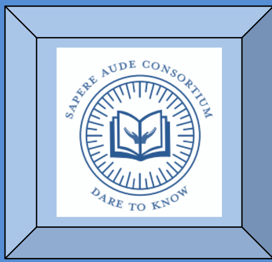

Technological Disruption: Generations Calling!

Opinion Snapshot

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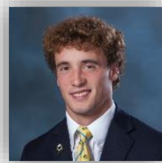

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How Can Asset Management Firms Capture Gen-Z and Millennials?

Technology has disrupted many industries. Banking and other Financial Services have been dramatically impacted by new technologically driven services providers. Is the Asset Management Industry at risk and what steps can these companies take to mitigate such a risk? The next generation of significant investors have grown up relying on the efficiency and customization that modern technology has provided. These investors expect these capabilities to be a part of all aspects of their lives. Younger generations have shown high affinity for companies that utilize technology to enhance their experiences and are not as skeptical as older generations when these companies try to enter new industries. The technology companies that have emerged as industry leaders have done so by satisfying not only the technology needs of their Millennial and Gen-Z users, but also this generation's support for corporate social responsibility in dealing with politics, the environment, and diversity. If firms within the asset management industry do not change their business approach to tailor towards the technological needs of future investors, Gen-Z and Millennials will be unsatisfied. If tech firms were to enter asset management, they could likely fulfill the technology needs that traditional firms could not implement. Because Gen-Z and Millennials make up 50% of the U.S. population, and their wealth is only beginning to grow, it is extremely important for firms to capture these two generations rather than lose them to technology firms. In order to do this, and prevent technology firms from disrupting the industry, traditional asset management firms must attract and sustain a customer base of Millennials and Gen-Zers by providing the technology, corporate social responsibility, and diversity that younger generations demand.

Sapere Aude Consortium, LLC was formed in July 2020 to serve college students interested in financial services, and whose internships were negatively impacted by COVID. The three founders' goal was to provide a forum for students to research and learn about critical issues impacting the wealth and investment management industries. The authors listed above were asked to express their own ideas in this Opinion Snapshot, whether or not the founders or other industry professionals agreed with their opinions or proposals. This Opinion Snapshot is offered in that spirit – to hear the views of some of the next generation of professionals to enter the wealth and investment industries. Neither Sapere Aude Consortium, the founders, nor any of the authors received any financial support from any firm or person with any interest, financial or otherwise, in this article. Neither the founders, nor the authors are currently affiliated with any organization mentioned in this article.

Change is Happening

Technological Disruption in Financial Services Across the Globe

China's Alibaba is a relevant example of how firms outside of financial services can greatly influence and disrupt the financial industry. Alibaba started as an ecommerce firm that gathers individual retailers together on one common online platform. Today, Alibaba is one of the leading technology firms in China that continues to play a major role in shifting Chinese consumers' behavior towards online shopping and mobile payments.

Alibaba has also developed its own money-market fund called Yu'e Bao that is overseen by Ant Financial Services Group. Yu'e Bao utilizes a convenient, online payment platform called Alipay. This platform can be used for almost all daily purchases and bill payments; therefore, people tend to use Yu'e Bao as an instant checking account. In addition, since Yu'e Bao offers a high rate of return on clients' savings, it is also commonly used as a money-market account. The fund then invests most of its money in state-owned banks, government bonds, and commercial paper.[1] Recently, Ant Financial announced plans to issue an IPO in Hong Kong with a target valuation of over $200 billion, making it one of the biggest listings of the year.[2]

Safaricom is another great example of a firm that has disrupted the financial services industry. Safaricom is a Kenyan mobile network operator and the largest telecommunications provider in the country. In 2007, Safaricom launched M-Pesa, a mobile banking service where users can deposit, withdraw and transfer money, pay for goods and services, and access credit and savings.[3] It has expanded to eleven other countries in Africa, Eastern Europe, and Asia with over 37 million active customers.[4] This fintech innovation has promoted financial inclusion in the developing world, which suffers from a large underbanked or unbanked population.

Alibaba and Safaricom both prove that technology firms can create new services and interfaces to address the needs of customers in the financial industry, as well as integrate financial services into their own services.

Technology firms are interested in the financial services industry because they see an opportunity to create more efficient, cost effective and transparent ways to offer similar services. The average net margin of public companies is around 8% while that of financial services firms is around 25%.[5] Should traditional technology firms pursue the asset management business; they could provide investment services which will attract asset management firm's clientele.

Technology firms have elevated consumers' expectations for interactivity and efficiency through their utilization of technology. Asset management firms that do not improve on technology will lag behind and could eventually be abandoned despite acceptable performance from traditional product offerings.

Domestic Disruption and the Threat to Asset Management

Asset managers must know domestic technology firms have already disrupted the financial services industry. In the United States, several technology firms have developed financial services offerings within the last decade. Facebook has made the most recent move into the industry, developing a cryptocurrency that was set to release in early 2020. The cryptocurrency, called the Libra, is "a digital asset backed by a basket of foreign currencies or other investments" according to Jeff Horwitz and Parmy Olson from the Wall Street Journal. Facebook teamed up with other well-known companies such as Mastercard, Paypal, Uber and Spotify to make the Libra a plausible alternative to fiat currency. These corporate partnerships enable the Libra to be used on a multitude of platforms for any financial transaction.[6] The Libra's accessibility is important because the social media giant intends to use the cryptocurrency to provide financial services to people across the world who do not have access to bank accounts.[7] The Libra is the most recent example of financial disruption by domestic technology firms, but Facebook is actually one of the last technology firms to diversify their revenue streams by tapping into the financial services industry.

In 2019, Apple partnered with Goldman Sachs to provide credit cards for its customers under the Apple brand name. Later this year, Google is partnering with Citibank to launch a program that gives customers access to consumer bank accounts under the Google name. In both cases, the large technology firms demonstrate their interest in developing a banking section of their business, but do not yet want to deal with the regulation involved in being a bank.[8] Sarah Kocianski from fintech consultancy 11:FS believes that big technology firms will slowly move further into banking by continuing to add more banking options while working with corporate partners.[9] Apple and Google may not make the move to banking on their own in the next couple of years, but making the move within the next decade or two is certainly not out of the question. Large technology firms are starting to explore the banking industry and if they find success, that portion of their business could grow tremendously in the future.

Apple, Google, and Facebook have made significant leaps into the financial industry within the last few years, but Amazon currently offers more financial services than any other technology firm. Amazon first created Amazon Pay, which is a digital wallet, to allow smoother interactions between buyers and sellers. Amazon Pay recently partnered with the bank Worldpay in an effort to make its payment platform available for purchases outside of the Amazon website.[10] Moreover, Amazon created Amazon Cash which establishes a connection between online commerce, using credit and debit cards, and offline commerce that uses cash and gift cards. The program allows customers to deposit cash in an account with Amazon without any fees, acting as a bank for smaller sums of money. That is why the program appeals to people who are currently bank less because customers do not need a bank account in order to open a cash account with Amazon Pay.[11] Finally, Amazon's small business (SMB) lending is probably the most substantial step into financial services by any tech firm. The Amazon SMB lending program partnered with Bank of America Merrill Lynch to offer loans that range from $1,000.00 to $750,000.00.[12] In 2019 alone, Amazon issued over $1 billion in loans to more than 14,000 small businesses in the U.S.[13] Jeff Bezos has also been very clear in his letter to shareholders that Amazon intends on growing their lending capabilities.[14] In fact, most recently, Amazon partnered with Goldman Sachs to offer a new digital credit line of up to $1 million for U.S. merchants using the platform.[15] Amazon's wide array of financial services is a relevant illustration of the potential threat it could pose to the asset management industry in the future. While these are examples of financial services disruption and not explicitly related asset management, the implication is that further disruption within asset management is plausible.

Several firms have obviously made headway entering the financial services sector, but the question remains: is there a threat to asset management? While that threat includes entrance of technology companies' into financial services as introduced above, it is further illustrated by the fact that Google, Facebook, Amazon, and Apple all have created asset management companies investing in venture capital and private equity.

Google's parent company, Alphabet, started a private equity company in 2013 that was later renamed CapitalG. CapitalG invests in growth companies by using the Google network to identify where they can add value and provide capital and expertise to help companies scale. CapitalG invests entirely for-profit and does not do so strategically for Google. Some of their investments include sports betting website FanDuel and free credit score service Credit Karma.[16] CapitalG is an asset management company because it makes investments which it believes have a high potential for growth and profit whether or not they help Google's future growth prospects. Furthermore, Alphabet also owns GV, previously known as Google Ventures, which is a venture capital fund that has up to $2.4 billion of assets under management as of 2017.[17]

In 2019, Facebook announced the introduction of its "New Product Experimentation Team" which was tasked with the job of making and finding new applications for users. However, beyond developing new apps, Facebook announced in 2020 that the new branch is part of developing a multimillion-dollar investment fund run by experienced investors aiming to find the next big thing.[18] Facebook's step into venture capital illustrates that they are taking the first steps

allocating capital and could take further steps into private equity or asset management in the future just like Google.

Moreover, Amazon is heavily involved with venture capital efforts including their Alexa Fund which provides up to $200 million a year in funding for voice technology and AI innovation.[19] The Alexa Fund is one of several venture capital efforts by Amazon; recently, the company announced that it will be launching a $2 billion venture capital fund to invest in the environment through food, transportation, and energy.[20] The combination of Amazon's venture capital and lending efforts in the past illustrate that it may be only a matter of time until they start a true asset management subsidiary.

If the threat to the asset management industry was not clear enough already, Apple's Braeburn Capital demonstrates the threat's true validity. Braeburn Capital is an asset management firm owned by Apple that manages a $244 billion portfolio consisting of funds from several investors along with the funds that Apple provides.[21] Braeburn capital already allocates capital for investors outside of Apple and does not limit itself to accepting funds from "sophisticated investors".[22] Apple may be the first company to tap directly into asset management, but given the trend of disruption, it certainly will not be the last. The examples above are presented for illustrative purposes to provide examples of infiltration into financial services and the potential for disruption within asset management.

It is important to recognize that the asset management industry has adapted to technology to combat disruption. In the last few years, large asset management firms like Vanguard, Fidelity, and Schwab shifted to zero fee index funds and costless trading structures, to be more competitive during a time of technological change and evolution. The combination of asset allocation "model portfolios", "Schwab Stock Slices" and the new costless structures illustrate that firms realize they must stay competitive in a changing environment. There have also been several examples of technology-oriented firms that have entered asset management. Robo Advisors such as Betterment, Wealthsimple and SoFi Invest are such examples. Additionally, the well-known firm Robinhood has gained tremendous traction due to its user interface, ease of use, cost effectiveness and transparency. There are other examples of technology-oriented firms that have attempted to enter the asset management business. However, as a cautionary example, Robinhood illustrates the need to properly educate your investor base given the recent tragedy of one of its clients who received reporting which was misunderstood and led to a suicide.

Recognizing the current and potential for further technological disruption, the asset management industry must take even more steps to embrace technology if they want to obtain the assets of Millennials and Gen Z. The industry must recognize the gravity of the threat posed by technology-oriented firms in order to contemplate how they may compete with these firms and new entrants in the future.

Gen-Z and Millennials' Values and Trends and Why They Matter to Asset Management Firms

Why Gen-Z and Millennials?

With the Baby Boomer generation's immense size, its tendency to remain in the workforce for longer than previous generations, and the amount of time it has had to accumulate assets, it is well known that Baby Boomer's currently have the greatest influence over the market for financial services. Deloitte estimates that the Boomers' share of net household wealth in 2020 is approximately 50.2%.[23] However, it is important to note that Deloitte's estimate is based on a forecasted peak of the Baby Boomer wealth share. At this point in time, the generation is old enough to have maximized their wealth in assets, but not too old to have completely exited the workforce. As 2020 ends, the proportion of Baby Boomers that are retired will rise, and the constant growth in wealth share of this generation will begin to reverse itself.[24] The decrease in wealth share is predicted to happen gradually, with Deloitte estimating that it will take until year 2030 for Boomer's to lose their title as the wealthiest generation.[25] 2030 is the year in which the

youngest Boomer will reach the age of 65, therefore, the majority of Boomers will begin to see more asset decumulation, and they will become less profitable to asset management firms as the generation ages.

While Boomers will see more loss in wealth share from decumulation than mortality rate, given most of their generation is just now entering retirement age, the Silent Generation (those born from 1928 to 1945) is entering an age where the mortality rate is the greatest factor in generational wealth share loss. With their mortality rate rapidly increasing, it is estimated that the financial assets of the Silent Generation will fall from $11 trillion to $4.6 trillion by 2030, the same amount of time it is predicted will take the Boomer's wealth share to fall about 5.7%.[26] This decline in wealth share not only highlights another generation that will see a major drop in their share of assets, but more importantly highlights how much *bigger* of a drop in wealth share the Baby Boomers will see when they, a much larger and wealthier generation, reach the current age of the Silent Generation. The Silent Generation's current situation demonstrates that their value as clients to asset management firms is rapidly declining, and that firms can expect a similar decline for Boomers when they reach a similar age in roughly 20 years.

On the other side of the Baby Boomer generation, Gen-X is reaching its most financially rewarding stage. However, as they are neither entering nor leaving the workforce, their wealth share is expected to increase by a much smaller percentage than Millennials. Millennials are much larger, have entered the workforce, and will continue move into more senior positions ultimately generating more wealth.[27] Additionally, Gen-X is smaller than both the Baby Boomer and Millennial generations, and it will take until year 2028 for the Gen-X population size to equal that of the Baby Boomers.[28] This means that when Boomers experience asset decumulation over the next two decades, Gen-X will not be large enough, or wealthy enough, to counteract the loss of Baby Boomer assets that asset management firms will experience. Millennials and Gen-Zers however, who collectively make-up around half of the population, are big enough to not only counteract firms' loss of Baby Boomer and Silent Generation assets, but to eventually carry the wealth management industry as the Baby Boomer generation has done for quite some time.

Despite large decreases in the value of assets held by both the oldest generation, the Silent Generation, and the wealthiest generation, the Baby Boomers, U.S. household assets as a whole are predicted to increase from today's value of $87 trillion to over $140 trillion by 2030, and about $64 trillion of this will be in investable financial assets.[29] Since it is predicted that the value of the Baby Boomers' and Silent Generation's assets are going to fall, asset management companies will need to attract the younger generations as the older generations decumulate their wealth. This "somewhere else" are the two youngest generations in the workforce: Gen-Z, whose oldest members are 25 and just beginning to gather the basis of their financial assets, and the Millennials, whose youngest members are entering the workforce while its older members are entering into senior positions and making more money. For Millennials, the increase in workforce participation and increased salaries are estimated to bring the assets Millennials currently control up from $1.4 trillion in 2015 to $11.3 trillion by 2030.[30] This is not only the biggest predicted increase in wealth share for any generation during this time period, but is also an indicator of why firms need to capture Millennials before this rapid asset accumulation takes place.

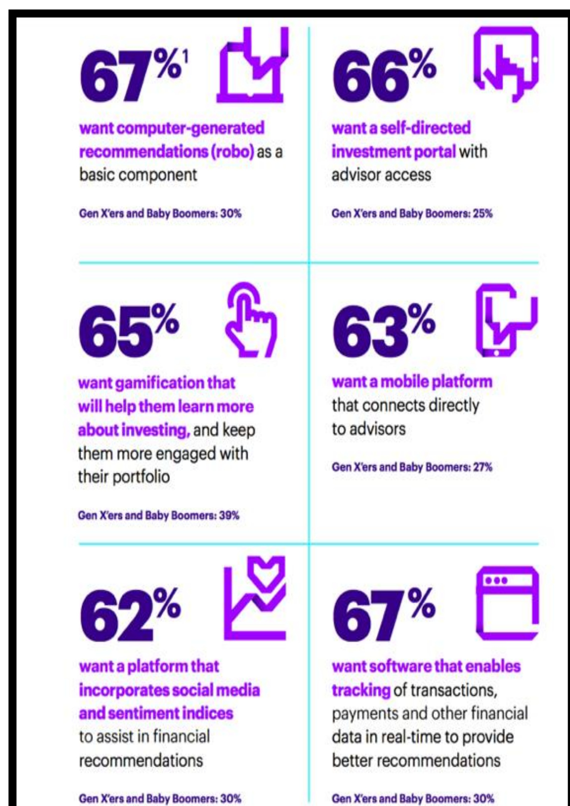
In addition, it is predicted that Millennials' parents, the majority of which belong to the Baby Boomer generation, will pass down an estimated $30 trillion by the year 2050, a prediction that has been widely accepted and dubbed, "The Great Wealth Transfer".[31] What makes this wealth transfer so complicated is not the extremely large value of the transfer, but *when* this transfer is supposed to take place, and the age of its heirs. Boomers who are 65 today, the current median age for the generation, can expect to live another 18 years on average.[32] Because they are expected to live much longer, and much healthier, lives than previous generations, they are also expected to retire, and transfer their wealth, much later than previous generations. This means that the Millennial and Gen-Z heirs to this transfer will have a substantial amount of time to begin careers and accumulate assets, and will likely have selected various wealth management

options for themselves.[33] Therefore, if firms wish to remain in control of Baby Boomer assets when they are eventually transferred to Millennials and Gen-Zers, they must capture these generations as clients not only before the Great Wealth Transfer occurs, but more importantly before these two generations select alternative asset and wealth management options.

Gen-Z and Millennial Trends and Values

The age and development of these two young generations are almost mirror opposites to the ages of the two oldest generations: while Gen-Zers and Millennials are growing up, entering the workforce, and establishing themselves in senior positions, Boomers and the Silent Generation are leaving the workforce and the rate of growth of their assets will be decreasing. Likewise, the consumer habits of Gen-Zers and Millennials also seem to be mirror opposites than those of the Boomers and the Silent Generation. Most notably, the needs, values, and company loyalty of these two generations differ dramatically, and these aspects need to be understood by asset management firms if they want to ensure access to the future's wealthiest generations.

One of the most notable differences in consumer characteristics is the loyalty members of these generations have to the companies they interact with. More specifically, younger generations have less loyalty to a company name and their history with that company, and are more loyal to companies and firms that replicate their overall values and take care of their needs, specifically related to technology and efficiency. Millennials have not quite tapped into the financial service industry yet, with a mere 27% reporting that they had sought out financial advice in the past five years.[34] The banking industry offers a relevant case study to examine consumer loyalty trends of younger generations within the financial services market. Loyalty to specific banks is at an all-time low for Millennials, with 75% of them saying they would switch their private bank if they found a better option.[35] This indicates that it is not a company's reputation or history that earns Millennial's loyalty, but the ability of the company to fulfill their generation's needs. In a study conducted to determine Millennials' least liked brands, the largest four banks were among the least liked companies' generation-wide.[36] This dislike for banks comes as no surprise; the banking industry focuses its marketing on older, currently wealthier generations, and in the opinion of the authors has done a suboptimal job tailoring to the needs of Millennials. An example of this is that 34% of financial marketing teams allocate over 50% of their media budgets to traditional media. This approach does not reach the majority of Millennials. who prefer social media and other alternative forms of media.[37] Additionally, a 2018 survey of banking institutions found that "attracting a younger audience, grow relationships with Millennials" ranked just ninth out of the ten most popular marketing priorities. Asset managers are in the position that banks were about ten years ago: they are on the cusp of needing the Millennial generation more than older generations. They need to act before other companies, who are much better at tailoring their offerings towards the needs and values of younger generations, become competitors in the asset management industry. Banks did not tailor their business plans towards attracting younger generations, and they are already falling behind non-traditional, technology-based companies. If the asset management industry wants to avoid the same pitfall, and take advantage of the enormous amount of wealth that will inevitably make its way into the hands of Gen-Zers and Millennials, it will need to tailor its business model and user interfaces to the needs of the younger generations.



Source: Accenture, "Millennials and Money"

The most notable need that these younger generations highlight over other generations is the implementation of technology into their customer experience. While we already know 75% of millennials would switch their bank if there was a better option, a resounding 54% said they would switch firms if they had a better technology platform at another firm. This group makes up the large majority of the 75% "unloyal" millennials who would happily switch bank firms a better service was offered.[38] The theory behind this stems from the fact that younger generations grew up with technology in many aspects of their lives. Not only did this cause them to be "used to" technology in their day to day lives, but they got used to the hands on, customizable approach to daily matters that technology provided. For example, according to Accenture's research, 50% of Millennials want to customize the look and feel of their user interfaces to create a frictionless investment experience compared to just 16% of Baby Boomers.[39] The high percentage of Millennials who say they want this feature, despite it having no meaningful impact on their investment return, indicates that it is something Millennials really value in their investment experience. Furthermore, the difference in the desire for this capability between Boomers and Millennials is a good example of how much more Millennials expect from their financial service providers than previous generations. Tech companies have exhibited proficiency in service customization, while asset management firms are generally new to this service component for younger retail investors, which puts the latter at a disadvantage. This disadvantage must be recognized, and firms must start implementing new technology in user interfaces if they want to capture Millennial and Gen-Z clientele before it is too late.

In addition to satisfying the needs that younger generations have in their investment experience, firms will also need to tailor their investment offerings around the values that Millennials and Gen-Zers find important. These two generations place a much higher value on the climate of the world than others: the environmental, political, and social climate. A 2020 Deloitte survey given to Millennials and Gen-Zers who felt anxious or stressed during the pandemic found that Millennials associated "the social / political climate" with 25% of their stress and anxiety (24% for Gen-Z), and "the environment / climate change" with 23% (25% for Gen-Z).[40] Surprisingly, the younger generations attributed almost an equal level of stress to "My personal safety", 24% amongst Millennials and 27% amongst G.[41] In the midst of a global pandemic, with a potentially fatal disease spreading, it is understandable that these individuals would be focused on their personal safety as their number one priority. However, this survey showed that even in such a dramatic crisis as the Covid-19 pandemic, the younger generation is still as focused on what they value most. This could be an indication of how Millennials will maintain these values when they are managing their wealth in the future. Furthermore, Millennials actively support brands and companies that support their ideas on these issues. A 2015 Cone Communications study found that 91% of millennials would switch brands to one associated with a cause.[42] This indicates that the younger generations realize the impact the way they spend their money makes, and that

they can use this to their advantage by supporting companies that share their values. This also impacts how they invest their money. A 2019 Morgan Stanley found that 95% of millennials were “interested” in sustainable investment, and 90% of them wanted the ability to tailor their investments to fit their values.[43] Firms will need to utilize technology, specifically technology that utilizes big data, to gain insight on exactly how Millennials’ values impact their investment habits. That being said, investing in companies that share the same values as younger generations does not necessarily lead to any real change, and this is why 91% of Millennials said they wanted an impact report on their investments.[44] If firms want to attract Millennials and Gen-Zers, and maintain them as long-term, loyal clientele, they must uphold and address these values, and invest in other companies that do the same.

Recommendations for Asset Management Organization

The asset management sector has not yet fully embraced innovative technologies, and many firms are not well-positioned for the inevitable competition from e-commerce and technology firms. Other sectors within financial services have begun the shift to competing in the digital economy, by making more user-friendly and technologically advanced business models. However, asset managers lag behind and could miss out on the growing Gen-Z and Millennial clientele. Gen-Zs and Millennials would prefer to choose asset managers / investment options based on social media feedback, user interface, values (i.e., sustainable investments, workforce diversity), education (gamification) as well as cost.

We recommend the following to asset management firms:

a. Build interfaces that can capture Gen-Z and Millennial clients;

b. Utilize big data to provide trusted advice for this demographic of investors; and

c. Hire diverse talent to align with Gen-Z and Millennial demographics and values.

Build Interfaces

Asset management should create a personalized user interface (UI) experience that emulates current technology preferred by Millennials and Gen-Z.[45] By failing to create a more user-friendly interface, asset management firms run the risk of losing the assets of the next generation to technology firms potentially disrupting the industry. Asset management can adapt to modern technology that already exists, like gathering data on consumer behavior, to enhance the customer experience. This type of technology could allow asset management firms to sell and market their products to the next generation of wealth builders. The user-friendly interface is pertinent to Gen-Z and Millennials because most grew up using the iPhone.[46], [47] Asset managers can use the success of Amazon and Netflix to make the customer experience and product selection more adaptable.[48] The managers who adopt a friendly user interface will ensure that they have a higher probability of gathering and obtaining the assets from Gen-Z and Millennials.

Gamification is another trend that asset managers could use to their advantage in gaining the loyalty of the next generation of wealth builders. According to Pew Research, 70% of men under 30 and 49% of women under 30 say that they often or sometimes play video games.[49] Thus, a large portion of Millennials and Gen-Z enjoy playing video games and could potentially be engaged by gamification. Asset management firms could use gamification to draw younger clients to their platform. The gamification of learning is one way in which programs like Duolingo have made students' experiences simpler and more enjoyable. Duolingo is a language learning program that provides users with sentences or words of foreign languages they are interested in learning, and the user translates these phrases into their primary language. When a user correctly translates a word or phrase, they are rewarded by receiving positive feedback from the app's interface or other users. The feedback from the app makes learning the language like a game, making education more enjoyable for younger students.[50] Asset management firms could offer their users investment and market education through gamified platforms that target younger individuals who will have assets in the future. Helping younger generations develop an understanding of investing and saving money could help asset managers create trust and loyalty from their potential clients.

For example, firms could offer an account with a marginal sum of money to clients who complete the education game. The accounts could help develop asset management relationships with younger clientele early in their investing career. Importantly, asset management firms using this technology such as gamification need to ensure that education is provided in a manner to help the new generation of investors understand there is significant **risk** with investing. The recent tragedy of one of Robinhood's clients is such an example.

Once the younger generations begin developing significant assets, the relationship developed through a gamified education system will help asset managers gather more assets under management and create loyalty. Furthermore, Gen-Z and Millennials, still early in their careers, need to educate themselves on saving money and taking advantage of 401k retirement plans. Educating the next generation of wealth builders on investing through their 401k's with gamification could be used by the asset management industry to obtain assets and develop loyalty from Gen-Z and Millennials. Overall, creating a more personalized and gamified user interface will allow asset managers to acquire more assets from younger generations.

Utilize Big Data

Big data analytics has become an increasingly critical part of the broader technological innovation trend in financial services. EY research shows that companies effectively utilizing big data strategy were able to outperform their peers by 20%.[51] The data generated through successful UI strategy implementation could potentially help asset managers predict their clients' behaviors and needs. Asset management firms should attempt to think a step ahead of the Gen-Z and Millennials and anticipate their needs since they are relatively inexperienced with investing.

The first way big data can be helpful is to anticipate potential investment learning curves and obstacles and provide personalized guidance for these young investors. For example, for clients

with no experience in long-term investing, an asset manager can use investment behavioral data, collected from past clients with similar attributes, statistical models, and data analysis tools, such as machine learning, to predict a more personalized learning curve for each individual. By doing so, the asset manager could help new investors anticipate their struggles and provide solutions based on past experience, allowing them to become more comfortable and more educated with the investment process. This is an effective strategy to both capture new clients and to retain them. Once asset management firms prove their value in providing life-long learning and growth opportunities for the Gen-Z and Millennial groups, they are likely to gain trust from this next generation of investors.

Another way in which big data can be utilized is to help construct financial products that address Gen-Z and Millennials' values and needs on an individual level. Since Gen-Z and Millennials are newer to investing, they are less concerned with short-term returns and more concerned with long-term impacts and the sustainability of their investments. As mentioned in the previous section on Gen-Z and Millennials' trends, 95% of Millennials are interested in sustainable investment.[52] One way to achieve sustainable and impactful investing is to consider ESG (environmental, social, and corporate governance) criteria. Although ESG investing is not a new concept and many asset management firms are already offering ESG products or packages, they can hardly meet the needs of their clients at an individual level in a systematic way. The key to capturing Gen-Z and Millennials is to offer them the right ESG products with the ESG factors that matter to them the most. According to researches, Millennials tend to focus on civil rights, healthcare and employment issues[53] while Gen-Zs have strong opinions about race, climate and the role of government.[54] Most asset management firms are unable to meet such diversified and customized needs. Big data and machine learning could potentially solve this problem given its ability to gather massive amounts of data, integrate ESG rating scales and develop a methodology to integrate individual factors into the portfolio construction strategy. By doing so, asset management firms demonstrate that they are actively taking steps to encourage ESG investing and address clients' needs of making social impacts.

As the aforementioned section points out, Gen-Z and Millennials will have more loyalty to firms that replicate their overall values and address their needs, with 90% of them wanting their investments tailored to their values.[55] Big data tools can effectively address their needs for financial guidance, technological efficiency and the opportunity to make social impacts through investing. Doing this will allow firms to build a reputation of trustworthiness and social responsibility, attracting more socially responsible customers and building life-long relationships.

Hire Diverse Talent

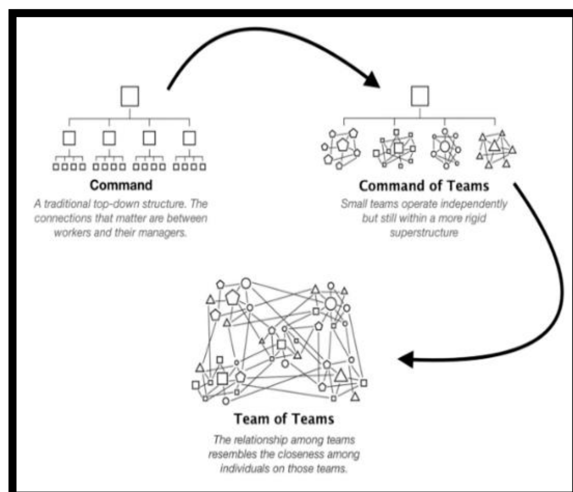
To accomplish the goals set out in this paper, asset management firms will need to evolve their hiring and management processes. In doing so, three key areas that must be addressed: skill sets, organizational structure and decision making, and diversity.

Firms need to diversify their skillset to focus on talent that can leverage digital capabilities and tap into the value of new technologies. If asset management firms are to build interfaces and utilize big data to capture Gen-Z and Millennials, they need to have professionals that are equipped with the necessary knowledge and skills to do so. This will require hiring more technology-savvy talent that can meet clients' digital demands by making data-driven investment decisions and improving operational effectiveness. Firms will need to compete with Big Technology for top-tier talent. They can achieve this by matching technology firms and attracting similar talent by offering competitive compensation and benefits, as well as a tech-oriented work environment.

Secondly, firms should re-skill and blend varying areas of expertise into each of the functional areas. An example would be the infusion of data-oriented talent with practitioners who know the business.[56] This has been successfully achieved by technology firms by establishing teams supported by a conducive organizational structure. Google, for example, has a cross-functional organizational structure that maintains flatness across the company.[57] This structure minimizes vertical hierarchy, and enables

employees and teams to communicate directly with upper management. This feature is a major contributor to Google's success, as it promotes efficient and effective product development and innovation. Many industries, including asset management, still often rely on a traditional hierarchical structure with a chain of command when it comes to communication and decision making. Technology, communication flow and consumer demands have created a work environment that is more complex than ever before.

An example of this idea is illustrated in General McChrystal's book, *Team of Teams*, where he argues that to succeed in such an environment, decision making needs to be more readily available, and made in real time with the people that have the most relevant information.[58] He used the battle of U.S. Forces in Iraq versus Al-Qaeda in Iraq to illustrate that teams of experts across an organization can make better decisions.



Source: Team of Teams by Stanley McChrystal

This cannot happen if organizations continue to operate with the traditional top-down approach where an employee must communicate with their manager who has to communicate with their manager, and so on, before a decision is made. Thus, asset management organizations need to evolve, and could consider creating "teams of teams" made up of both investment, technology, and other professional working in a horizontal organizational structure. This structure could enable a work environment that is better equipped to harness the know-how and capabilities in investment, technology, and innovation.

Thirdly, asset management firms will flourish by developing a representative workforce. If they are to attract and maintain Gen_Z and Millennials, the most racially and ethnically diverse generations, they need to have staff that represent them. In the United States, for example, one in four Gen-Zers are Hispanic, 14% are African American and 6% are Asian.[59] Gen-Z and Millennials prioritize diversity across race, gender and sexual orientation more than any other generation. They believe that corporations should set out to achieve a broad balance of objectives that include an emphasis on diversity and inclusion in the workplace.[60] Technology firms have responded to this demand from Gen-Z and Millennials and have made advancing diversity a priority. 53% of Apple's hires in the U.S are from historically underrepresented groups; women and BIPOC (black, indigenous, people of color).[61] Asset management, on the other hand, is lagging when it comes to diversity and inclusion. In 2017, Hispanics and African-Americans held only 4.8% of executive roles in asset management.[62] Additionally, only 1.1% of the industry's $71.4 trillion in assets are managed by firms owned by women and minorities.[63] Asset management firms need to diversify their staff to include more women and BIPOC not only in their firms but their executive suites. This will not only attract Gen-Z and Millennials, but also improve their performance. Cognitive diversity that is achieved when people who have different ways of thinking, different viewpoints, and different skill sets work together, often leads to better performance. The aforementioned team of teams' structure relies on cognitive diversity and benefits from the collaborative culture and collective intelligence of its team members. As today's diverse, interconnected world presents difficult challenges, a diverse and well-networked group of professionals have the best chance of responding to such challenges.[64]

Asset management firms need to adapt and improve their skill set, their organizational structure, and their diversity in order to attract Gen-Z and Millennial clients, as well as to gain a competitive advantage against technology firms

that could disrupt the industry. They can do so through hiring more technology talent, hiring more women and BIPOC, and by evolving their organizational structures to focus on decision making by integrated and informed teams rather than strict hierarchy.

Conclusion

Technology is and will continue to disrupt the asset management sector. The difference between successfully adapting or failing could likely be decided by whether or not asset management firms are able to capture Gen-Z and Millennial investors and their growing asset base. Many in asset management seem to believe that providing the next generation with simplicity, cost effectiveness and convenience might be enough. This paper concludes that more is needed and that by building interfaces that attract these generations, utilizing big data to offer personalized advice and products, and by hiring diversely, firms can gain a competitive advantage and maintain loyalty within the upcoming generations. In line with Gen-Z and Millennial values, firms must also address their own corporate responsibility, and serve clients in ways that promote sustainable, ethical, and responsible growth across the entire economy.

Author's Note

This paper has reviewed actionable steps that firms can take now, which includes assessing user interface interactivity and efficiency, incorporating big data analytics to advise clients, and revising recruiting policies and processes to attract diverse talent. We recognize that every innovation involves risks. Potential issues that firms might encounter when developing and implementing a technology-focused strategy include technology failures associated with the new user interface, cyber security and the protection of client's data, and governmental and institutional regulations on new investors' capacity and ability to invest. We suggest firms carefully implement changes that fit their organizational goals and test these strategies on a small range of their client base before fully implementing them on a company-wide level. We also recommend that firms conduct further research on these topics.

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