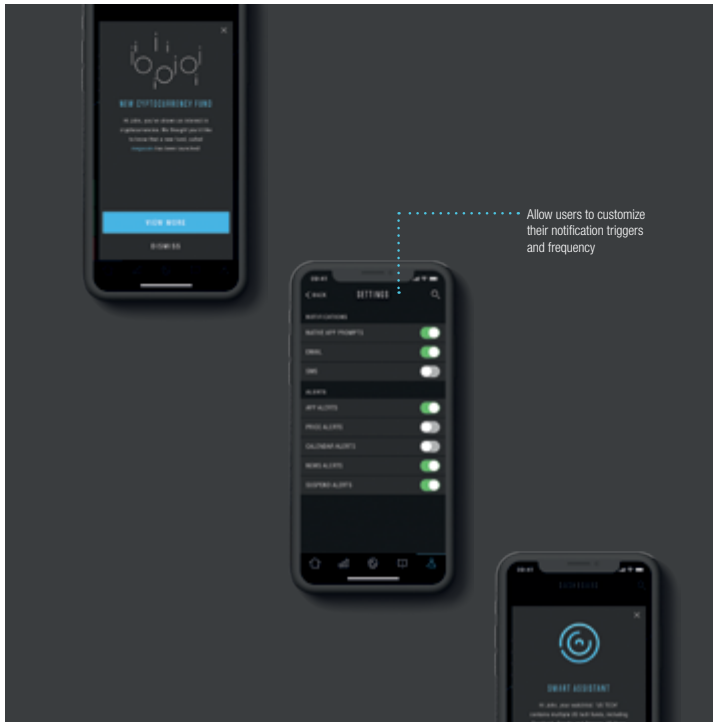
A recent YouGov poll found that just 36% of British consumers trust banks to work in their customers' best interests [Palenicek (2017)]. Evidently, trust is still an issue banks need to work on, more than ten years after the market crash. However, there is an opportunity for firms to understand which features are most frequently used, improve the refinement process, and tailor apps towards what is actually wanted. Most users will not want a generic “one-size-fits-all” approach to their app/service and the ability to tailor and personalize, be it the onboarding journey or the default section of an app, is fundamental in making users feel important. By helping users build personal relationships with their products or applications, you can also start to build trust – something that cannot be underestimated.

5. TOP UP/WITHDRAW FUNDS

As well as the traditional linking of bank accounts to a user's account, customers should also be given the option of using multiple sources of funds to top-up their accounts, including non-traditional payment sources such as PayPal, Apple Pay, Google Pay, Samsung Pay, etc. Customer trust with, and usage of, non-traditional payments has risen significantly in recent years, and WIM firms need to cognizant of this fact. WorldPay (2018) estimates that by 2021 over half of all online transactions will be made using alternative payment methods. Given this notable increase, early adopters of the technology, and the convenience it has to offer, will appeal to increasing market audiences. TransferWise, a foreign exchange money transfer service, is an early adopter and allows users to transfer money linked to their cards stored on their Apple Pay wallet to their platform. This seamless process involves entering a payment amount and simply using your fingerprint to authenticate the payment.

It is equally important to establish a seamless withdrawal process, whereby customer can withdraw their earnings at any point and then put it into their selected account





choice, with withdrawal fees clearly being communicated during the initial onboarding process. Not only is this process streamlined, it also builds on the trust element touched on earlier, which will be key for the sustainability of the brand. After all, the customer has earned the money, so they should be made clearly aware of any charges for moving it. According to an FDIC report, overdraft fees are the leading cause of involuntary bank account closures, highlighting how perceived deception, and the lack of trust that comes with that, impacts customers [Samolyk et al. (2013)]. But small steps towards a better customer relationship can be very impactful – they do not need to all need to be giant leaps. Small, engaging interactions, such as an animation to verify confirmation of top-ups, or push notifications to smart watches (which alert the user that their funds have been withdrawn successfully), may seem like basic facets, but ultimately, it is these regular micro-interactions for otherwise mundane tasks that have a lasting positive impact.

6. TRADE/INVESTMENT EXECUTION

Arguably, the most critical action you are asking your users to perform is to place their investment, and trust, with you. Consequently, it is essential that this step of the process is one of the most seamless and simplified. The path from research, to selection and execution should be a logical one with minimal cognitive load; and setting alerts, limits, and stops should all be part of the final execution flow. If the app allows for different payment methods, the selection between them should be straightforward, with all the authentication being done when the payment type is registered during the onboarding process.



Innovative execution paths should also be considered. For example, when sending an email with research or news that includes your customer's top stock picks, it should have deep linking capabilities so that users can select a link in the news articles, taking them directly to the app and onto that stock's page – ready to be traded in a click or two. This will not only improve engagement levels with the app, but also helps with improving the personalization of the services. In addition, anything that can help support the user with their trading and investments will be largely beneficial and can significantly improve the overall user experience. Chatbots or virtual assistants are great for support and proactive prompts, as well as for how-to guides, and keep the user from having to use more than one interface. Furthermore, it is common, particularly

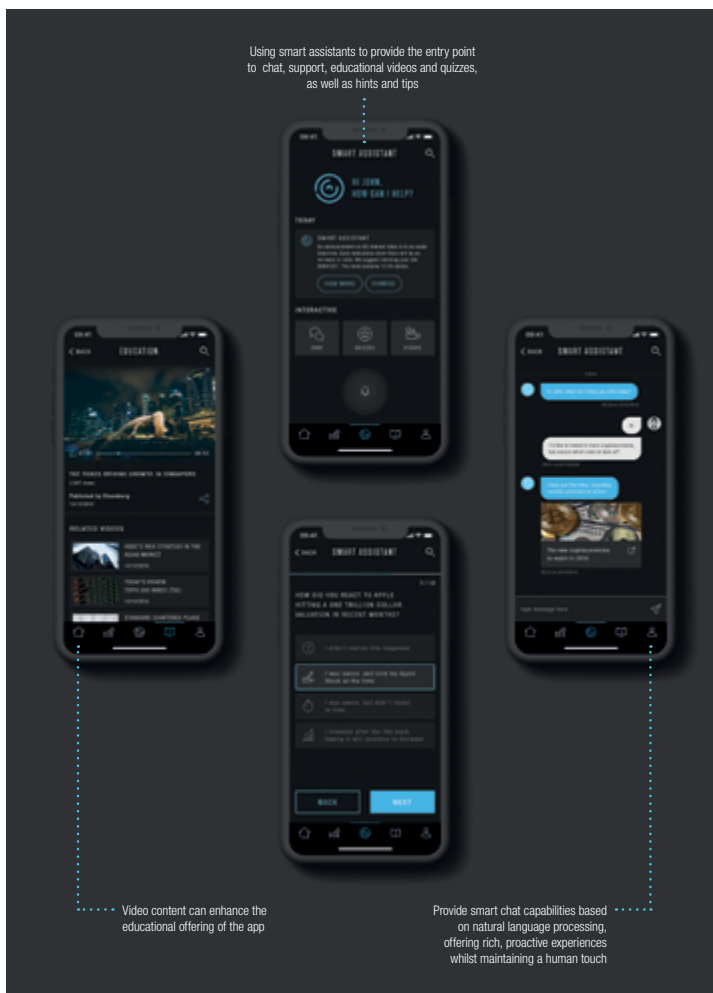
within trading services, to offer news when looking at a stock or share, rather than having to switch between separate news feeds.

7. NOTIFICATIONS AND COMMUNICATIONS

Notifications and alerts are important ways to keep the savvy trader up-to-date with the latest status of their holdings and the various events affecting their positions. Notifications for longer-term investment products are less frequent, but for an intra-day trader these are invaluable for keeping them informed when events take place that impact their portfolio. These events can be market developments, technical indicators, economic announcements, reaching specific price targets, or even system outages preventing trading during certain times. There are different ways to reach the user: alerts, push-

notifications, emails, and in-app messaging can all be used to communicate with investors as events happen. The type of notifications, frequency, and event triggers should all be made customizable for the user, as without this the information may lose relevance to the individual and become useless. If the notifications are too frequent or irrelevant, the user may trivialize them, or turn them off, and subsequently miss opportunities when more important notifications are issued. A good example of this is the CMC Markets app, which gives users the power to set a multitude of notification options, as well as the events that should trigger them. The benefits of setting up and using pro-active notifications include:

- **Saving time:** customize your notifications to receive price alerts and then execute your trades, saving you time from monitoring price movements manually.
- **Quick response:** delivering push notifications when impactful news breaks, allowing you to make instant buy or sell decisions by a single click when not logged into the app.
- **Retain app usage:** notifications are a great way of increasing returns to your app and engagement with your user base, so long as they are relevant. Frequent, irrelevant notifications outside of user preferences may actually have the adverse effect and frustrate users to the point they leave the service. Research shows that 22.3% of people would stop using an app if they received two to five notifications a week, so any notifications they do receive need to be aligned to the topics they have requested [Gibb (2018)].



8. PARTNERSHIPS AND INTEGRATIONS

Established investment and trading companies can differentiate themselves from the competition by becoming early adopters of the latest financial technologies. Of course, building everything yourself (robo-advisers, machine learning capabilities, hyper-personalized dashboards, etc.) may be a step too far for your cost appetite, so forming a strategic partnership with a fintech that is providing a best-of-breed solution in their niche offering could be a more viable option. With this in mind, instead of viewing fintechs as competition, traditional financial institutions should investigate how strategic partnerships can be used to create an entity stronger than either individual unit could bring on their own. Benefits of these collaborations include cost reduction, quicker time-to-market, improved customer retention, and additional revenues.

U.K. challenger-bank Starling is a huge supporter of the partnership model and has even created a “marketplace” on their app that allows users to link their bank account to services from other fintechs, such as your pension details to your account via PensionBee or adding travel insurance via Kasko. A recent first in the U.K. investment world also occurred when AJ Bell launched a developer hub, allowing external apps to link their services to AJ Bell’s Youinvest platform. AJ Bell is also working on a project that will allow its customers to request to be able to view their bank account, pension, and ISA details from external providers via their AJ Bell account.

“WIM organizations need to turn their attention to the latest and most innovative ways to stand out from the crowd. We suggest that developing a “design thinking” culture could be a critical differentiator.”

Application Programming Interfaces (APIs) underpin both these two collaborations and provide the channel to access data between partners. Allowing access to your data and transactional services via a robust API strategy will aid the execution of a smooth and secure partnership ecosystem. However, keeping and enforcing security standards is critical for both regulation and brand longevity purposes, and so must be considered at all times during the design.

There are many benefits to this model, but primarily it allows for an open ecosystem, which is an attribute that an increasing number of consumers are beginning to prefer. A single service that is paired with other services via APIs will allow open access, and this only helps when viewing their finances. For instance, a trading app could partner with a venture capital funding app and use their investment service within the trading app, allowing users to browse and select a start-up they wish to invest directly into. This would mean users would not need to switch between two apps, and both companies could benefit from an increase in usage as a result of the added simplicity. From a business perspective, the two respected parties could also work together to monetize the combined service.

9. EDUCATION / GUIDANCE

Investing can be an intimidating and complicated experience for the first-time investor who must navigate their way between a multitude of products, services, accounts, and fees, while usually also lacking the financial literacy needed to make smart investment decisions. In fact, a study by Schroders found that only 37% of participants knew what the correct description of an investment manager was. 10% thought investment managers were retail banks [Nicolli (2019)]. So, with an apparent lack of knowledge about what an investment manager does, why should we expect customers to be able to manage their own investments effectively? The companies that provide a simplified service execution, coupled with best-in-class learning resources will have a competitive advantage in winning business from millennials. In fact, some neo-banks are making education and guidance central to who they are. This is clearly expressed by Atom Bank’s CMO Lisa Wood in an interview with Marketing Week: “It’s not about the customer relationship with us, or our relationship with customers’ money. The traditional old banks constantly reference their relationship with its customers, but our brand strategy is about helping people understand money much better” [Roderick (2016)].

Fundamentally, a customer base that understands a company’s products and services is far more likely to transition to and use them. This simplification of services has already gained momentum within the retail banking but is not as prominent within the WIM industries. Considering the fact that products on offer within WIM are likely to be more complicated, education and guidance offerings will be key to adoption. Some examples of best practice within education and guidance include:

- **Demo account:** allow your users to first invest using a limited feature demo account from which they can invest on real life products by using a virtual currency. This will build up their knowledge of the markets and confidence in their abilities to execute investments using real currency. The IG Index app makes it easy for users to sign up for a demo account by simply logging in via Facebook to create a risk-free demo account with £10,000 (over U.S.\$13,000) of virtual funds.

- **Features walkthrough:** once your new user downloads your app for the first time, a walkthrough of the main features using pop-up messages will help introduce them to the capabilities and service features of the app. These messages can also be displayed to introduce new features whenever your app is upgraded. However, keep this high level and simple. In line with a smooth onboarding process, this element needs to only highlight the key features and be easily interpretable, otherwise it may frustrate users.
- **Live/robo-chat:** allow users to access in-app chat features to converse with either real-life customer service representatives or even bots, programmed to answer common questions. The Capital.com trading apps enables users to chat with bots using natural language processing to answer queries. If chat-bots are used, it is important to ensure that the automated response language is in keeping with the brand language style and is simple to understand. Monzo has an award-winning terms and conditions due to the transparent, honest, and clear tone used, and is backed by research showing that people prefer simpler, more natural language.
- **Educational content:** short videos educating users on trading and investing best practices within your smartphone app would provide a one-stop shop for educating them. Like the robo-chat, language needs to be kept simple and clear if users are to gain maximum benefit from this. WIM comes with an element of risk, so providing users with the security of having some educational content is far more comforting. If this is done effectively, it will lead to more contact with the product.
- **Gamification:** use of items like leaderboards, badges, missions, and levels will encourage your users to increase their engagement with your apps. With the mobile gaming industry forecast [Statista (2019)] to be worth U.S.\$74.6 bn by 2020 (80% more than in 2016), and with approximately 32.4m people in the U.K. playing games, the popularity of engaging with games is evidently growing. For example, in 2017, Wells Fargo launched a game called “Retirement City” with the

intention of helping America's workforce prepare for a better retirement. The game blends quizzes, videos, mini games, scoreboards, calculators, an online resource library, and other elements to deliver financial wellness concepts focused exclusively on retirement. Players in “Retirement City” pick one of 40 avatars and move through five neighborhoods on a simulated journey to retirement. Along the way, they earn badges and rack up points as they learn retirement-saving basics, make choices (pull-out-the-stops wedding or modest affair? New car or used car?) and see how life's curves (your house has been damaged by a storm and now there are repair costs) affect long-term savings. This allows players to learn retirement concepts, and benchmark themselves against other players, blending finance and literacy concepts.

10. CONCLUSION

There are many design-focused initiatives, tasks, and methodologies that can have a huge impact on the overall experience of customers. Some are stringent rules, others are more flexible. But there are a number of ways in which you can work toward this:

- **Incorporate design thinking:** in apps, products, websites, or, in fact, any consumer-facing product. The key here is to have a deep interest and understanding of what your customers really want. Empathize with your customers, define their needs, and ideate by creating innovative solutions. Prototype solutions, test with your customers, iterate, and test again until you get it right. Gain feedback and reviews from your customers and ensure they are taken seriously.
- **Get senior stakeholder buy-in:** empower senior management and stakeholders by training them and getting them involved in the design thinking process. Invite them to focus sessions so that they can really see things from the end-user's viewpoint. Projects will ultimately need a senior sign-off, so having a set of stakeholders that understand design thinking will allow for more customer-focused project visions and objectives.

- **Analyze key trends:** look at what your competition is doing. However, only relying on your competition to act first means you will always be playing catch up, so do not use this as your sole source of inspiration. Look at completely irrelevant industries and spot other success stories, because from this could stem an idea or an approach that could positively impact your business. To be genuinely creative and to offer something that no one else is, it makes sense that the source of inspiration will come from outside of the industry, so embrace this.
- **Embrace technological advances:** determine how they can create a positive impact, but make sure that you have a human-centered approach to innovation. Break the stigma that technology is only going to replace humans and use it to serve them better.

Early adoption of technology can help establish a customer base with millennials that want the latest design thinking, as well as enhancing the customer experience. It also allows you to work with and learn from the technology earlier, whilst the competition is still getting to grips with deployment.

- **Be open:** sometimes it is not necessary to do everything yourself. For example, why build a new service when you can integrate a partner's service at a much quicker and cheaper cost? Being agile and reacting to changes in the market is critical, so a traditional in-house build, whilst allowing more control, might not offer the ability to act quickly. Furthermore, think about appealing to non-traditional customer bases. The ability to create a mobile WIM app means your services are reachable by everyone who owns a mobile device – use this to your advantage.

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