

Digital Business

Reimagining Retirement: Longevity and the Future of Financial Services

As life expectancies grow, banks and insurers need to deliver products and services that provide people with financial security throughout their extended sunset years. Here's how the financial services industry can remain relevant and vital as life journeys elongate and grow more fluid.

Introduction: Time to Reimagine Retirement

At the Twin Galaxies Video Game Masters Tournament, Doris Self, 81, set a world record with 1,112,300 points on Q*Bert.¹ At 87, James C. Warren became the oldest person in the world to receive his pilot's licence.²

Human life expectancy has more or less doubled over the past 100 years, mostly as a result of improved environmental factors, better sanitation, lower infant mortality, fewer onthe-job accidents and the introduction of antibiotics. The traditional three life stages – formal education in childhood and adolescence, working throughout adulthood, retirement in the later years – has already been replaced for many by a multistage and fluid life journey.

Yet, even as life expectancy and life patterns and choices have changed, the financial services industry has struggled to respond.

Humanity is now on the cusp of the next wave of increased longevity. Once scientists hone the ability to fundamentally manipulate biology (and address the accompanying ethical considerations), life expectancies will expand very quickly. Living to 110 or 120 may become increasingly common.

Here's our take on what the financial services industry can do to remain relevant and vital across the much longer, multi-stage lives that are the new reality for their customers.

Executive Summary

Retirement is a 20th century invention that is unlikely to survive the 21st century. Traditionally, people's lives – and the financial services that support them – have been built around the traditional three stages of education, work and retirement. But as people live longer, the idea of saving enough for a retirement that may stretch over 20 years and perhaps far longer, is simply not realistic for the majority of the population.

Demographic shifts are occurring due to longer life expectancies and declining fertility rates, and these shifts are fundamentally transforming the way people approach education, careers, retirement and financial security. As people live longer and healthier lives, and have fewer children later in life, overall life patterns have become more fluid and less predictable. A new life pattern has emerged that is multi-staged and punctuated by a variety of transitions. Instead of the traditional products and services required to support a three-stage life, individuals now need financial services providers to act as engaged collaborators that enable them to maintain and enhance their financial, mental, physical and vocational resilience through each transition and stage of their existence.

With the help of advances in products, services and technologies (particularly in the fields of analytics and machine learning), the building blocks to address these needs already exist, potentially transforming how the industry engages individuals, not as a provider of products but as a trusted provider of integrated services. The greater challenge now appears to be gaining and rebuilding the trust of customers and regulators, so that the financial services industry can effectively and safely deliver the products and services that address these new realities.

The 21st century centenarian

As the impressionable daughter of parents who lived through post-war austerity, Pamela did everything right. That's why her situation seems so unfair.

Throughout her working life – a rewarding career in the software industry – Pamela did just as the experts advised. She lived within her means. She contributed steadily to her retirement fund. Though she once dreamed of retiring at 60, she opted instead to grit her teeth and work until age 67.

At 62, Pamela was looking forward to a future without endless meetings and presentations – until her latest routine physical. The cheerful young doctor noted that between Pamela's fitness and modern medicine, she may well live beyond 100. Though the comment was intended as a compliment, it prompted Pamela to rethink her retirement dreams and plans.

And the numbers simply don't work. She can't *afford* to retire in her mid-60s and live to 100.

Pamela's doctor was right: 100 years is a very real possibility, not just for her but also for an increasing number of individuals.

Now Pamela wonders what went wrong.

The problem with assumptions

What happened, in a nutshell, is that both her assumptions and those of her employers were overtaken by events. Until the 1970s, employers confidently offered defined benefit (DB) pensions, which allowed employees to retire in their 60s and spend the rest of their lives secure in the expectation they'd receive a protected level of income no matter how long they lived and no matter how the markets performed.

This system worked as long as people didn't live too long after retirement. But then people started living longer – in some cases a lot longer – than expected. Companies such as British Airways and General Motors became so overcommitted to retirement plans that in some cases, pension liabilities exceeded the overall company valuation.³ It wasn't long before companies began shutting down DB plans. The responsibility for pension savings shifted more and more toward the individual employee, and defined contribution (DC) plans gradually replaced defined benefit plans.

While plans changed, critical assumptions did not. The assumption remained that workers would somehow save enough by their 60s to fund 20, 30 or even 40 years of retirement. It turns out that for the majority of workers, that was a very poor assumption. If funding a long retirement with a guaranteed income was unaffordable for employers, it was equally unaffordable for most individuals.

Institutions – businesses, governments, society as a whole – are lagging behind in their ability to enable good choices. A fresh vision is needed that addresses the way we live now.

More than money: The new reality of a longer, healthier life

Sound personal finances are simply an enabler – not the end goal – for that longer, healthier life. This demographic upheaval touches all aspects of our education, healthcare and career choices. Financial security and flexibility create the foundation that enables choice.

Yet as increasing longevity changes the patterns of our lives, there's still reluctance to shift the focus from products based on outdated assumptions about retirement to a more holistic and positive view of other areas of life that also require attention. Pamela may understandably feel dejected that she can't retire in her early or mid-60s, but she can look forward to a longer, healthier life than her forebears. The question becomes: What will she do with this extra stage of life? Rather than focusing too much attention around selling outdated and inappropriate products, a more balanced approach is needed that helps Pamela live a fulfilling life as long as she would like.

As is typically the case with tectonic shifts, consumers are leading the way, if only out of necessity. Institutions – businesses, governments, society as a whole – are lagging behind in their ability to enable good choices. A fresh vision is needed that addresses the way we live now. What if Pamela could use her long-term savings, without any tax penalty, to fund training for entirely new job skills – which could, in turn, launch another fulfilling career?

An opportunity to do good - and do well

This unprecedented opportunity to create new offerings that benefit both individuals and society introduces a larger market overall for the financial services industry. Greater participation in the workplace by people in their late 50s, 60s, 70s and 80s could have a very significant positive impact on gross domestic product (GDP).

Simply put, individuals like Pamela need solutions to address their financial needs in the face of their longer lives. These solutions will vary widely in scale and scope, but they need to help shift some of the investment, health and longevity risk from consumers and be integrated with social policy. And while seniors such as Pamela are top of mind, these solutions must be implemented early in life and not just approaching retirement.

For example:

- What if Pamela could use her long-term savings, without any tax penalty, to fund training for entirely new job skills which could, in turn, launch another fulfilling career?
- What if a family could conveniently use their retirement funds as a deposit for a home payment, thus helping them break out of the rental trap into home ownership?
- What if mortgage providers could take into account not only income and assets but also insights around retirement savings, health and career prospects to inform their decisions?

More broadly, what if financial services providers could positively and profitably engage in situations where customers are unable to access the financial products and services they need to enhance their vocational, mental, physical and financial resilience? This broader market, encompassing the long tail of the financial services sector, could bring greater resilience to a wider group of individuals.

Tools and expertise exist to effect significant change

While the ageing population presents a significant challenge to the financial services industry, the state and society as a whole, it is hardly insurmountable. A trust-based architecture with customer permissions could access data across borrowing, income, insurance, savings, mortgages, retirement and health plans to enable a 360-degree view of the financial and health position of individuals, groups and even societies. This information could be used to deliver insight, advice and the products and services required, at the time they're needed. Employers could play a valuable role as trusted partners, responsibly harnessing data for the benefit of both employees and the organisation.

The technology and architectural components exist to offer a truly innovative approach to financial products and services on a scale that reaches a much larger market than before. The key questions are now around how to approach the barriers that prevent this level of innovation.

The regulatory barriers need to be examined carefully. Currently, the UK's Open Banking initiative⁴ and Pensions Dashboard⁵ offer consumers unprecedented access to their banking and long-term savings data, but the next level of innovation would involve combining these views to create actionable insights based on a 360-degree view of an individual's financial situation.

Ultimately, the goal would be to create a hyper-personalised view that would reveal a consumer's financial situation, overall life stage and other contributing factors to the individual's financial wellbeing. This capability could help individuals at every life stage make decisions around work, education and health, using much more information on how their decisions impact their financial resilience – which, again, is the underlying enabler rather than the end goal.



Future architecture of financial services

The financial services industry needs to collaborate on establishing open and transparent governance, standards and architectures that enable trust at the regulatory and industry levels, as well as engage the public in ways that engender trust. New solutions must be designed from the outset to create end-customer value and move away from the traditional mindset of selling products. An effective future design will be built around three fundamental principles that reflect how organisations will need to work together to create efficient commodity services, freeing them to create new areas of competitive advantage:

- I Build trust by giving customers control over their data; democratise data to the individual, not the corporate entity.
- **Use that data to create customer value and insight**, through the use of predictive analytics and machine learning.
- I Build a data ecosystem that minimises the friction of sharing data securely and feeds value creation from insight.

The future solution must reflect the emergence of new trust models in which consumers retain ownership and the right to control who can see and use their data. To earn permission to collate data that generates valuable insights, the financial services industry will need to approach this issue upfront and collaboratively, demonstrating to customers and regulators that this is in consumers' best interest.

Empowering consumers with sovereignty over their own data should be a cornerstone of the new underlying architecture. This would give the financial services community the opportunity to lead and guide regulators on how consumer data management can best be done in everyone's interest. Fintechs are already emerging that use an array of technologies (including blockchain and Web 3.0 technologies) to provide data sovereignty capabilities to consumers as point solutions. However, a rethink is needed for the traditional industry model that considers corporate retention of consumer data to be a competitive advantage. Future competition will be built around intelligent machine learning algorithms to hyperpersonalise customer insight value and timeliness and not from the data itself.

Initiatives such as Open Banking and the Pensions Dashboard are showing how data can be shared with minimal friction to deliver greater value to customers. This model could be extended into open data models, such as "open insurance." Solutions must be designed around an open data ecosystem concept, leveraging open API and semantic data models as core concepts to enable data to flow as efficiently and as cheaply as possible, to feed insight. This will allow consumers to share cross-sector information with chosen providers that offer the most effective insight and solutions.

Empowering consumers with sovereignty over their own data should be a cornerstone of the new underlying architecture.

Paris

New insights, new products, new value - new resilience

With these foundations in place, enterprises will discover that competitive advantage will be found by using data science and technology to deliver insight across multiple dimensions of a customer's life, using predictive analytics to generate insights, and smart automation and virtual assistants to interactively guide an individual. Organisations will be able to provide hyper-personalised advice, delivered at scale and low cost, to rival today's human wealth managers. We see three areas where this will emerge:

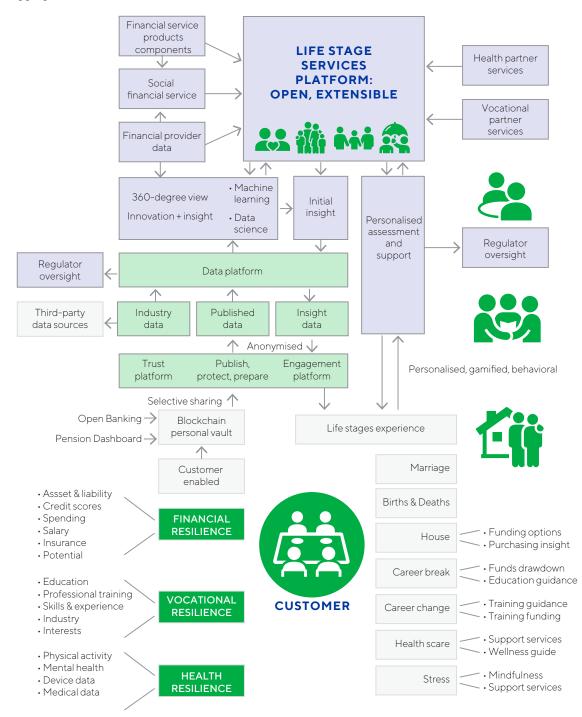
- I Financial resilience: The natural starting point will be to provide insight and guidance on financial resilience by looking at a personal balance sheet that considers assets (equity, pensions), liabilities (mortgages, borrowing), income (earned social benefits) and even insurance (individual, family) using analytics and robo-advisors to give a financial resilience assessment across both the short and long term. This would be the core focus for financial services providers, but leaders have an opportunity to go further, to add a more complete set of insights and value to a customer.
- I Vocational resilience: A further extension of this concept would be to provide guidance on vocational resilience. Individuals face an increasingly uncertain job future, with expected increases in the rate and number of career changes during their extended life, as well as rapidly shifting required skills in a job market transformed by artificial intelligence. If organisations could provide guidance on future job prospects, based (for example) on LinkedIn profiles and job board activity, while also advising individuals on potential training opportunities to meet new skill demands, they could greatly support individuals and employers in planning ahead for an increasingly diverse career.
- I Health resilience: A final dimension would be to consider mental and physical health resilience, as the ability to work and remain healthy will have an obvious impact on the other two dimensions of resilience. Access to data from the growing number of personal health devices and their ever increasing accuracy and depth of the personal health data they capture would allow organisations to use the insight from thousands of aggregated data records.

There's a final capability that will be vital for organisations to be successful in this new digital ecosystem: combining technology with human insight to deliver new insights at scale. Enterprises will need to combine data-driven insights and machine learning analysis with a fundamental understanding of human motivation. This can be done by overlaying technology-driven insights with anthropological and human behavioural science.

An individual's relationship with money, finance and investment is already complex; this will only increase as people adapt to the new multi-stage life paradigm. Organisations that can understand the rationale and motivation behind customers' attitudes and decisions regarding finances will engage with customers more effectively and at the right time. This, in turn, will give customers the best chance of acting on the advice provided to live happy and long lives (see Figure 1, next page).

A financial resilience planning framework

A new trust- and permission-based architecture is required to enable the personalisation of services to support life stage transitions and improve financial, health and vocational resilience at both individual and aggregate levels.



in we better exercite tegy? ic Expansion 12 / Reimagining Retirement Longevity and the Future of Financial Services

542 000

rojected Actual 015000 725000

436000

Q2 Q3

Q4

610 000

736000

452 000

terly Results

Digital Business



Looking ahead

The challenges presented by increasing longevity to individuals, employers and societies also present extraordinary opportunities.

Between 2015 and 2050, the population of those aged 55 and above in high-income countries is projected to grow by almost 50% to over 500 million,⁶ putting significant pressure on healthcare and retirement systems.

The UK and many other countries could offset these higher costs by tapping into their older workforce thereby increasing both GDP and tax revenues. UK GDP would increase by roughly £80 billion if the UK had the same proportion of working people over 50 as Sweden does.⁷

Our perspective and experience across industries is that advances in products, services and technologies, particularly in the fields of analytics and algorithms, mean that we already have the technical means to address these needs and opportunities.

The financial services industry can help individuals improve their financial, physical, mental and vocational resilience as they address the challenges across their longer and multi-stage lives; however it must first gain and rebuild the trust of regulators and customers.

Endnotes

- ¹ Stephanie Buck, "This Granny Gamer Set World Records Against Players Half Her Age," Timeline, March 2017, https://timeline.com/doris-self-granny-gamer-b5b35db25023.
- ² "Oldest Person to Obtain a Pilot's Licence," Guinness World Records, 2019. http://www.guinnessworldrecords.com/worldrecords/oldest-person-to-obtain-a-pilots-licence.
- ³ Joann Muller, "GM Unloads \$26 Billion in White-Collar Pensions; Could Union Workers Be Next?" Forbes, June 1, 2012, https://www.forbes.com/sites/joannmuller/2012/06/01/gm-unloads-26-billion-in-white-collar-pensions-could-unionworkers-be-next/#71dee2a63213 and Alistair Osborne, "BA Pension Deficit 'Dwarfs Market Value," The Telegraph, Nov. 6, 2008, https://www.telegraph.co.uk/finance/newsbysector/transport/3392089/BA-pension-deficit-dwarfs-market-value. html.
- ⁴ Open Banking Ltd. website: https://www.openbanking.org.uk/.
- ⁵ Pensions Dashboard website: https://pensionsdashboardproject.uk/.
- "PWC Golden Age Index: The Potential \$2 Trillion Prize from Longer Working Lives," PWC, June 2017, https://www.pwc. com/ee/et/publications/pub/pwc-golden-age-index-june2017-final-v2.pdf.
- 7 Ibid.

About the authors



Faisal Aziz

Assistant Vice President, Leader of Cognizant Consulting's Insurance Practice, UK & Ireland

Faisal Aziz leads Cognizant Consulting's Insurance Practice for the UK & Ireland, which includes a large team of strategy, architecture and delivery subject matter experts. He is passionate about the enabling role of technology and financial services to improve the financial resilience and well-being of those on low and middle incomes, across all age groups. He is a graduate of Imperial College and has worked in the insurance industry for over 20 years. Faisal can be reached at



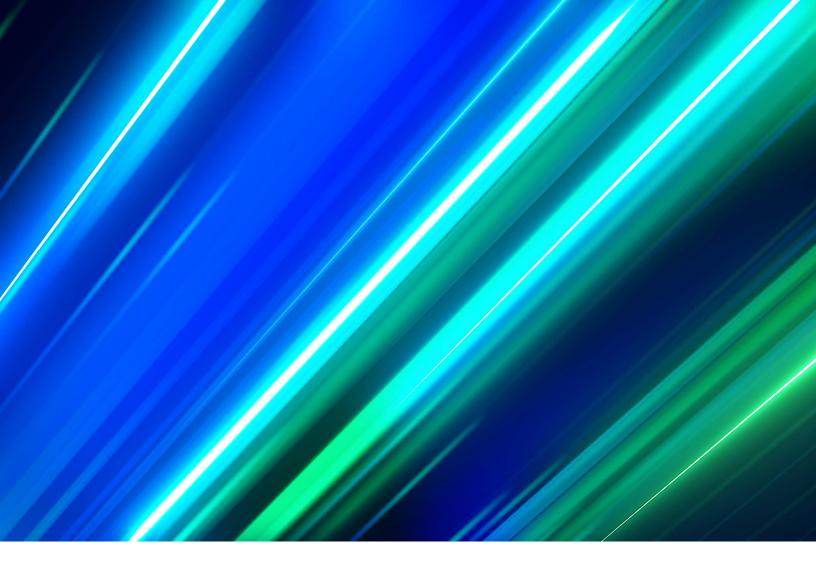
Daren Rudd

CTO, Chief Architect within Cognizant's Insurance Practice, UK & Ireland

Darren Rudd is CTO and Chief Architect within Cognizant's Insurance Practice for UK & Ireland. He has over 20 years of experience working with insurance companies delivering successful future-state architectures and defining technology change roadmaps. In recent years, he has helped insurance industry clients understand the transformational benefits of digital business models utilising web, mobile, social and emerging technologies, including IoT and blockchain, to innovate and build new and engaging customer propositions. Daren can be reached at: Daren Rudd@cognizant. com | LinkedIn: https://in.linkedin.com/in/daren-rudd-a323812/.

Acknowledgements

The authors would like to thank Alan Alper, VP and global leader of Cognizant's thought leadership program, for his guidance in developing this white paper. They also acknowledge the invaluable contributions of colleagues inside and outside of Cognizant, without whom this white paper would not be possible.



About Cognizant Digital Business

Cognizant Digital Business helps our clients imagine and build the Digital Economy. We do this by bringing together human insight, digital strategy, industry knowledge, design, and new technologies to create new experiences and launch new business models. For more information, please visit www.cognizant.com/digital or join the conversation on LinkedIn.

About Cognizant

Cognizant (Nasdaq-100: CTSH) is one of the world's leading professional services companies, transforming clients' business, operating and technology models for the digital era. Our unique industry-based, consultative approach helps clients envision, build and run more innovative and efficient businesses. Headquartered in the U.S., Cognizant is ranked 195 on the Fortune 500 and is consistently listed among the most admired companies in the world. Learn how Cognizant helps clients lead with digital at www.cognizant.com or follow us @Cognizant.

Cognizant

World Headquarters

500 Frank W. Burr Blvd. Teaneck, NJ 07666 USA Phone: +1201 801 0233 Fax: +1201 801 0243 Toll Free: +1 888 937 3277

European Headquarters

1 Kingdom Street Paddington Central London W2 6BD England Phone: +44 (0) 20 7297 7600 Fax: +44 (0) 20 7121 0102

India Operations Headquarters

#5/535 Old Mahabalipuram Road Okkiyam Pettai, Thoraipakkam Chennai, 600 096 India Phone: +91 (0) 44 4209 6000 Fax: +91 (0) 44 4209 6060

© Copyright 2019, Cognizant. All rights reserved. No part of this document may be reproduced, stored in a retrieval system, transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the express written permission from Cognizant. The information contained herein is subject to change without notice. All other trademarks mentioned herein are the property of their respective owners.