Millennials – the global guardians of capital

UBS Chief Investment Office
Wealth Management white paper

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Foreword

Dear reader,

The financial, economic and sociopolitical prominence of the "millennial" generation is continuing to grow at a rapid pace. Those born between 1982 and 1998 already account for 27% of the global population. Today they hold USD 17trn of the world's private wealth, and by 2020, that could rise as high as USD 24trn — or roughly 1.5 times the US's national output in 2015. Looking further ahead, millennials are set to control an even greater share of global wealth, as they are positioned to benefit from one of the largest intergenerational wealth transfers in history.

In this white paper, UBS CIO WM explores the ways that the millennial generation is different, and how the impending shift of economic power will significantly influence their expectations and potential compared to prior generations. The paper specifically highlights three characteristics that set millennials apart from those that came before them.

First, millennials are digital natives that have grown up in a world of automation and connectivity. This high fluency with technology means millennials demand ever more digital services, and accelerating adoption rates imply that new innovations are already spreading quickly across generations.

Second, millennials call for a wide choice of content, conveniently delivered, that meets their varied affinities and needs. The choice, social connections, and convenience of a platform-company model appeal to millennials today and will spread to other generations as technologies diffuse.

And finally, millennials seem increasingly aware of global problems and their potential solutions, as technology broadens their circle of social connections. A broadly held desire for purpose means they are particularly willing to use their private capital for the public good, and will be ever more able to do so as wealth passes down to them.

Stakeholders who respond to these trends will unlock wider opportunities, especially as other generations follow millennials' lead. Businesses should embrace digital, multichannel service provision alongside their traditional operating models, making choice possible through a preferred mode of delivery that suits each client's tastes. Similarly, corporations, governments, and non-governmental organizations should collaborate to build communities and networks that link people, products, and information – something that is particularly relevant for those who seek a greater purpose and who want to use their financial and human capital to have a positive social impact.

No stakeholder can afford to ignore the millennial generation, nor can they allow themselves to make false assumptions based on ill-informed stereotypes or near-sighted typecasting. Instead, there must be a widespread adaptation to meet the needs of these next guardians of global capital, to embrace the technological changes that define their demands and to evolve in ways that help transform our world for the better.

Thank you for taking the time to read about this important topic.

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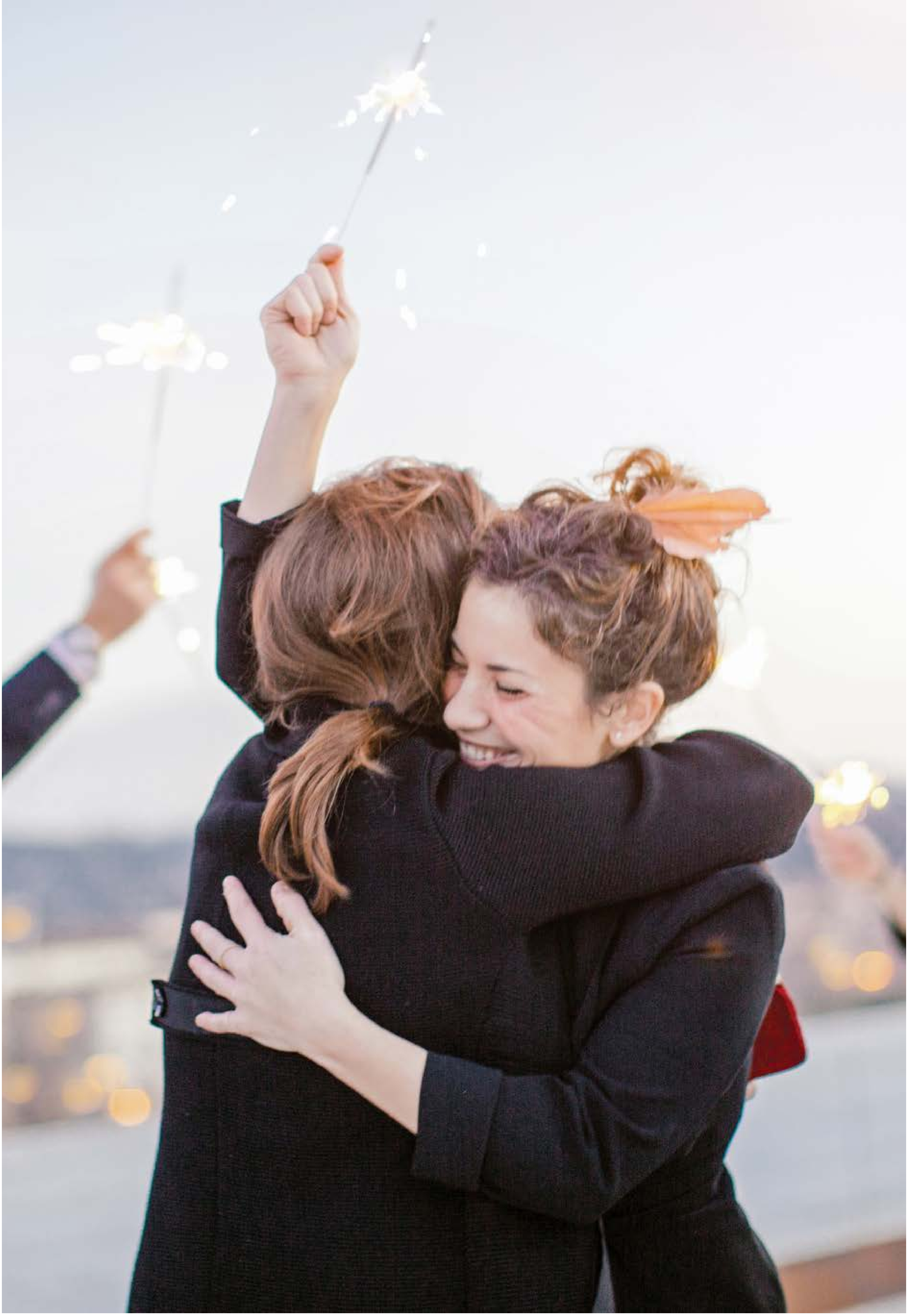


1.
Why millennials matter.

"Millennial" is the term used to define a cohort of people that came of age at the turn of the 21st century. They are set to benefit from the biggest wealth transfer ever seen, warranting research that examines their expected demands.

By 2020, global millennial wealth could stand at USD 24trn, around one-and-a-half times the size of the whole US economy in 2015. Inheritance, entrepreneurial activities, and income growth could power this wealth accumulation.

We observe that millennials have particular traits that differ from other generations. They particularly favor convenience, multi-channel communication, and transparency from businesses (and wealth managers).

1. Why millennials matter.

In 1991 a word was born. American authors Neil Howe and William Strauss created "millennials," to label a generation of Americans whose oldest members would come of age at the turn of the second millennium. Definitions for millennials abound. A common one for this group (also known as "Generation Y") is those born between 1982-1998 (ages 19–35 years today), and this is what we use in this white paper. For context, millennials are preceded by "Generation X" (aged 36–51 years) and has parents in the generation before that, the "Baby Boomers," who were born in the immediate aftermath of the Second World War and are aged between 52 and 70 years old today.

Measuring the millennial opportunity
Businesses, governments, and other organizations are intent on trying to understand this whole "generation" of people. Why? Arguably the main reason is that millennials already control significant levels of wealth and are expected to command even more over the coming years and decades. Millennials were already estimated to control USD 16.9trn of wealth in 2015 (according to Business Insider UK's report of Boston Consulting Group analysis), though the share of millennial-managed wealth across regions differs considerably, from just 5% in North America to 16% in Asia Pacific (ex Japan).

Looking ahead, this generation looks set to benefit from one of the largest intergenerational wealth transfers ever, carried out over a comparatively short timeframe. Even by 2020, the total net worth of global millennials is expected to grow to USD 19–24trn, according to data in Deloitte's 2015 edition of Insights. The 2016 Billionaires report from UBS and PwC estimates that 460 billionaires will hand over USD 2.1 trillion over the next two decades, a sum equal to India's entire gross domestic product in 2015. And Baby Boomers are expected to pass down around USD 30 trillion between 2011 and 2050 in North America alone, as quoted in a 2015 study by Accenture.

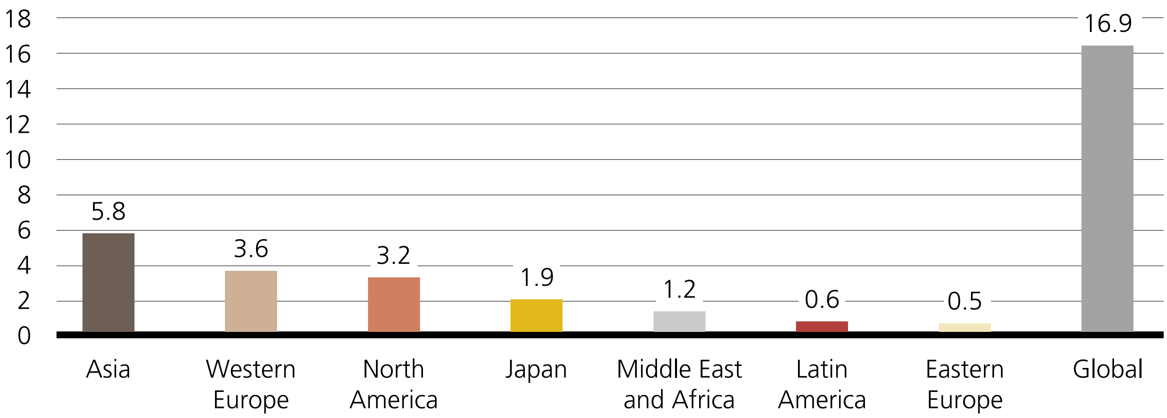
Entrepreneurship may also lead to further millennial wealth accumulation. Members of this cohort started their first businesses eight years sooner, launched twice as many businesses, and targeted gross profit margins more than 30 percentage points higher than their parents' Baby Boomer generation, according to a 2016 report on global entrepreneurship by BNP Paribas and Scorpio Partnership.

Last, the oldest members of the millennial generation are on the cusp of moving into their peak labor income, spending, and investment years as they advance professionally. This generation, expected to account for three-quarters of the global workforce by 2025, is forecast to enjoy a near doubling in its gross income by 2030. Earning power should rise to USD 32trn from USD 18.4trn in 2015, according to analysis from Bank of America Merrill Lynch, based on Euromonitor data. And in Asia Pacific, the millennial generation is expected to have the largest spending power of any generation ever, with an estimated disposable income of USD 6trn by 2020 according to September 2016 data from Accenture.

In consequence, it is critical that institutions adapt to the needs of these new guardians of capital. A first step in making changes would be to understand millennial tastes and behaviors, comparing those to other age groups in order to establish any observable differences.

Fig.1 – Millennials' existing wealth is already sizable

Total millennial wealth (trillions of USD in 2015)



Source: Business Insider UK, based on BCG Global Wealth Market-Sizing Database, 2016 and BCG analysis.
URL: http://uk.businessinsider.com/millennials-investing-boston-consulting-group-2016-6?r=US&IR=T, accessed 26 May 2017.

Millennial tastes are different
Evidence suggests that millennials have some characteristic tastes that are different to former generations. Looking at data on millennial behaviors across industries, including financial services, we find that this generation places particularly high emphasis on three qualities: convenience, multichannel delivery, and transparency.

Convenience
The millennial generation wants convenient, on-demand access to goods and services. This age group dominates the US on-demand economy, which includes online market places, transportation, and food shopping conducted on the Internet. Millennials accounted for 49% of all on-demand consumers in the US in 2015, compared to 22% aged 55 or older, according to a Harvard Business Review report based upon the National Technology Readiness Survey (Rockbridge Associates and A. Parasuraman). Millennials also seem to place a particularly high value on their time and efficient use of it, even when it comes to issues such as their own health. Some 49% of US millennials prefer interactions with healthcare providers that are "fast, convenient, or instantaneous," compared to 40% of Generation Xers and 28% of Baby Boomers (according to a 2016 report Insights into the Millennial Market from WebMD Health Services).

This desire for greater convenience than other generations extends to financial services too – 69% of UK millennials would like to use their mobile phone as a replacement to a physical card for point-of-sale transactions, versus 40% of Baby Boomers that want the same, according to a 2016 consumer survey undertaken by McKinsey. Millennials are more than twice as likely as Baby Boomers to demand a mobile banking service that allows for financial advice to be delivered by in-app chat or via video conference, based on data from the same survey.

Multi-channel delivery
In contrast to other generations, millennials prefer to engage with companies and purchase their products using a variety of channels. They value digital communication and social media as a means to be inspired, compare prices, and select goods and services. In 2014, 47% of millennial consumers used social media as part of their shopping experience versus 19% of non-millennials, according to Deloitte Digital (Navigating the New Digital Divide, 2015). Yet they combine this digital interaction with in-store collection more frequently than other age cohorts – 19% of millennials bought their shopping basket online and then collected the goods or services in store, versus 12% of non-millennials according to the same survey.

They also appear to be embracing convenient, multi-channel delivery of financial services that is both traditional and digital. Based on a 2016 consumer survey undertaken by McKinsey, millennials transact business with their principal bank 52 times a year via internet banking, compared to 42 times a year for Baby Boomers, while having more than double the number of mobile banking touch points (48 versus 19). However, millennials also visit branches nearly twice as often as Baby Boomers (29 times against 16 times respectively), and engage with a broker or agent three times as often as Boomers.

Transparency
Millennials show a higher propensity than other generations to be transparent and share personal information if doing so gives them an advantage such as a financial or experiential incentive, or if service is thereby more personal. On this point, 23% of millennials would be willing to share their cell phone number, 21% their purchase history, and 15% their household income (compared to 11%, 12%, and 6% respectively for Baby Boomers), based on data from an October 2015 study conducted by the University of Columbia Business School and Aimia (What is the Future of Data Sharing? Consumer Mindsets and the Power of Brands).

In financial services, millennials are willing to forego privacy more so than other generations, if sharing personal data gives them a more convenient or more personal service. 57% of millennials would use biometric identification for their mobile-banking log-in, more than 20 percentage points more than Baby Boomers according to McKinsey. Furthermore, 57% of millennials would be prepared to share details of their savings target with family and friends, perceiving that doing so would allow trusted individuals to offer more tailored advice on how to achieve their goals. In contrast, just 32% of surveyed Baby Boomers would be prepared to divulge the same information.

To explore further go to:
ubs.com/millennials

2.
Who are these millennials… and who are they not?

Researchers have attempted to generalize about millennial behaviors. They have risked alienating this diverse group by overlooking wider trends that will affect everyone.

In fact, millennials’ ability to adopt new technologies and willingness to tackle global issues will drive broader shifts in demand across age groups, compelling stakeholders to respond with new, innovative operating models.

The assumptions that millennials are obsessed with technology and themselves, to their own detriment, do not conform to the facts. All age groups rely increasingly on technology and are aware of the world’s economic and social imbalances.

2.
Who are these millennials… and who are they not?

Observed behaviors and traits suggest that millennials demand greater convenience and access to a wider range of communication channels, while exhibiting a high degree of transparency in supplying personal data to organizations.

Researchers have sought to scale up from micro evidence to the macro level. A vast body of research has sought to examine not just how millennials behave, but who these millennials are.

Two key assumptions about the millennial cohort stand out in particular:

Assumption 1: Millennials are obsessed with technology, at considerable cost.

Purported side-effects of the millennial generation's obsession and exposure to technology are shorter attention spans, and a culture of "instant gratification." In 2015, almost nine in 10 US millennials checked their mobile devices within a quarter hour of waking according to a study in Deloitte's 2015 edition of Insights. One conclusion is that millennials' relationship with technology is a uniquely unhealthy one that threatens their ability to make long-term investments in their careers, education, and personal passions.

Assumption 2:
Millennials are more narcissistic and selfish than other generations.

Commentators frequently pin the label of narcissism, entitlement, or self-interest on millennials. The cohort is alleged to attach more importance than other generations to selfish concerns (money, social status, fame) over community or civic ones. Studies by Jean Twenge and others of US college students over the past four decades concluded that millennial generations showed an elevated sense of egotism, self-esteem, and expectations about their future prospects. For example, US millennials scored lower than Generation Xers and Baby Boomers on 11 and 13 measures of civic orientation and social capital respectively, such as thinking about social problems (Twenge, Campbell, and Freeman (2012)).

We would argue that both of these assumptions are disputable. In short, we find that millennials are neither technology-obsessed in comparison to other age groups, nor uniquely self-centered compared to other people. We will show, in parts 3 and 4 of this white paper, that millennials exhibit an affinity toward embracing technological progress. Technology has raised millennial awareness of the world's grave problems and of how these international problems affect their generation as the definition of community extends from local and national scales to the global level. This generation also shows a willingness to tackle unsustainable growth with sustainable, private capital solutions.

Fact 1:
Everyone depends on technology…to an increasing extent.

The millennial generation is the first to have grown up in smartphone-connected, technology-rich households. They are most fluent in using the Internet and online networks to learn, conduct business, and live. Mark Prensky describes such people as "digital natives" and those who had to pick up technological proficiency later on in life as "digital immigrants."

It is clear that millennials rely heavily on technology, but we would argue that everyone does today. Almost nine in 10 millennials checked their devices with 15 minutes of waking in 2015. A year later, this behavior had spread across all age groups, with Deloitte's Global Mobile Consumer Survey 2016 study finding that six in 10 people, regardless of age, checked their digital devices within a quarter hour of waking. Additionally, evidence suggests that while "millennial" reliance on digital communication is higher than other generations, other age groups also attach a great deal of importance to having constant connectivity. A 2016 Commscope study of 4,000 people from San Francisco, Sao Paulo, London, and Hong Kong found that 74% of millennials said that they could not survive one full day without their smartphone – this compared to a smaller (but still significant) proportion of Baby Boomers – 50% – that said they could not survive a single day without their device.

One criticism of "millennials" is that instant access to information and social connections in a world of extreme connectivity had nurtured this culture of "instant gratification" and shortening attention spans. A more digital lifestyle has been ascribed as a reason for declines in the average human attention span across all age cohorts, from around 12 seconds in 2000 to eight seconds in 2013, according to a survey of 2,000 participants by Microsoft Canada. By way of comparison, a goldfish is thought to be able to fix its thoughts for nine seconds.

However, we would argue that all age cohorts are increasingly shifting to on-demand services and will alternate their focus between multiple tasks. This trend across age groups stems, in part, from technological advancements and speedier adoption of technologies for everyone. We explore the impacts of technology and the business model implications in part 3 of this white paper

To explore further go to:
ubs.com/millennials

Fact 2:
Millennials are no more selfish than prior generations of young people – they may even be more socially aware.

We identify several reasons to refute the view that the under-35 age group is more "Generation Me" than "Generation We" compared to prior cohorts.

First, criticism of younger generations as being more selfish or self-centered is a historical phenomenon, not just limited to today. The idea of the "Me Generation" applied by Tom Wolfe to US Baby Boomers in the 1970s sounds strikingly familiar to the concept of "Generation Me" assigned to millennials in 2013.

Second, psychological studies suggest that self-centered behavior is no more prevalent in today's youth than in other cohorts. A comprehensive study of near 500,000 US high-school seniors between 1976 and 2006, conducted by Trzesniewski and Donnellan (2010), found little statistically significant evidence that today's millennials were more selfish, individualistic, or antisocial.

On the contrary, a greater proportion of under-35s think carefully about the impact of their actions on other people. The under-35 age group believes that businesses in which they invest, whether as employees or with financial capital, have wider responsibilities than simply making profit. According to Deloitte's 2016 survey of "millennials," 87% of this group believes that corporate success should be measured in more than just financial performance.

These people want to embed sustainability issues into their consumption and investment decisions, more so than other age groups. A 2015 study by Morgan Stanley's Institute for

Sustainable Investing established that this age group is nearly twice as likely to check product labelling for sustainability criteria, when compared to other age cohorts (40% versus 22% of respondents). Under-35s are twice as likely to sell an investment position due to corporate behavior that is perceived to be unsustainable.

We would argue that millennials are leading the way in advocating solutions to the world's economic problems, as a means of promoting greater equality of opportunity for people across the world to achieve their potential and find a sense of purpose. "Every generation expands its definition of equality," as Mark Zuckerberg noted in his May 2017 commencement speech at Harvard. In millennials' case, a consequence of extreme connection is that ideas of nationality no longer apply. A majority (36%) of near 20,000 "millennial" respondents across 187 countries and territories defined themselves not by birth country or heritage but as "global" citizens, according to the World Economic Forum's Global Shapers Annual Survey 2016. Millennials identified cross-border challenges such as climate change, war, and religious conflicts as their top global issues.

This cohort, regarding themselves as "citizens of the world," believes in a shared responsibility for global economic and social inequalities. The reason for this world view is that extreme connection has not only expanded people's social networks, but led to greater inclusion. Mark Zuckerberg also said in the same speech, "every generation expands the circle of people we consider one of us."

Our research finds that the millennial generation is not only mindful of the world's economic and social problems, but is looking for increasingly innovative ways to use its private capital for the public good. We explore this rising interest in sustainability in part 4 of this white paper.

What do we know about millennials (and non-millennials)?

Millennials have matured in an increasingly digital world where extreme connection is the norm, the nature of community is changing, and awareness of the world's economic and social problems is high.

As technological developments and their rates of adoption advance, investors of all ages will increasingly embrace this new world, and demand similar services to the millennial generation. However, the younger cohort will continue to spearhead this demand evolution.

This implies that identifying and implementing the "right" millennial business strategy would open up a far wider opportunity for corporations that reposition and adapt to their existing and prospective client bases. We argue in part 3 of this white paper that the optimal strategic operating model recognizes the importance of technological advances.

If governments and non-governmental organizations also embrace new and innovative operating models with a technological core, they have the potential to seize the opportunities afforded by citizens' increased awareness of global issues, and millennials' desire to use their wealth for the public good. In part 4 of this white paper, we outline why mobilizing private capital for public good requires cooperation and purpose from public sector stakeholders, the next global guardians of capital, and the wealth managers that support them.

3. Technology is impacting expectations and behaviors across generations.

Extreme automation and connectivity are pushing consumers of all age groups toward digital services that allow seamless information flow. A consequence of this trend is increased awareness of the world's economic and social challenges.

Millennials and non-millennials alike are being increasingly drawn toward platform-companies, with technology powering an open, information-sharing infrastructure to match financial and human capital with user needs.

Clients and customers will increasingly demand enhanced technological solutions. We recommend that businesses, including wealth managers, accelerate efforts to complement traditional operating models with convenient digital capabilities and omnichannel content delivery that enables a choice of traditional, digital, or hybrid offerings.

The convenience, connectivity, and pull of platform-companies, where relevant communities are a key value proposition, will encourage firms to refine their business models and provide valuable content that is customized toward clients' particular affinities.

3.
Technology is impacting expectations and behaviors across generations.

The revolutionary forces of technology – extreme automation in the worlds of work and leisure, and extreme connection that breaks down local and national boundaries – will not discriminate by age.

Technology is already shaping the way we look at the world and is forcing firms, governments, and non-governmental organizations to adapt. If institutions focus on expected "millennial" attitudes and plan new offerings for tomorrow's world, they risk falling behind today's demand, across all age groups, for services that harness technology.

Extreme automation and extreme connection are enabling the seamless flow of information. More prevalent information about the scope of the world's economic and social challenges is increasing everyone's awareness of these problems, and raising demand for global solutions in response. We explore this topic in more detail in part 4.

Before that, we explore why the biggest potential opportunities for institutions will accrue to those that utilize technology today, and why they need to do more to create digital solutions for their users.

Extreme automation and connectivity are influencing everyone

Our research uncovers evidence against the assumption that millennials are more obsessed with technology than any other, and that this is having a profoundly negative impact on this age cohort alone.

A simple history in pictures, showing commuter trains sixty years ago and today, shows that behaviors haven't changed. An obsession with catching up on the latest news was just as prevalent then as it is now. What has changed is the mode of delivery.

> The under-35 generation may be digital natives today, but this generation's interest in technology (and the older generation's initial distrust) is timeless.

The under-35s attach an even greater importance to the provision of digital services, as technology use forms an integral part of their daily lives. Their preference for smartphone and instant messaging communication may appear excessive compared to prior cohorts, simply because the technologies did not exist for prior generations. Yet young people's affinity for technology is arguably a historical trend, and not a contemporary one.

In fact it can be argued that each and every time a new technology with the power to tell a story or narrative has arisen, older generations less familiar with the new medium have worried. The English writer and satirist Douglas Adams pithily expressed the consistent attitude to new technology across different age categories:

> I've come up with a set of rules that describes our reactions to technologies. Anything that is in the world when you're born is just normal and a natural part of the way the world works. Anything that's invented between when you're fifteen and thirty-five is new and exciting and revolutionary and you can probably get a career in it. Anything invented after you're thirty-five is against the natural order of things.

Yet researcher from Helsper and Enyon suggests that digital proficiency today depends not on age, or on being a "digital native" or "digital immigrant." Use of digital technology depends rather upon a wide range of other demographic or social markers. Comfort with (and use of) digital technologies extends across age groups.

> Shorter attention spans are not just a "millennial" characteristic – everyone has to adapt to a faster cycle of technology adoption.

The time taken for major innovations to move into the mainstream appears to be shrinking. Author Ray Kurzweil explored how long it took between the first year of a large-scale technological advancement becoming commercially available and for that technology to be adopted by 25% of the American population. The adoption process for electricity, first available in 1873, took 46 years. For modern, digital technologies with network capabilities, adoption rates were far shorter. The personal computer's transition took 16 years, whereas the Internet's take-up rate was a mere seven years (Fig.2).

We expect that as the twin trends of extreme automation and extreme connectivity pick up pace, adoption rates for new technologies will accelerate further. Millennials are spurring quicker rates of technological adoption today, but this trend will likely extend.

Behaviors haven't changed – modes of delivery have.
(Philadelphia, circa 1955. Photo by Three Lions/Getty Images)

Millennials and non-millennials are increasingly drawn to digital platforms...
Technology has not just transformed people's expectations about how they receive information. The Fourth Industrial Revolution has precipitated a fundamental shift in what information they demand.

...the next example of how technological change and the growing power of the Internet are disrupting traditional operating models.
Historically, increased use of the Internet and the arrival of new disruptive technologies have forced businesses to shift their strategic operating models (Fig.3). In the first wave of the mid 1990s, corporate Internet advertising quickly moved from being a "nice-to-have" to a "must-have" part of business strategy. Today digital advertising has subsumed traditional channels, with eMarketer predicting that last year marked the first in US history when digital-ad revenue would exceed that of television.

In the second wave, advances in technology spurred increasing automation of production processes and increased connections across supply chains and between end-users. Businesses such as retailers enjoyed falling costs and could provide a far wider range of products and services, including a "long tail" of more niche content. These supply-side economies of scale meant "pipeline" companies could harness the power of online commerce to extend their market presence and market share.

In the future, we expect the twin forces of extreme automation and extreme connection to draw people to open-architecture "platform-companies."

A platform-company houses a broad range of content (information, products and services, or social connections) produced by a wide range of users (not all of whom are for-profit corporations). Big-data analysis across multiple users and careful curation do not just match platform participants to the content that they value – the by-products of extreme automation and connectivity provide a powerful feedback loop that can offer increasingly accurate or valuable content to users. For example, analytics could not only suggest content that appeals to a user's known affinities, but match valuable new content to a user's previously unknown affinity. This unanticipated matching increases the potential appeal of the platform to existing users and could increase their loyalty toward it.

Historically, businesses have operated on the understanding that "all knowledge itself is power," and have generally sought to hold on to that power. The platform-company differs in that firms themselves act as the facilitators by providing a network infrastructure, but entrust the power of knowledge back to users and give them the choice and freedom to navigate the network as they want. As Geoffrey Parker, Marshall Van Alstyne, and Sangeet Choudary note in their book Platform Revolution, platform-companies do not orchestrate value creation. They provide the platform upon which value is created, and write the rules required for smooth network operation.

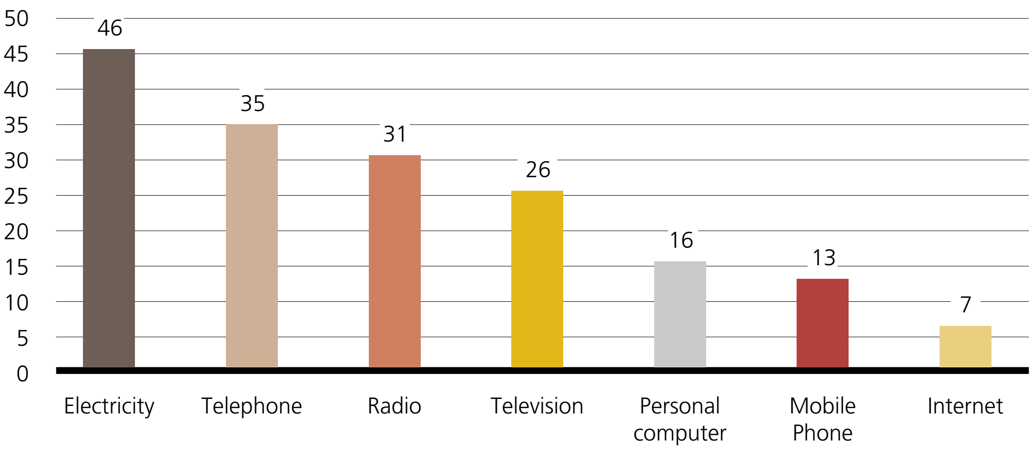
Today we believe the value that digitally-attuned clients place upon open-architecture, multi-channel networks justifies the appeal of a well-designed platform as a complement for more traditional operating models, whether from a business, a government, or a charity. Most of all we believe that failure to adapt to this new paradigm today raises the risk that even the most established institutions lose market share, user loyalty, or simply fail.

Behaviors haven't changed – modes of delivery have.
(Tokyo, Japan, 2012/iStock)

Implications
Technological advancements, not client or customer ages, are transforming everyone's appetite for digital services. We expect all people to accept and integrate new technologies into their working lives to maintain competitiveness; and to demand increasingly sophisticated digital service provision from businesses, governments, and other institutions. We further identify particular implications for the wealth management sector.

Fig.2 – US technological adoption rates

Years until use by 25% of US population



Source: Pew Research Center, singularity.com, accessed 13 May 2017.

1. Digital channels

Demand for digital services that include human advice look set to grow. Hybrid robo-advisory services are forecast to command USD 3.7trn of global assets by 2020, according to a 2016 online article from Business Insider UK. We highlight three key features of digital investment services that should contribute to this forecast growth:

> Digital services give clients the convenient access to the variety of content they want.

Clients have come to expect that extreme connectivity and big-data analysis will enable customized content or solutions, whether they are shopping, booking a hotel, or hailing a taxi. We expect that rising levels of digital proficiency and more rapid adoption of new technologies will require all institutions, including wealth managers, to provide more digital services that cater to clients' more varied demands. This suggests that the days of a "one-size-fits-all" business strategy, government initiative, or investment strategy are over. Flexibility and customization will be critical demands from tomorrow's clients, customers, and citizens.

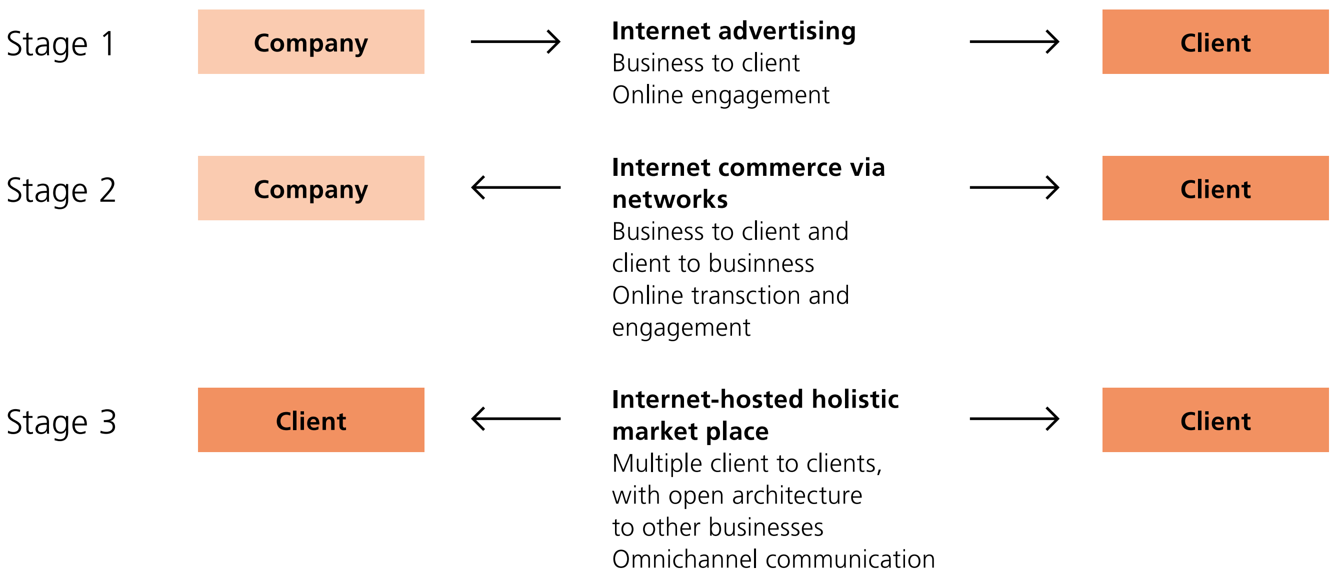
Businesses should therefore supplement traditional operating models with new, technologically-enabled ones. In wealth management, this means augmenting advisor-centric models (with a human expert at the center) and accelerating the provision of digital services like robo-advisory, bespoke portfolio analysis, and customized content in a best-of-breed hybrid model.

> We expect all clients will increasingly want a total communication approach.

While millennials may be leading the charge toward increased digital communication, we do not think that the desire to access services through multiple channels will be limited to younger generations. Specific evidence for financial services finds that all age groups want to interact with their banks in a host of ways depending on convenience. In fact, a March 2017 report from UBS Global Research finds that differences across age groups in using mobile or internet banking were not statistically significant among 2,000 Swiss and German survey participants.

Current and future generations of digitally-attuned clients and customers can be expected to attach greater importance to multi or omnichannel communication from all institutions, depending upon the type of content they are seeking. While web-based or mobile communication may be preferable to a face-to-face meeting for preliminary information or for a simple transaction, we expect that clients will still demand human contact when looking for more complex services or when seeking a particularly valuable social connection.

Fig.3 – The three stages of Internet-based business models (stylized diagram)



Company is the platform – "one-stop shop" but not "one-size-fits-all"

Source: UBS

RECOMMENDATIONS:
Our research has concluded that digitally-savvy clients and customers value the flexibility and convenience provided by technology when accessing an institution's service offering.

In future, institutions may consider the following recommendations of:

- integrating digital service provision into today's traditional operating models that are advisor-centric or hybrid, to ensure a consistent experience that takes the best of automated and human-generated client service;
- redoubling efforts to ensure that content is delivered in the right digital format for users to access at their convenience, on any device, anywhere;
- continuing to invest in omnichannel communication that allows users to communicate with a wider circle than just their client advisor.

2. Through a platform-company model

All clients increasingly value information from, and access to, a network of people.

Clients of all age groups want to communicate anywhere, at any time, and in a variety of ways. In the field of wealth managers, new entrant firms first tapped into this demand for more constant, digital communication and extended it. They built fresh businesses, unencumbered by existing scale or expensive infrastructure, upon the "platform-company" model that we described above. We expect that the value created by such platform-companies will attract ever more users and increase the appeal for businesses to create a platform of their own.

All institutions can potentially create large additional value to all their users by harnessing their existing networks and adopting a platform-company business model. Such a platform should facilitate information sharing from all sources, and allow for externally-generated content (information, products, or social connections).

Digital platforms allow clients of all ages to connect most effectively with their networks and consume customized content most flexibly.

The appeal of being socially networked and connected is a particular strong draw of digital services across age groups. Digitally-savvy clients have increasingly varied connections, both in their work and social lives.

Demand-side platforms, whose content is created by a variety of users, offer digitally-astute customers of all ages a combination of social connections that appeal to their specific affinities, and customized content. This digital personalization would add to the expertise provided by more traditional operating models, and would be a draw factor of any institution that operates as a platform-company.

Digital platforms and positive network effects offer corporations the opportunity to win new business and extend competitive advantages.

From their inception, platform-companies have not only to develop their platforms but also to put in place checks and balances to encourage positive network effects. Platform-companies need to curate the content on their platforms effectively to ensure that the matching of users with content adds value to all parties (and users do not become overwhelmed with content or cannot find the right quality of content). Through careful curation that accounts for users' affinities and sophisticated feedback loops, positive network effects should lead to content that adapts to clients' changing personal affinities and objectives. In a modern day version of Say's Law, supply creates its own demand as effective curation increases the quality of content supply, raises the chances of successful matching, and increases the appeal of joining and contributing to the platform.

Competitive advantage lies in the breadth of a platform and the positive effects of a large network. In platform-companies, competitive advantage accrues from the quality of the people in the platform, not products sold through a network. Consequently, firms today will likely have to focus more on the people on their platforms and less on the products they originate or source. If businesses want to build a protective "moat" against competition from new entrants to the market, they need to recognize that economies of scale are on the demand side, not the supply side.

RECOMMENDATIONS:
No industry where information, connections or content have value will be immune to the platform-company revolution. Incumbent players in every industry need to re-evaluate their business models, look at ways to enable social connections, and match diverse users with diverse content to unlock new types of valuable activity.

We advocate that all institutions, especially for-profit corporations, consider the following recommendations of:

- enabling user-generated content that appeals to a broad set of client affinities, passions, and goals; and building data analysis tools that help curate diverse content and better match clients with other users, content, and experts;

- prioritizing people and resources outside the firm over product and internal capabilities, to increase positive network effects and augment the appeal of the platform to build demand-side economies of scale and a sustainable competitive advantage.

To explore further go to:
ubs.com/millennials

www.

4.

Demand for using private wealth for public good is also rising across generations.

Individuals will increasingly demand innovative means by which they can tackle problems of social inequality, as technology and extreme connectivity throw light on issues across the globe to more people.

Corporations, governments, and non-governmental organizations will progressively drive innovation and develop solutions that meet this demand and marshal capital (both financial and human) into the most purposeful projects.

Wealth managers have a critical role to play in this transformation, by cooperating with governments and non-government organizations to provide transparency and connections between those that need capital with those that can provide it; and by supporting platforms that draw stakeholders together to mobilize millennial wealth for the public good.

4.
Demand for using private wealth for public good is also rising across generations.

Part 3 outlined how technological advancements are enabling increased automation and connection across many businesses, potentially transforming business models. We would also argue that technology is enabling greater awareness of global economic and social issues. These global problems are making people of all age groups increasingly keen to find innovative solutions. Institutions have committed significant financial and non-financial resources to tackling these issues of unsustainable growth and international inequality. Millennials appear particularly willing and able, as the next guardians of global capital, to use their private wealth for the public good. We would argue that millennials' lead in promoting a more sustainable and equal world is likely to spread across cohorts, demanding coordinated efforts from more stakeholders to marshal capital into projects with positive social and environmental returns.

Everyone cares about global issues and wants to find solutions.

Today, 47% of the world's population has access to the Internet (and almost instantaneous communication) according to United Nations estimates. Smartphone users, with a portable camera and recording capability, are their "own correspondents." And news flow is constant, digital, and real-time. More readily available information on trends around the world, care of extreme connection, means that people today are arguably more aware of global economic and societal issues.

Despite the recent synchronized upswing in economic growth around many parts of the globe, the international economy is still growing in an unsustainable way. Average consumption patterns and lifestyles demand the resources of 1.6 planet Earths, according to data from the Global Footprint Network. According to estimates from the UN World Food Program, 795 million people remained chronically undernourished in 2014. And in 29 developing countries between 2002 and 2011, there was no available data on measurable poverty trends at all according to a 2016 report from the UN Association – UK.

In response to these challenges, bodies like the United Nations have created formal programs to tackle such problems, such as the 2030 Agenda for Sustainable Development. Initiatives like the UN Sustainable Development Goals (SDGs) are designed specifically to recognize the most pressing international issues affecting people of all ages, and provide 17 specific goals whose solutions present a critical opportunity to promote sustainable growth for all.

All age cohorts care about the consequences of their investments on society.

Current initiatives to support investment in the SDGs are bearing fruit. There is already broad interest in including sustainability criteria in key decision making. Global financial assets managed according to responsible investment principles stood at USD 22.9trn in 2016, up by a quarter since 2014 and representing around 26% of all global professionally managed financial assets, according to the 2016 Global Sustainable Investment Review from the Global Sustainable Investment Alliance (GSIA). Additionally, firms representing USD 62trn of assets under management are preparing to incorporate environmental, social, and corporate governance (ESG) factors into their investment decisions (whether through negative screening, integrative approaches, or active ownership), based on the 2016 Responsible Investment Market Update from the UN Principles for Responsible Investing.

We noted millennials' particular affinity for incorporating sustainability criteria in their consumption and investment behavior in part 2 of this white paper. More broadly, demand has grown across age cohorts for sustainable and impact investments (financial solutions that exhibit a "dual bottom line" of positive societal and financial returns). Impact investment assets increased to USD 77bn in 2016 from USD 10.3bn in 2013, based upon a survey of 158 investors undertaken by the Global Impact Investing Network (GIIN). Our analysis suggests the appeal of impact investing is growing for ultra-high net worth investors too. For example, the 2016 Global Family Office Report, a UBS and Campden Wealth joint publication, finds that 32% of surveyed family offices are already either somewhat or highly active in impact investing, while a further 30% of family offices are likely to become more active in this field over the coming years.

Multiple stakeholders are working on channeling capital into projects with positive social impact…

Governments, non-governmental organizations, and private bodies are working hard to funnel even more private capital toward the promotion of a more sustainable world economy. There are numerous initiatives underway to channel capital into projects designed to meet the UN SDGs.

As noted in UBS's white paper *Mobilizing private wealth for public good*, the World Bank (Global Infrastructure Facility, Guarantee Program) and Organization for Economic Cooperation and Development (Sustainable Development Investment Partnership) are particularly focused on publicizing and promoting the SDGs and engaging private capital holders to help plug SDG funding gaps by incorporating sustainable and impact investments into their long-term asset allocation plans.

Governments are also actively involved in supporting increased private capital allocation toward sustainable investments – the Canadian Government's Convergence program, China's Asian Infrastructure Development Bank, and the Dutch government's sustainable investment policy are all notable examples.

…yet few focus on drawing private wealth capital into funding sustainable and impact investment projects.

Despite these concerted efforts, too few global initiatives account for the needs of private wealth clients that want to make sustainable and impact investments but are hindered from doing so. The imperative to break down these barriers to investment could grow stronger, given that the millennial generation is poised to control considerable sums of wealth and is particularly desirous to deploy this wealth in projects that have a positive impact on society.

UBS identifies three key obstacles to greater private wealth mobilization for funding the SDGs: i) lack of transparency on investment need, ii) absence of information about available philanthropic or for-profit investment opportunities, and iii) misaligned incentive structures biased toward institutional investor needs (such as a lower level of investment risk) over private client ones (such as a higher level of potential investment return).

Foundations are showing how pure philanthropic capital can be deployed to overcome some of these obstacles and induce private financial and non-financial capital into projects that have wider societal benefits. First, foundations are experimenting with providing financial capital to provide a financial return to initiatives that currently only offer a societal return. This type of return augmentation could entice more investors to commit their human or financial resources to causes that promote more sustainable economic outcomes and create positive externalities.

Second, foundations are effectively underwriting research and development efforts in fields such as healthcare, giving researchers an additional financial incentive to find breakthrough solutions such as vaccines for currently incurable communicable diseases. In this way, foundations effectively create a market mechanism that stimulates research into new methods of solving the world's economic, environmental, and social imbalances.

Implications

To create a world where everyone has purpose, stakeholders need to cooperate and channel private capital into projects that benefit society.

We believe that stakeholders must seize opportunities to deploy technology and drive innovation in the sustainable and impact investment industries. There is scope for continued investment in data collection and analysis, in order to generate much needed data on investment gaps, investment opportunities, and the quantum of positive social and environmental returns.

Governments, non-governmental organizations, and financial institutions are developing cooperative initiatives that employ technology to connect private investors to projects that have the potential to generate positive financial, social, and environmental returns. Increasing the resources committed to digital networks may result in three key outcomes: first, a better matching of stakeholders; second, a speedier transformation of sustainable and impact investing from niche to mainstream strategies; and third, an enhanced partnership between different sustainable development stakeholders (a key target of the seventeenth UN SDG of revitalizing the global partnership for sustainable development). Wealth managers can add value to these schemes and guide private capital toward social entrepreneur networks whose members seek to tackle social and environmental problems.

Examples of such networks include the World Economic Forum's Young Global Leaders (YGL) initiative, whose functions are outlined in more detail in UBS's white paper *Mobilizing private wealth for public good.*

> Stakeholders should embrace extreme automation and connectivity to fill data gaps and provide the transparency that people desire.

Widespread developments in technology and data availability have the potential to increase the supply of (and demand for) quantitative data that would break down some of the aforementioned obstacles.

In the pre-millennial era, computer processing power was limited and data storage expensive. The first gigabyte hard drive, produced in 1980, weighed around a quarter of a metric ton and cost USD 40,000. In 2014, US consumers could buy the equivalent of 3,000 of these first hard drives, in one device weighing 1.3 kilos, for under USD 100. In an age of extreme automation, extreme connectivity, and big-data, continual data measurement, ongoing real-time assessment, and feedback loops have the power to reveal more clearly where SDG funding gaps lie. Also, technology can connect diverse stakeholders, centralizing information on where investment needs are greatest and where private investment capital is most willing to fund those needs.

More readily available data is gradually making it easier for all stakeholders to identify companies with the most sustainable corporate behaviors, particularly with respect to environmental, social, and corporate governance (ESG) criteria. ESG scoring of one form or another was already available in 2015 for 99% of S&P 500 Index and developed market stocks (MSCI World), and for nine in 10 emerging market stocks (MSCI Emerging Markets), based on Bloomberg ESG Disclosure Score data.

However, a lack of standardization across companies prevents investors from consistently assessing ESG factors across regions and investments. Numerous initiatives are already working to rectify this and promote the inclusion of common, sustainable investment assessments into company reporting. Examples include:

- the Global Reporting Initiative (GRI) outlines more than 400 indicators of corporate sustainability performance. It launched its GRI Standards in 2016 with the aim of ensuring consistent, effective reporting on sustainability issues;
- the Financial Stability Board's Task Force on Climate Change has launched recommendations on how firms can design and report consistent climate-related financial risk disclosures;
- the Sustainability Accounting Standards Board (SASB), an independent non-profit organization that identifies material ESG factors for publicly-listed US companies across more than 80 industries;
- Sustainable Stock Exchanges, a learning platform organized by the UN Conference on Trade and Development, UN Global Compact, UN Environment Program Finance Initiative, and Principles for Responsible investing, examines how global stock exchanges and other stakeholders can improve corporate transparency on ESG issues;
- Institution Shareholder Services (ISS) including specialist proxy voting policy guidelines for socially responsible investors and developing tools that help monitor and evaluate ESG and reputational risk factors.

RECOMMENDATIONS:
UBS has outlined a number of ways that decision makers in the public sector, non-governmental organizations, and the private sector can foster increased funneling of private capital into impact investing. As discussed in the 2017 World Economic Forum White Paper *Mobilizing private wealth for public good*, stakeholders can promote sustainable and impact investments by:

- increasing education and transparency around sustainable investment needs, particularly those funding the United Nations' Sustainable Development Goals (SDGs);

- connecting investors more effectively with impact investment and philanthropic projects, through networks of sympathetic philanthropists or social entrepreneurs;

- driving innovation in impact investments that marry financial, social, and environmental returns in a quantifiable, "lock-step" way; stepping up efforts to measure and evaluate the positive social and environmental outcomes of sustainable and impact investing in a global, quantitative way; and linking local, qualitative results of such investments to clients' personal passions.

UBS also reiterates that wealth managers and other large investors should support initiatives that draw stakeholders together via Align17, a World Economic Forum Young Global Leaders project to design an independent, digital platform. Wealth managers have a pivotal role to play in helping all interested investors, including the millennial generation, to use their capital to fill SDG-funding gaps.

Active commitments should include:

- the sponsorship of co-investment opportunities in sustainable and impact investments, and supporting the development of platforms (like Align17) that house these opportunities to a wide circle of potential interested institutional, sovereign wealth, and private wealth clients;
- the active use of a sustainable investment platform like Align17 to source investment opportunities for pooled or diversified investment vehicles, increasing the appeal of the platform and pulling in more users that consume and provide content to it;
- the leverage of existing philanthropic, sustainable, and for-profit impact investing initiatives, ensuring that they complement and support the wider work of platforms like Align17.

Appendix

Country-level analysis confirms that future generations will want a flexible wealth manager, not a "one-size-fits-all" approach.

Analyzing granular data from a 2016 unlimited.world survey on 2,130 affluent "millennials" (those in the top fifth of income earners across 10 countries) reveals strong similarities across countries in terms of wealth priorities and the value of human capital.

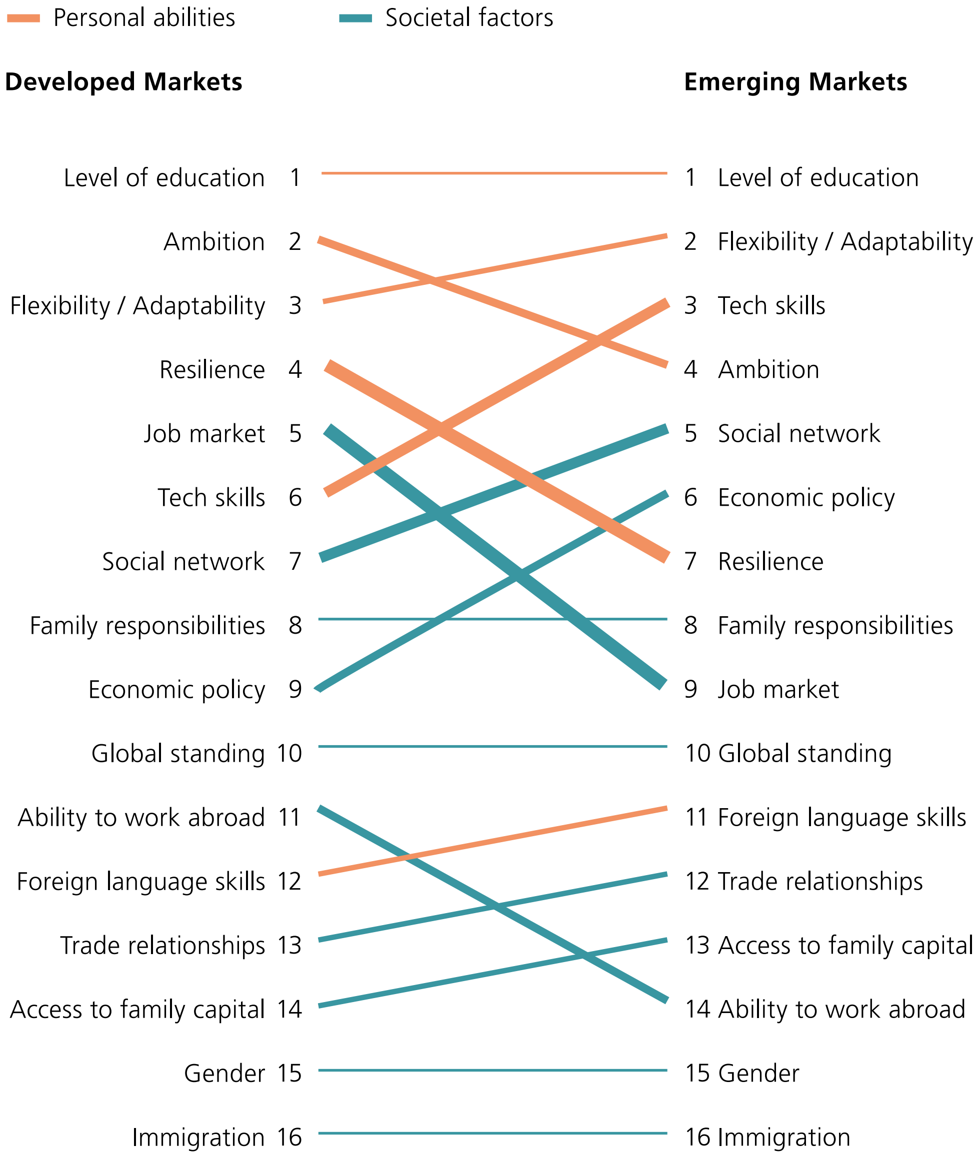
To explore the data in more depth across countries, please check out our online data visualizations (and a quick quiz) at ubs.com/millennials.

They place high importance on education and flexibility… but the Fourth Industrial Revolution will likely increase returns on everyone's human capital.

As shown in the following graphic, the under-35 age cohort consistently believes that two of the most important factors that will contribute to their financial security are education and flexibility. Between 89% and 96% of respondents in the US, UK, Germany, and Singapore believe learning to be an important or very important determinant in financial security. This implies that "millennials" in these markets, looking for financial service provision that supports their goal of financial security, will demand a holistic wealth management approach that includes education and training on global markets, investment strategies, and financial planning.

In emerging markets, flexibility, technology skills, and social networks are identified as relatively more important skills than in developed markets for financial security. This suggests that "millennials" may seek a comprehensive wealth management approach that allows them not just to increase their financial capital, but also offers them flexible opportunities to broaden their technological capabilities and widen their social networks.

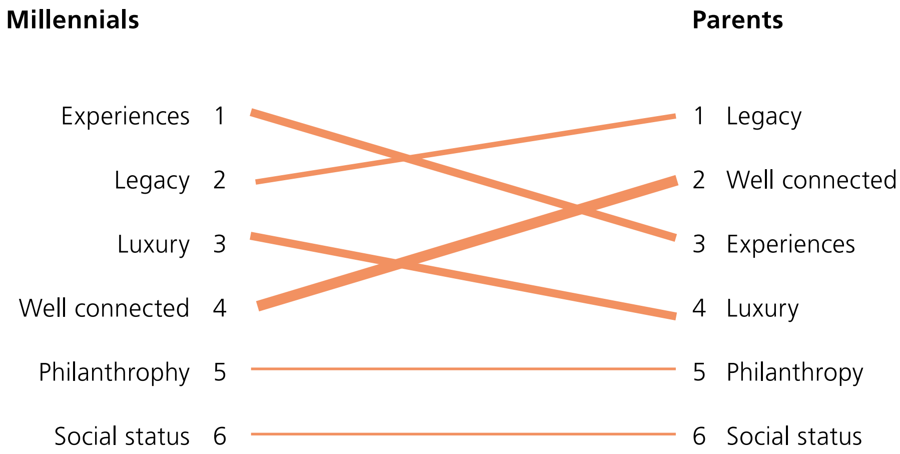
When thinking about your personal situation, which factors do you expect to positively influence your financial security in the coming years?



Source: unlimited.world, UBS, as of October 2016

To play the interactive quiz, go to **ubs.com/millennials** or scan the code below.

The most important forms of wealth for millennials and their parents.



Source: unlimited.world, UBS, as of October 2016

However, demand for flexibility of labor and skills is likely to grow across age cohorts, as the Fourth Industrial Revolution looks set to value high-skilled labor groups more than low-skill workers. Countries with the most flexible labor structures, most adaptable worker skills, and most mobile jobs markets are expected to thrive best. This suggests that the need for continuous education and lifelong learning across all age cohorts will increase.

They may increasingly demand a holistic wealth approach that matches their affinities and wealth priorities…but so did their parents.

Using data on over 2,100 participants in ten countries from a 2016 unlimited.world study, we find that having "a vibrant, experience-rich life" is the most important form of wealth for ''millennials.'' While this age cohort perceives experiences as a more important form of wealth than they believe it to be for their parents, a life rich in experiences is still viewed as a top-three form of wealth for the older generation.

Interestingly "millennials" place less emphasis on being well-connected as a source of wealth than they perceive their parents to do. It can be argued, though, that this may arise from the fact that digital networks and extreme connection have become part of daily life for the under-35s and more gradually adopted by older generations. As access to social connections has broadened over time due to technological advancements, it is plausible that younger generations attach less scarcity value or worth to being socially connected than they perceive their parents to do.

Nevertheless the data above do suggest a wide range of views on which forms of wealth are most important to people of all ages. Consequently businesses and wealth managers should consider ways to support their clients in protecting and growing diverse types of wealth across generations. They should focus using technology to provide holistic services that depend upon diverse affinities, passions, and wealth aspirations but are independent of age.

To play the interactive quiz, go to **ubs.com/millennials** or scan the code below.

Do you think like a millennial?

Learn by playing.

The millennial generation is fast becoming a major force in the world economy. Their varied tastes and evolving demands are influencing other generations too. The potential implications are big for everyone. So how well do you know the millennials?

To play the interactive quiz, go to **ubs.com/millennials** or scan the code below.

Source: cross-generational external survey conducted via Google Forms. Data as of May 2017. N = 436

UBS

Millennials – the global guardians of capital
UBS Chief Investment Office
Wealth Management white paper

This report has been prepared by UBS AG,
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