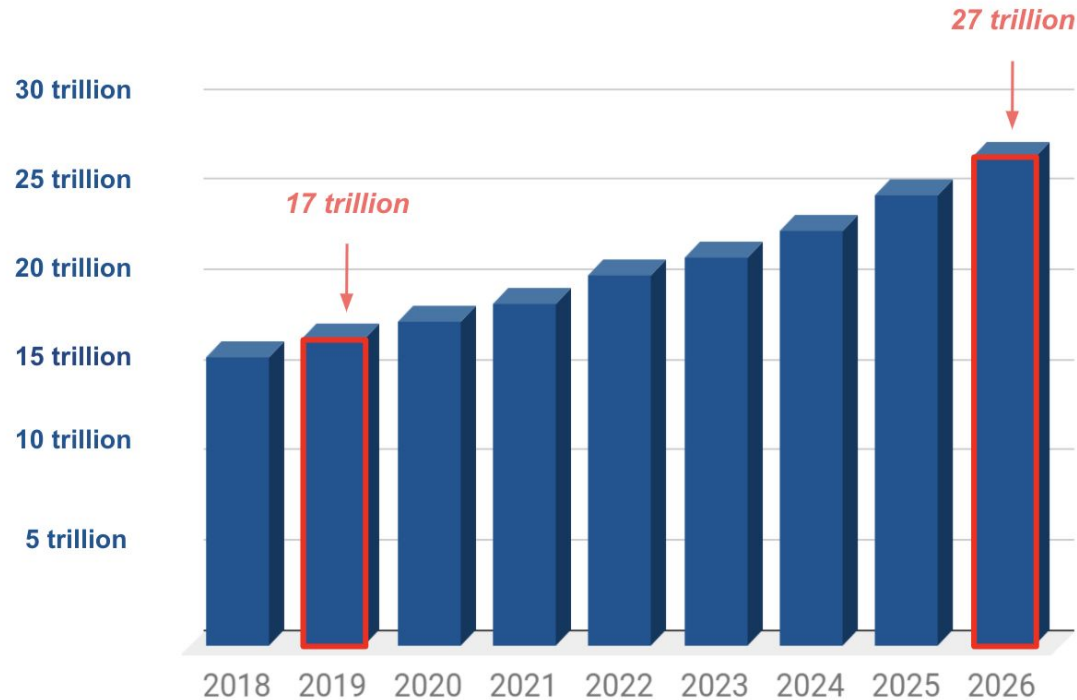


DMITRY KAMINSKIY

Deep Knowledge Group
General Partner

World Longevity Economy Size

World Longevity Economy Size Projections, current US \$*

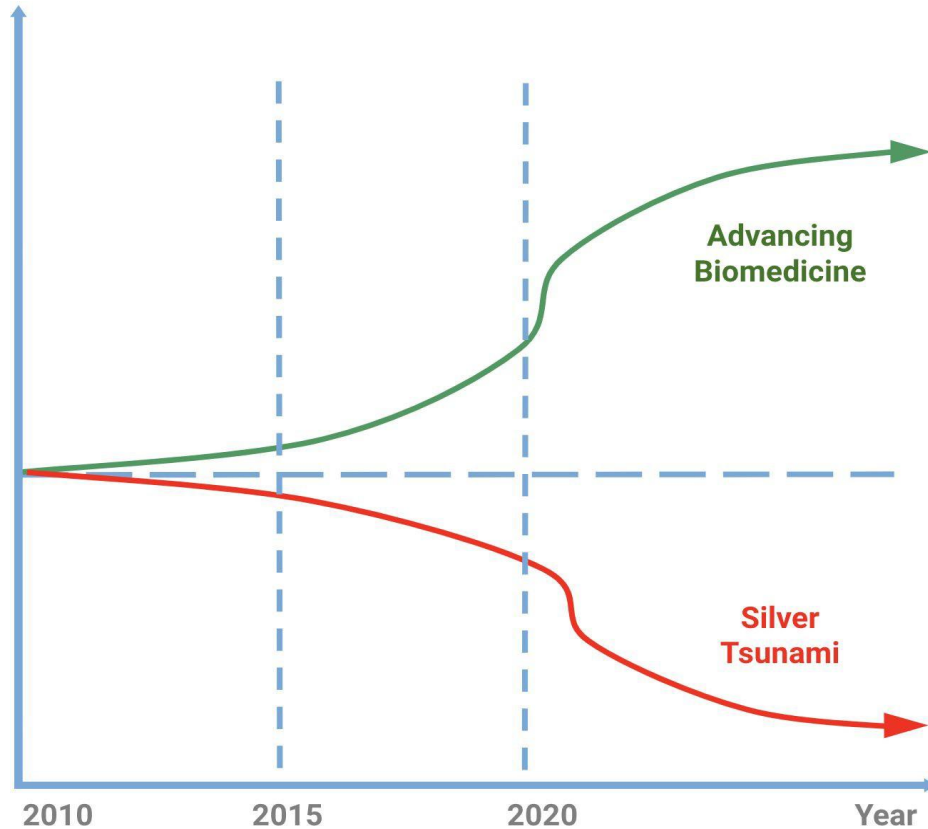


**projections are made taking into account the assumption that the share of the Longevity Economy is 20% of the world GDP*

The “7th Continent” of 1 Billion People in Retirement



The Collision of Two Opposed MegaTrends



The Longevity Industry is characterized by the collision of two opposed MegaTrends: Advancing Biomedicine (Extension of Healthy Longevity) and Ageing Population (Silver Tsunami). Developed nations are set to either sink or swim in the face of the oncoming Silver Tsunami, and their success depends on how proactively they deploy broad, well-funded national plans to extend Healthy Longevity and financial reform to neutralize the economic pressures of their aging populations. They have the opportunity to transform the deficit-model of aging into the opportunity and asset-model of Healthy Longevity.

Longevity Financial Industry - Multi Trillion Opportunity

Longevity, AgeTech &
WealthTech Market

Globally

1 Billion in Retirement

In the UK

10 Million in Retirement

**“ The one billion retired people globally are
a multi-trillion dollar opportunity for business ”**

~ Dmitry Kaminskiy [interview in the Financial Times](#)



FINANCIAL
TIMES

**“ The global spending power of those aged 60
and over will reach \$15 trillion annually by 2020 ”**

~ Bank of America Merrill Lynch

BANK OF AMERICA 

LONGEVITY
INDUSTRY 1.0

HOME

AUTHORS

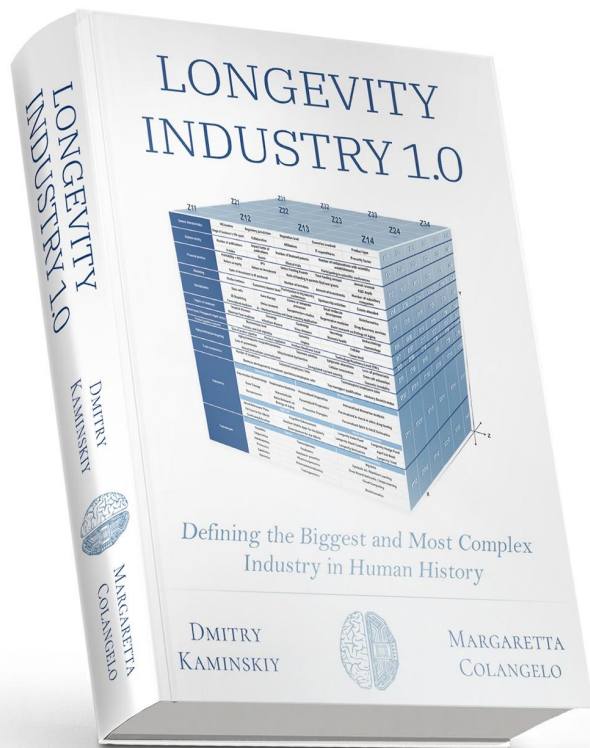
TEASER

ONE PAGER

SUMMARY

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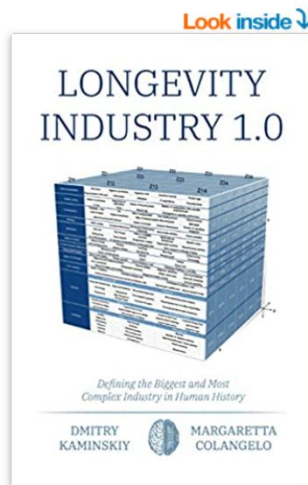


www.longevity-book.com

Subscribe to the Longevity Book website by clicking the CONTACT button for exclusive access to

- Tailored topic-specific content,
- New articles by the authors,
- Sneak-preview chapters to the sequel *“Longevity Industry 2.0”*
- Registration links to specialized virtual events on Longevity Finance and FinTech, Longevity Investing and InvestTech, Longevity Policy & Governance and Practical Tips for Optimizing Healthy Longevity

Books ▸ Politics & Social Sciences ▸ Social Sciences



Longevity Industry 1.0: Defining the Biggest and Most Complex Industry in Human History

Paperback – August 8, 2020

by Dmitry Kaminskiy ▾ (Author), Margareta Colangelo ▾ (Author)

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FULL COLOR EDITION - In "Longevity Industry 1.0: Defining the Biggest and Most Complex Industry in Human History", seasoned Longevity Industry professionals Dmitry Kaminskiy and Margareta Colangelo distill the complex assembly of deep market intelligence and industry knowledge that they have developed over the past 5 years into a full-scope understanding of the global Longevity Industry, showing the public exactly how they managed to define the

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Germany: <https://www.amazon.de/Longevity-Industry-1-0-Defining-Biggest/dp/1916391710/>

PART



The Longevity Financial Industry

*Novel Financial
Instruments and
Health as New Wealth*

- The Increasing Role of Longevity in Global Finance
- Formulating the Framework for the Longevity Financial Industry and Novel Financial System
- Longevity FinTech
- Longevity Embraced by the World's Biggest Financial Corporations: Investment Banks, Insurance Companies, Asset Management Firms
- New Financial Instruments and Derivatives: New Business Models and Novel Financial Instruments Tied to the Rising Longevity Industry
- Integrated AgeTech, WealthTech, FinTech Solutions
- AI, Data Science and Mathematical Technologies Driving the Evolution of the Longevity Financial Industry
- FinTech 2.0 and the Rise of Longevity Banks
- Projected Evolution of the the Longevity Financial Industry
- Longevity Stock Exchanges, Financial Marketplaces and AgeTech-Longevity Banks

Longevity Financial Industry Framework

AGETECH

TeleHealth

NeuroTech

Mobility Tech

Sensory Aids

Smart Homes

SocialTech

WEALTHTECH

Robo-retirement

Digital Brokers

Micro-investments

Annuities

Long-term Securities

Robo-advisors

LONGEVITY

Novel Retirement Plans

Cognitive Enhancement

FinTech for the Elderly

NextGen Mobile Apps for
the Elderly

Continuing Education

Insurance for the Elderly

ASSET MANAGEMENT

Longevity Index Fund

Longevity Hedge Fund

Strategies Diversification

AgeTech Bank

Longevity Derivatives

Pension Planning

Longevity Industry Framework

GEROSCIENCE R&D

Rejuvenation
Biotechnology

Gene Therapy

Geroprotectors

Regenerative Medicine

Nutraceuticals

Basic Research on
Biology of Aging

P4 MEDICINE

Personalized Diagnostics

Personalized Biomarker
Analysis

Personalized Prognostics

Personalized in vivo & in
silico drug testing

Personalized QALY &
HALE Estimation

Preventive Therapies

AGETECH

Novel Retirement Plans

Cognitive Enhancement

FinTech for the Elderly

NextGen Mobile Apps for
the Elderly

Continuing Education

Entertainment for the
Elderly

NOVEL FINANCIAL SYSTEM

Longevity Index Fund

Longevity Hedge Fund

Longevity Stock
Exchange

AgeTech Bank

Longevity Derivatives

Longevity Trust

Major Financial Corporations Gaining Appetite for Longevity



Credit Suisse featured Health and Aging as one of four main themes in their 2018 Global MegaTrends Conference



Julius Baer held a major forum on the topic of "Investing in Longevity" featuring a keynote presentation by Aging Analytics Agency Founder Dmitry Kaminsky

Julius Bär

EXTENDED LONGEVITY



SHIFTING LIFESTYLES 4 min

Do we really want to live forever?



SHIFTING LIFESTYLES 3 min

Longevity: How to make the most of the extra years



UBS featured "Living to 150" as one of six major topics in their 2018 Healthcare Summit, featuring a keynote presentation by prominent Longevity entrepreneur Alex Zhavoronkov



UBS Investor Watch

The century club

The rising prospect of living ten decades



UBS Investor Watch

80 is the new 60

Retirement is one word, but **three phases**

UBS also issued a report on the "largest survey of wealth investors in the world to date", concluding: "'Don't let skepticism about living to 100 keep you from planning for it. Life expectancies are rising, and it's a real possibility. In fact globally, nine in 10 investors are already adjusting how they are planning for their life and their legacy."



CitiBank released a landmark report detailing the rise of the Longevity Industry, and highlighting it as one of the quickest-rising sectors being driven by disruptive innovation today.

ANTI-AGING THERAPIES AND SERVICES MARKET
-TRENDS AND GROWTH
OPPORTUNITIES, FORECAST TO 2022

FROST & SULLIVAN

Frost and Sullivan also released two prominent reports on the emerging Longevity Industry, and in 2018 created the "Award for Innovation in Artificial Intelligence for Aging Research and Drug Development"



"Longevity is a blessing. And as an investor, it provides you opportunities to benefit from compounding and to have a longer investment horizon. But if you don't prepare for it, you are left with two options: Work longer in life, perhaps much longer than you'd like, or hope you've been good to your children and that they'll be willing to care for you in your old age. And, second, I hope you'll speak out. Longevity is an issue of social justice that will have a more profound impact on your generation than on any generation before. If we don't start to address it – not just in this country but globally – we're going to see fewer job prospects for young people, higher unemployment, lower growth and many older people – maybe your parents – left without the means to support themselves."

**- Larry Fink, Chairman
of Blackrock Capital**



"I'm actually pretty optimistic about the U.S. economy. But Europe's got real challenges. A lot of that is due to the demographics in Europe. China has been the engine of growth for the world for the last 20 years, or the last 10 years in particular, but that's not sustainable. So you're looking at a world where growth is going to be more challenged than it's been, unless you see some really big jumps in productivity."

- Bill McNabb, Chair of Vanguard



"The new technology wave is changing who we are. There is research going on in biology, regeneration of body parts, enzymes and so on. If we make progress in what we are doing in treating cancer, it will prolong life expectancy by a number of years. Now, in Switzerland, every second baby is expected to have a life of more than 100 years."

**- Klaus Schwab, Founder
and Executive Chairman
of the World Economic Forum**



AGEING SOCIETIES

Reaping the longevity
dividend

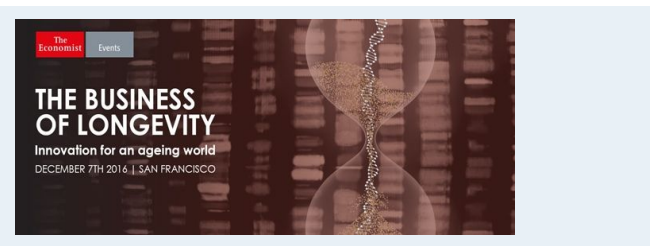
Join an audience of
150+ global Business executives
November 29th-30th 2016
St.Pancras Renaissance Hotel
London

THE BUSINESS OF LONGEVITY

Health innovation
for an ageing
world

October 27th 2017

Hong Kong



Longevity is now regularly embraced as a major topic of interest for panel discussions and entire conference series by top-tier finance and business media brands including *The Economist*, *Financial Times* and *Bloomberg*.



FINANCIAL TIMES LIVE	
12:10pm	Aging and Longevity
Dmitry Kaminsky , Co-Founder and Senior Partner, <i>Deep Knowledge Ventures</i>	
Alex Zhavoronkov , CEO, <i>Insilico Medicine</i>	
Joseph Antoun , Chairman & CEO, <i>L-Nutra</i> ; Chairman, <i>Global Healthspan Policy Institute</i>	
Aubrey de Grey , Vice President of New Technology Discovery, <i>AgeX Therapeutics</i>	

A GLOBAL NETWORK OF INNOVATORS

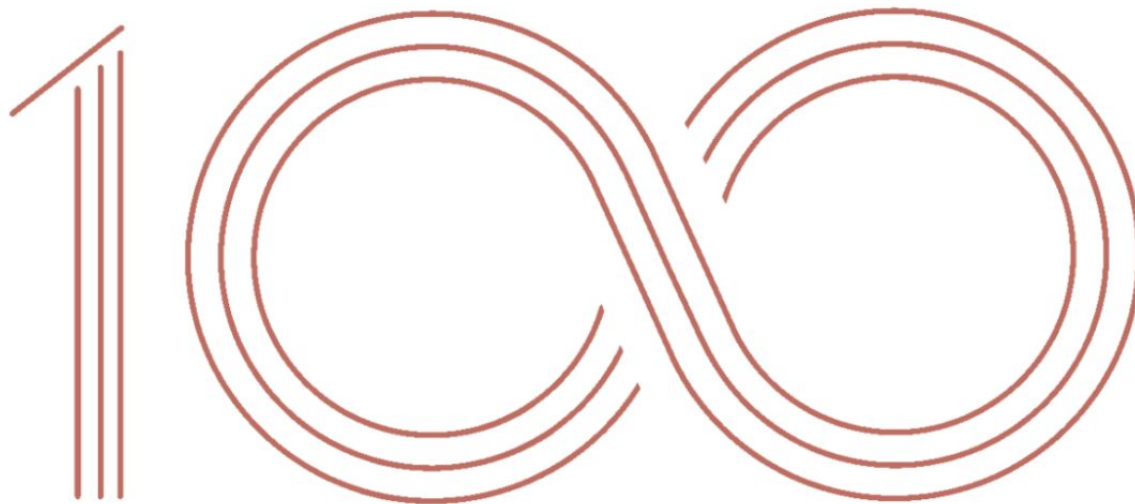
AGING^{2.0}

BLOOMBERG LONGEVITY ECONOMY
CONFERENCE



The century club

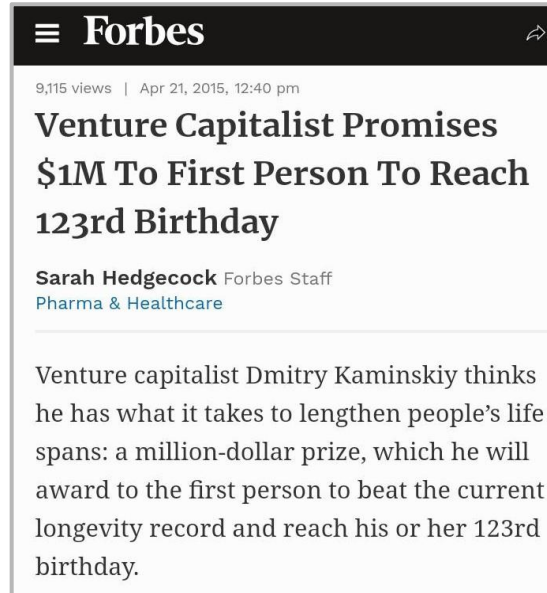
Get in touch



Longevity Record

With the aim of getting the ball rolling in the emerging longevity industry, Dmitry Kaminskiy announced a \$1 million prize for the first person to reach the age of 123 - just 6 months longer than the current record holder, Jeanne Calment, who achieved 122 years and 6 months age.

Life record of 122.5 by Jeanne Calment who died in 1997



MOST PROGRESSIVE PENSION-TECH COMPANIES

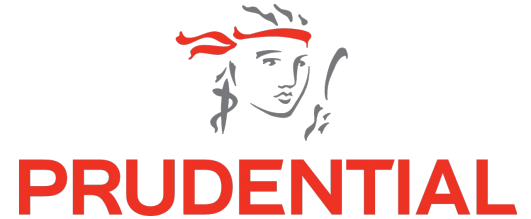
grandhood™

Aging Analytics Agency made an analysis of the most progressive pension-tech companies, where it is clear that the majority of them are based in the UK and EU.



MOST PROGRESSIVE INSURANCE COMPANIES

The most progressive insurance companies are developing Longevity-focused InsurTech and offering financial incentives to maintaining Healthy Longevity



Top-150 Financial Institutions Advancing Financial Industry Longevity / AgeTech / WealthTech

Asset Management Firms - 30
Pension Funds - 40
Reinsurance Companies - 15
Insurance Companies - 30
Banks - 35

Asset Management Firms

Pension Funds

Banks

Reinsurance Companies

Insurance Companies



40 Pension Funds



35 Banks



15 Reinsurance Companies



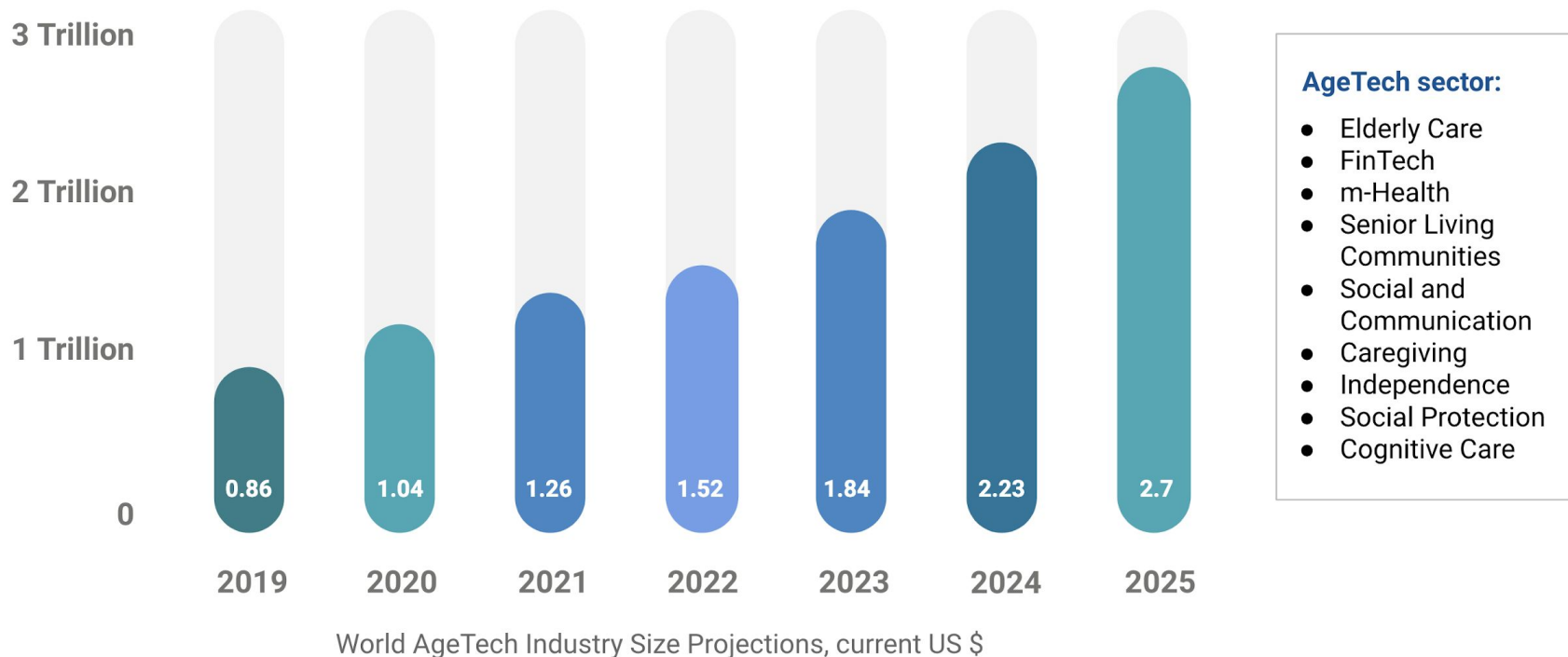
30 Insurance Companies



30 Asset Management Firms



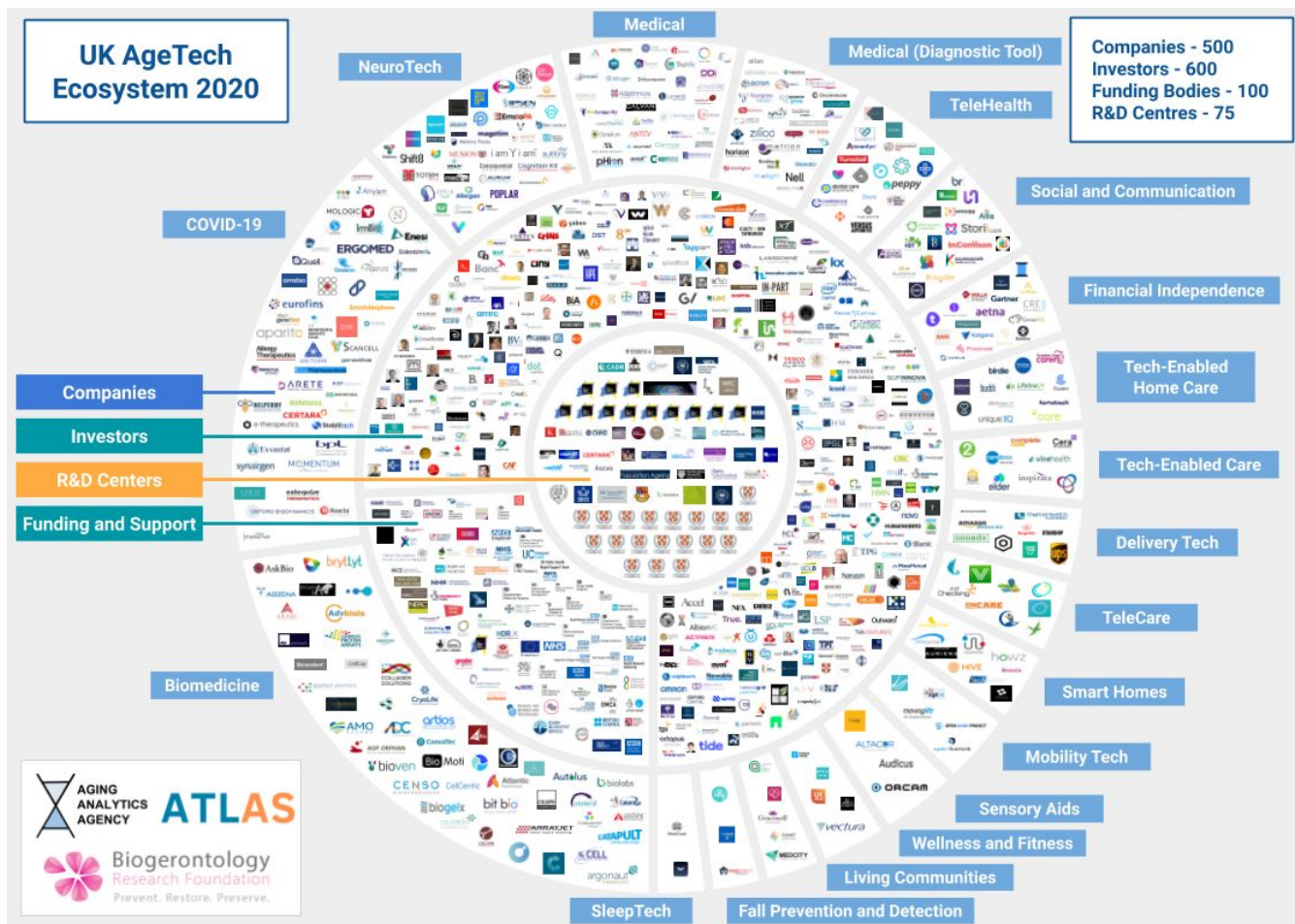
AgeTech Industry Market Capitalisation



While, the global Longevity Economy is projected to reach \$27 Trillion in 2025, Age-Tech potential within it will reach \$2.7 Trillion by 2025.

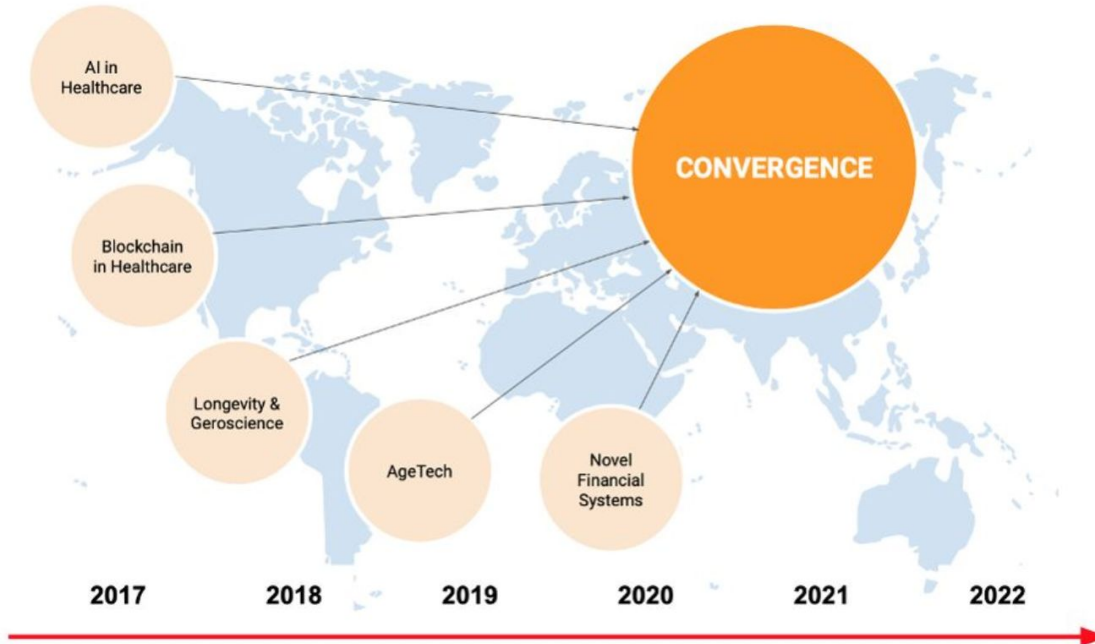
This would imply 21% annual growth in the global Age-Tech market. This growth is driven by the general development of elderly care sector enhanced by advancing IT, FinTech and other digital technologies.

UK AgeTech Industry Landscape



FinTech 2.0 =

AI + FinTech + LegalTech + RegTech + MarTech + HealthTech



**Major Driving Factors for the
Future of Finance**

**Wealth Management
+
Artificial Intelligence**

**Traditional Banking Services
+
IT-Technologies & Platforms**



Longevity Card

Longevity (AgeTech) Bank

Key points:

- The aged market is enormous, worth trillions and is as of yet underserved.
- Technology will play a critical role in delivering AgeTech focused banking.
- Leading companies in this space will focus on the integration of InsurTech, HealthTech, AgeTech and FinTech into seamless Longevity-focused products and services.



AI-Driven WealthTech Solutions

Investing Tools

Robo Advisors

Robo Retirement

Micro Investing

Financial Services

Digital Brokerage

Rising Longevity is Driving a Self-Sustaining Cycle of Financial Innovation

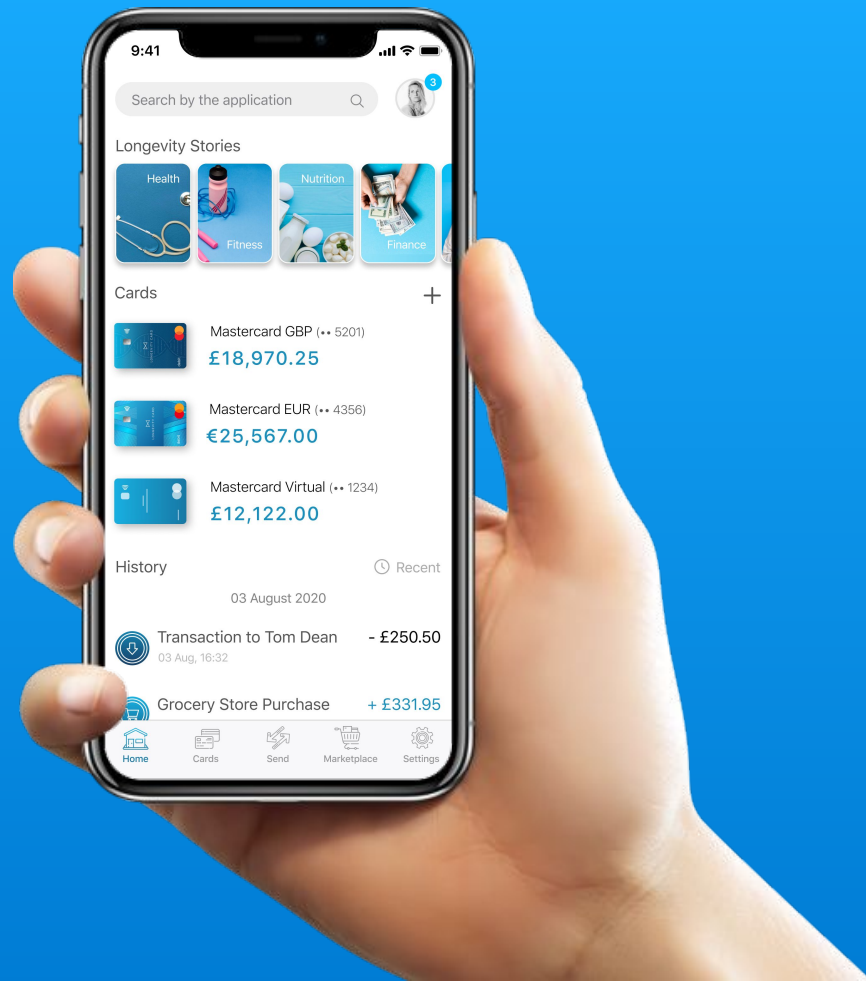


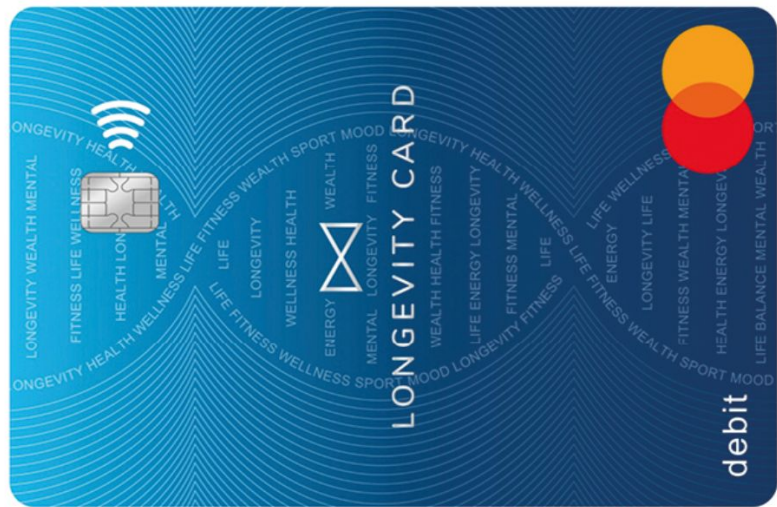
Age-Focused Banking: An Untapped Ocean

- As the share of the population above 60 is increasing in every member state of the European Union, European banks are lagging behind in finding solutions for this age group, especially taking into account the fact that seniors are holding the lion's share of the savings. Traditional banks like UBS, HSBC, Credit Suisse, Barclays and Citi, as opposed to challenger banks, are making their first steps in AgeTech, adapting their infrastructure for the elderly.
- HSBC has partnered with the Alzheimer's Society to create dementia-friendly products, as mentioned, while Barclays is actively developing software for seniors to make their customer experience more comfortable. UBS went so far as to create [The Century Club](#) among their clients expecting to live up to 100 years.
- If traditional banks, with hundreds of years of history and nearly-unbreakable, guaranteed trust behind their brands and their long-standing reputations, were willing to on-board Data Science, AI and advanced IT-solutions and technologies to meet the needs of the untapped Silver Ocean (clients who are 60+ years old), they would stand in an almost unconquerable position to challenge and gain the multitrillion market opportunity that their younger, less experienced competitors failed to capture.

LONGEVITY CARD[®]

HEALTH IS THE NEW WEALTH





BANKING CARD

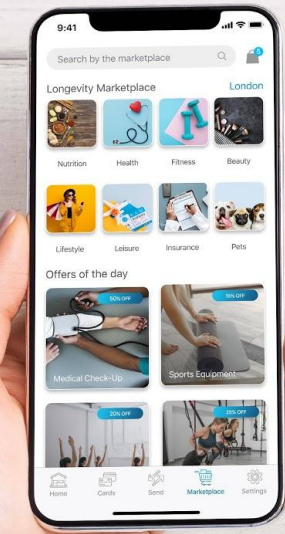


MEMBERSHIP CARD



LONGEVITY CARD





ACCOUNT FEATURES



UK IBAN



MULTI CURRENCY
ACCOUNTS



DEBIT CARD



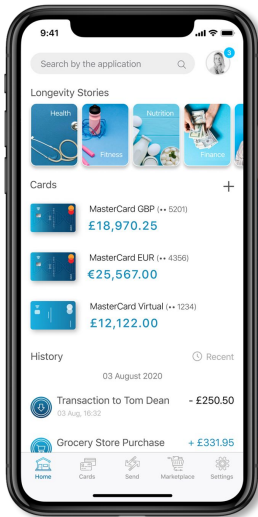
MONEY
TRANSFERS



CASH LOAD



LONGEVITY
MARKETPLACE



PERKS



FAST
SIGN UP



REAL-TIME
NOTIFICATIONS



TRAVEL
INSURANCE



BUSINESS
ACCOUNTS



24/7 SUPPORT

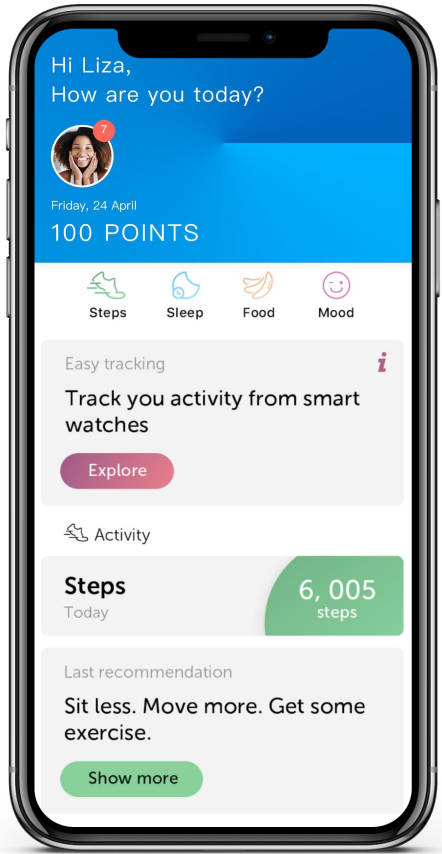
HEALTHTECH INTEGRATION

HEALTHSPAN
AND FITNESS
GAMIFICATION

LONGEVITY
POINTS

DAILY ACTIVITY
ANALYSIS

SLEEP
ANALYSIS

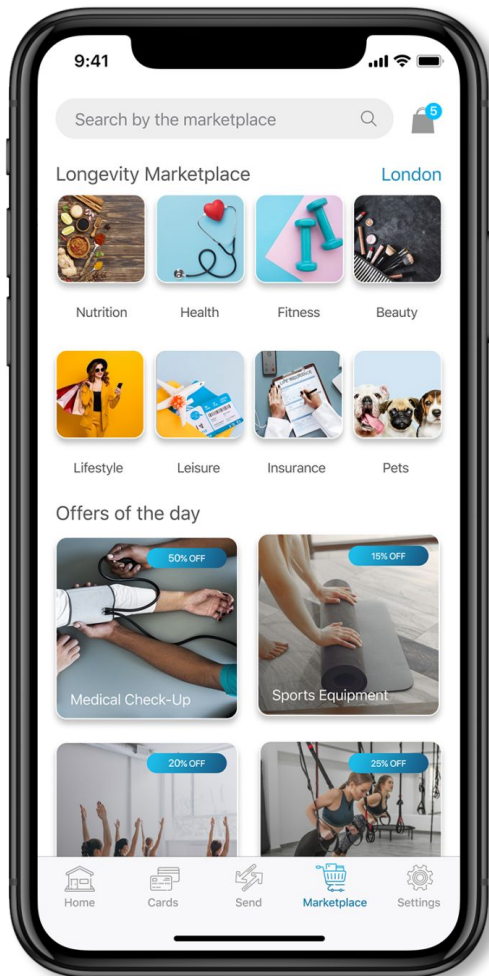


AI POWERED
PERSONALISED
RECOMMENDATIONS

WEARABLES
COMPATIBLE

LONGEVITY
STORIES

NUTRIENT
TRACKING



LONGEVITY MARKETPLACE

Longevity Marketplace
offers the World's Best
Products and Services
in the Industry,
Exclusively Featuring
Scientifically and
Technically Validated
Vendors

Longevity Finance Dashboard

*Big Data Analytics,
Market Intelligence
& SWOT Analysis*

Longevity Finance Big Data Analytics Dashboard

AGING ANALYTICS AGENCY

Longevity Industry Dashboards

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Welcome, Mr. Brown

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SWOT

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Funds

Investments

Exits

Companies

Investors

Funds

Angels

Industries

Longevity Finance Dashboard

Main Statistics

Companies	Investors	Funds	Angels	Industries
10 000	8000	500	1000	30

SWOT Analysis

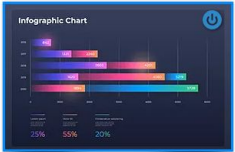
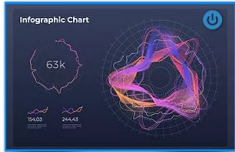
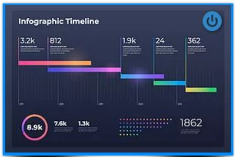
Agon N.V. is a multinational life insurance, pensions and asset management company headquartered in The Hague, Netherlands. At the same time, it provides retirement, workplace savings and protection solutions to over two million UK customers.

Strengths

Weaknesses

Opportunities

Threats



Select a location

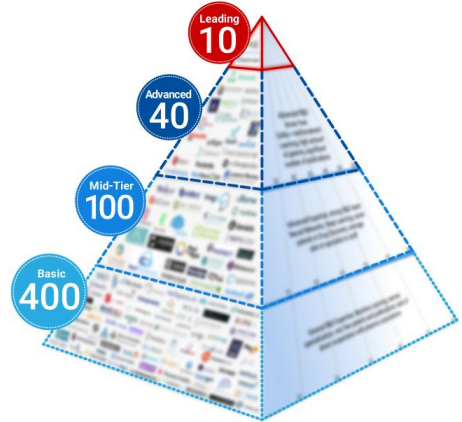
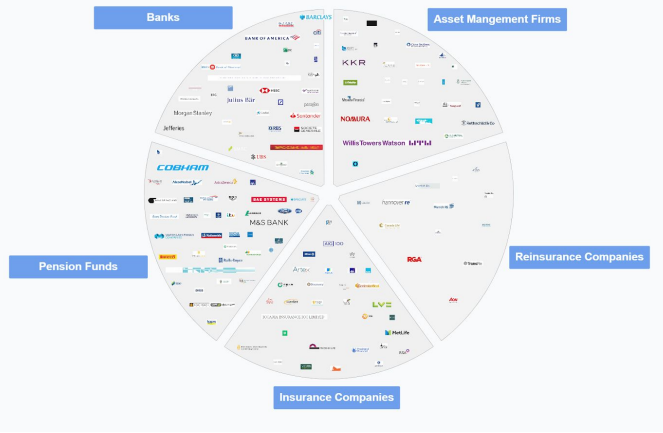
UAE

Saudi Arabia

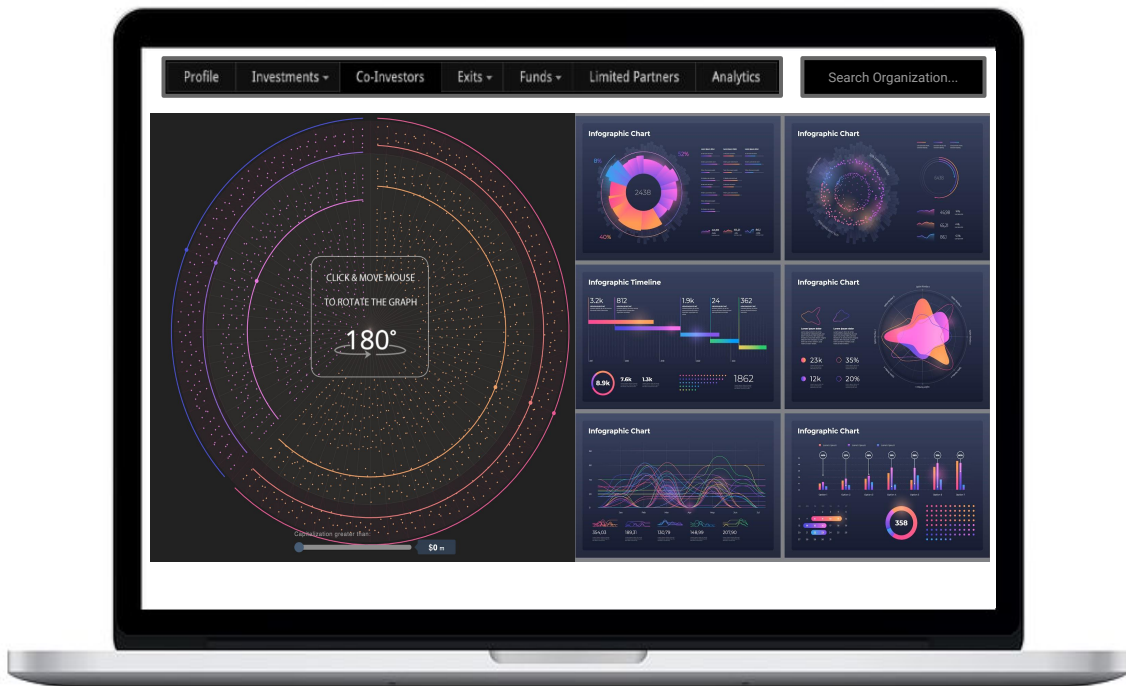
55.6 MILLION



dusty



Longevity Finance Dashboard: Main Features



2000 Entities

**100,000
Data Points**

**8 Industry
Sectors**

**30 Major
Parameters
per Entity**

**100 SWOT
Profiles**

**50+
Interactive
Charts**

1 Market Intelligence Dashboard

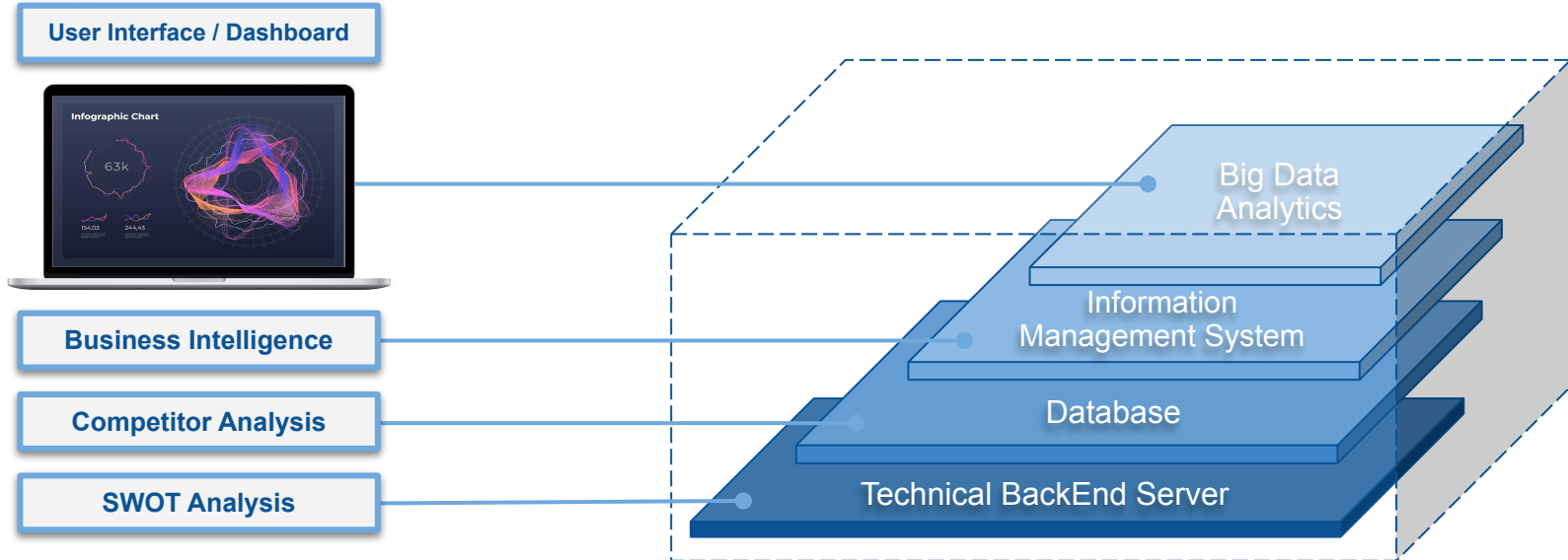
2 Longevity Finance Ranking & Benchmarking

3 SWOT Analysis Dashboard

4 Forecast Dashboard
(*Future Prospects Benchmarking*)

5 B2B Dashboard
(*Longevity Finance Products & Service Providers*)

6 Big Data, Machine Learning & AI Analytics Dashboard



Longevity Finance Dashboard Visualisation

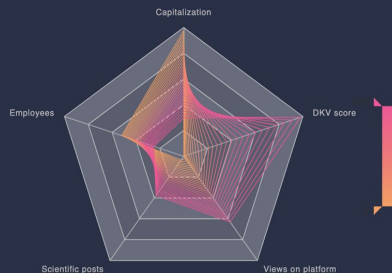
Company description

Name: Axa
Industry: Insurance
Headquarters: Paris, Ile-de-France, France
Founded date: 1852
Employees number: 10001+
Funding status: N/A
Investor type: N/A
Investment stage: N/A
Number of exits: N/A

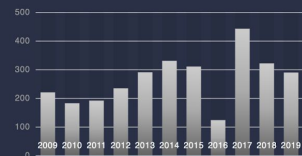
Main information

AXA is a French multinational insurance firm that focuses on global insurance, investment management, and other financial services. AXA helps its clients live more confidently day after day, by protecting them, their families and their property against risks, and by managing their savings and their assets.

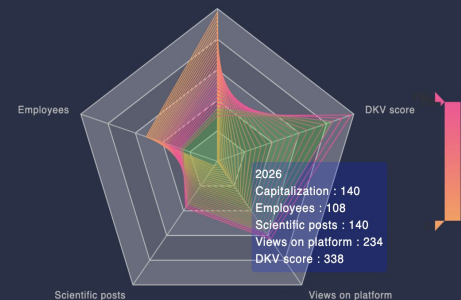
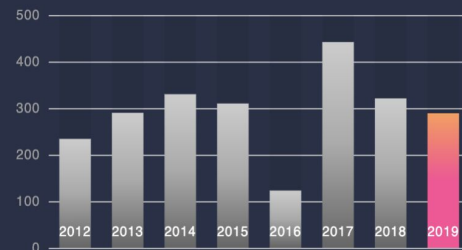
Predictive potential of the company



Capitalization dynamic for last 10 years



Capitalization dynamic for last 10 years



Contacts and social media

Website: <http://axa.svg>
Email: N/A@NA
Twitter: <https://twitter.com/AXA>

Major Use Cases

- The dashboard enables financial institutions interested in Longevity to select and filter Longevity products and services available within their region, in order to aggregate a set of vendors capable of providing their own clients with relevant products and services designed to maximize Healthy Longevity across the full scope of the global Longevity ecosystem (from healthspans to wealthspans).
- Clients will also gain access to advanced analytics showing relevant benchmarking parameters for available vendors within each specific product and service category, enabling them to conduct cost-benefit analyses and determine which vendors are best suited to meet the needs of their clients within their specific target demographic and regional market.
- The dashboard will also provide continuous monitoring and market intelligence of the specific Longevity-focused activities, products and services developed and deployed by 500 financial corporations globally, to continually track, analyze and rank best practices within the Global Longevity Financial Industry.

Longevity-Focused SWOT Analysis of Major Financial Institutions

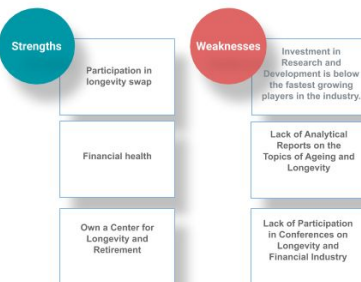
Aegon N.V.

Aegon N.V. is a multinational life insurance, pensions and asset management company headquartered in The Hague, Netherlands. At the same time, it provides retirement, workplace savings and protection solutions to over two million UK customers.



Financial Highlights

\$4.69B Gross Profit
0.16% Return on Assets (ROA)
3.05% Return on Equity (ROE)
3.95% Profit Margin



Amundi

Amundi SA provides investment management services. The Company offers savings, financial instruments, equity trading, credit activities, and investment solutions. Amundi serves customers worldwide.






Financial Highlights

EUR 2.6 B Revenue
EUR 1.3 B EBITDA
EUR 1 425 B Assets under management
EUR 0.85 B Net Profit



Longevity-Focused Competitive Analysis of Major Financial Institutions

Institution	Specialized Longevity Focused Marketing Strategies & Activities (Score out of 100)	Specialized Longevity Focused Financial Instruments (Score out of 100)	Products and Services Tailored to Elderly and Middle Aged Demographic (Score out of 100)	Longevity (100+ Years) Investment and Asset Management Programs (Score out of 100)	Integration of Financial Products and Services with AgeTech/HealthTech Components (Score out of 100)
 BARCLAYS	75.00	65.00	55.00	65.00	65.00
 Prudential	75.00	65.00	57.00	65.00	65.00
 Investment Managers	65.00	57.00	55.00	47.00	65.00
 UBS	75.00	57.00	65.00	65.00	75.00
 Manulife <i>Vitality</i>	57.00	65.00	65.00	65.00	75.00



Longevity Investment Analytics Dashboard

Longevity Investment Big Data Analytics Dashboard



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Longevity Investment Analytics Dashboard

Investors Portal

Investor Portfolio Search

Investor Competitors Search

Comparative Analysis

Major Trends

Interactive Network Diagrams

Interactive MindMaps



Investor Portfolio Search

ENTER



Investor
Competitors Search

ENTER



Comparative Analytics

ENTER



Major
Trends

ENTER



Interactive Network
Diagrams

ENTER



Interactive MindMaps

ENTER

Company Portal

Company Portfolio Search

Company Competitors Search

Comparative Analysis

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Interactive Network Diagrams

Interactive MindMaps



Company Investor Search

ENTER



Company
Competitors Search

ENTER



Comparative Analytics

ENTER



Major
Trends

ENTER



Interactive Network
Diagrams

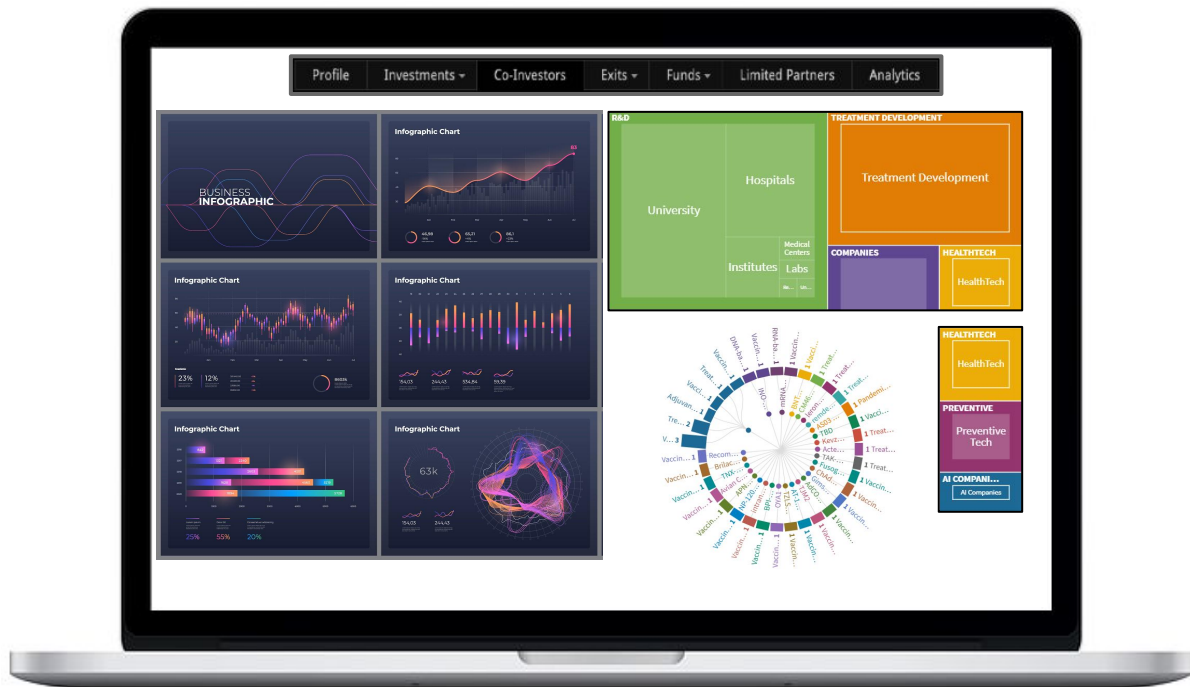
ENTER



Interactive MindMaps

ENTER

Longevity Investment Big Data Analytics Dashboard



**100,000+
Data Points**

**20,000
Entities**

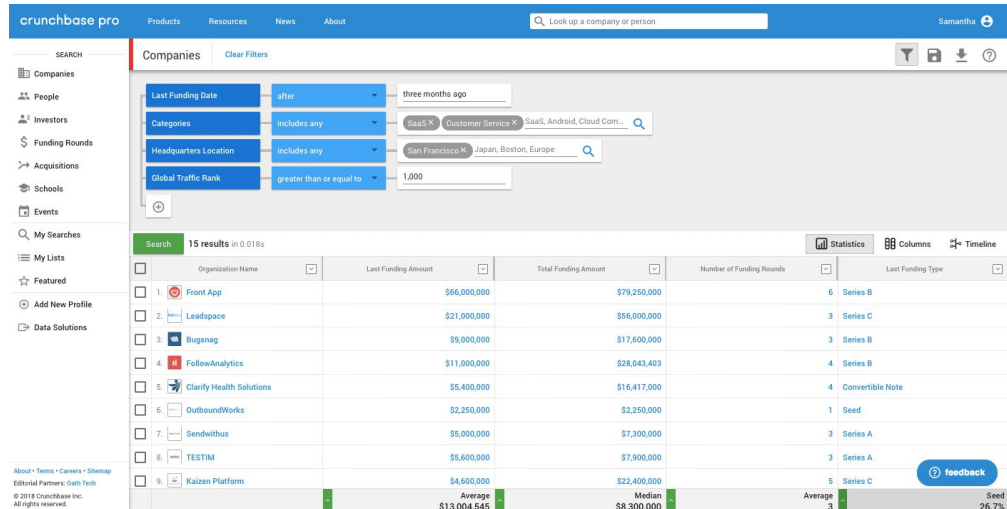
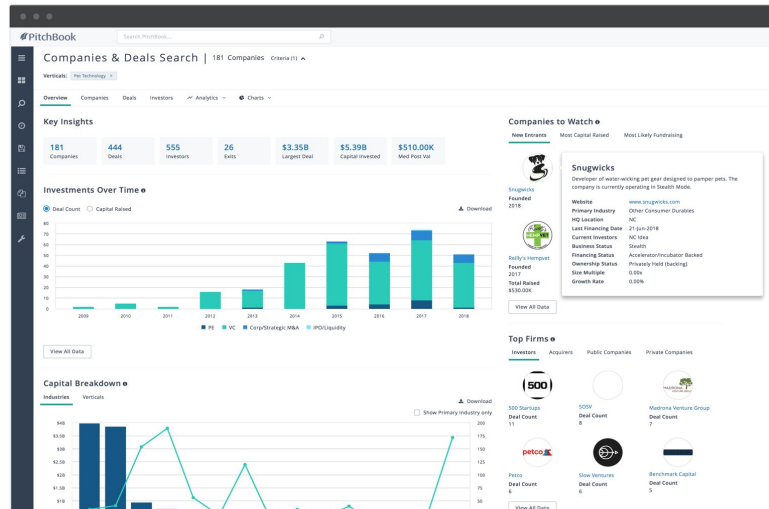
**20+ Dynamic
Search Filters**

**20+
Comparative
Analysis Filters**

**Company
Competitor
Search**

**Investor
Competitor
Search**

The Pitchbook, Crunchbase and CB-Insights of the Longevity Industry

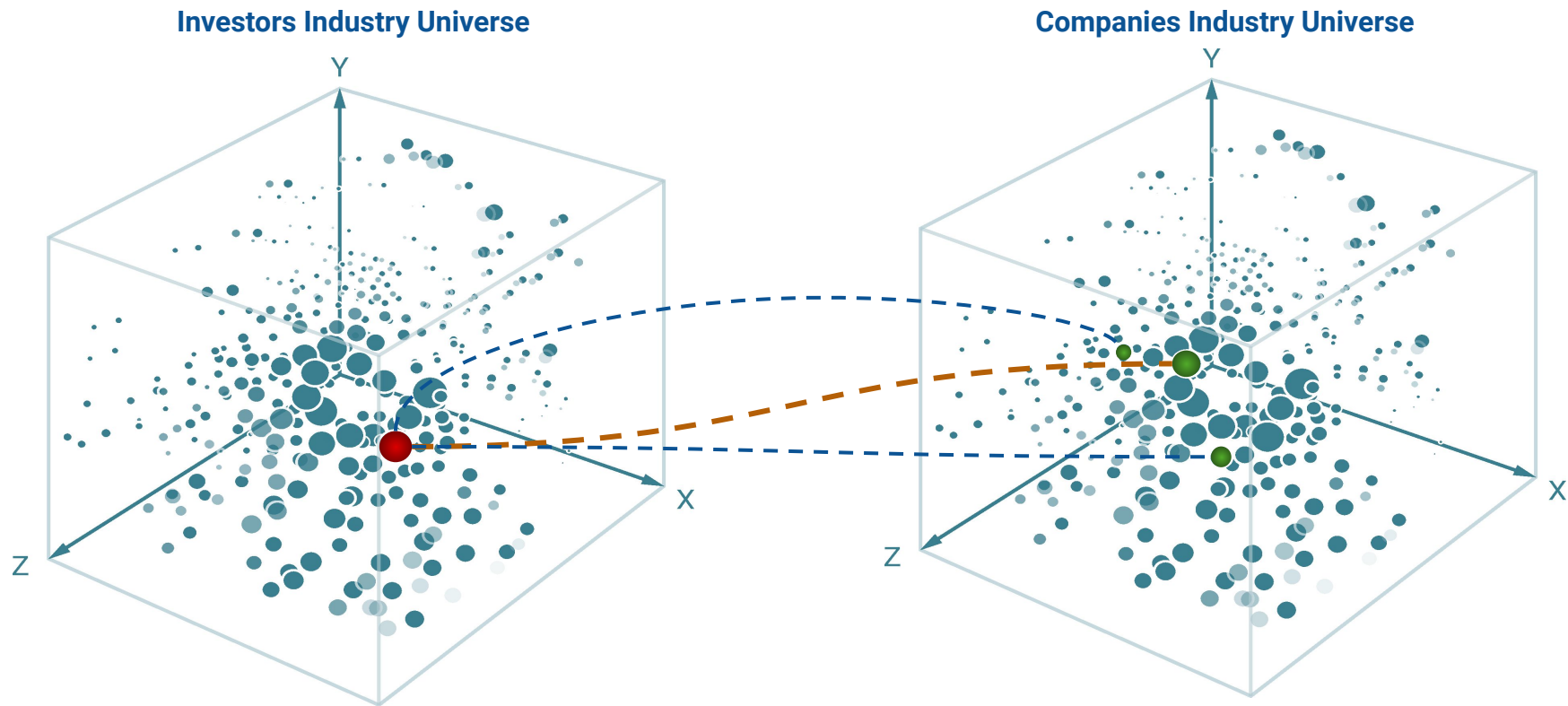


- The data and analytics architecture and overall user interface for the investment Analytics Dashboard was inspired by services like Pitchbook and crunchbase, and offers equally targeted and visually intuitive types of comparative analytics, filtered searches, analytical toolsets and peer-to-peer smart matching capabilities.
- For the first time, both Longevity companies and investors will have access to the real-time data and analytics required to formulate intelligent strategic decision making within the unprecedentedly complex sphere of Human Longevity.

Longevity Investors:

- Access to quantitative, sophisticated and multidimensional analytics on many potential future portfolio companies and investment prospects,
- Real-time analytics on potential investment candidates, providing insight into their development prospects over time, their future and ongoing growth potential, visibility on which companies are growing the fastest, which are consistently making or losing money, etc,
- Targeted and intelligent smart-matching between investors and portfolio candidates based on specified sectors and qualifying criteria (e.g. highly-targeted ratios of rankings in specific areas).

Multidimensional Big Data Analytics Vector Space

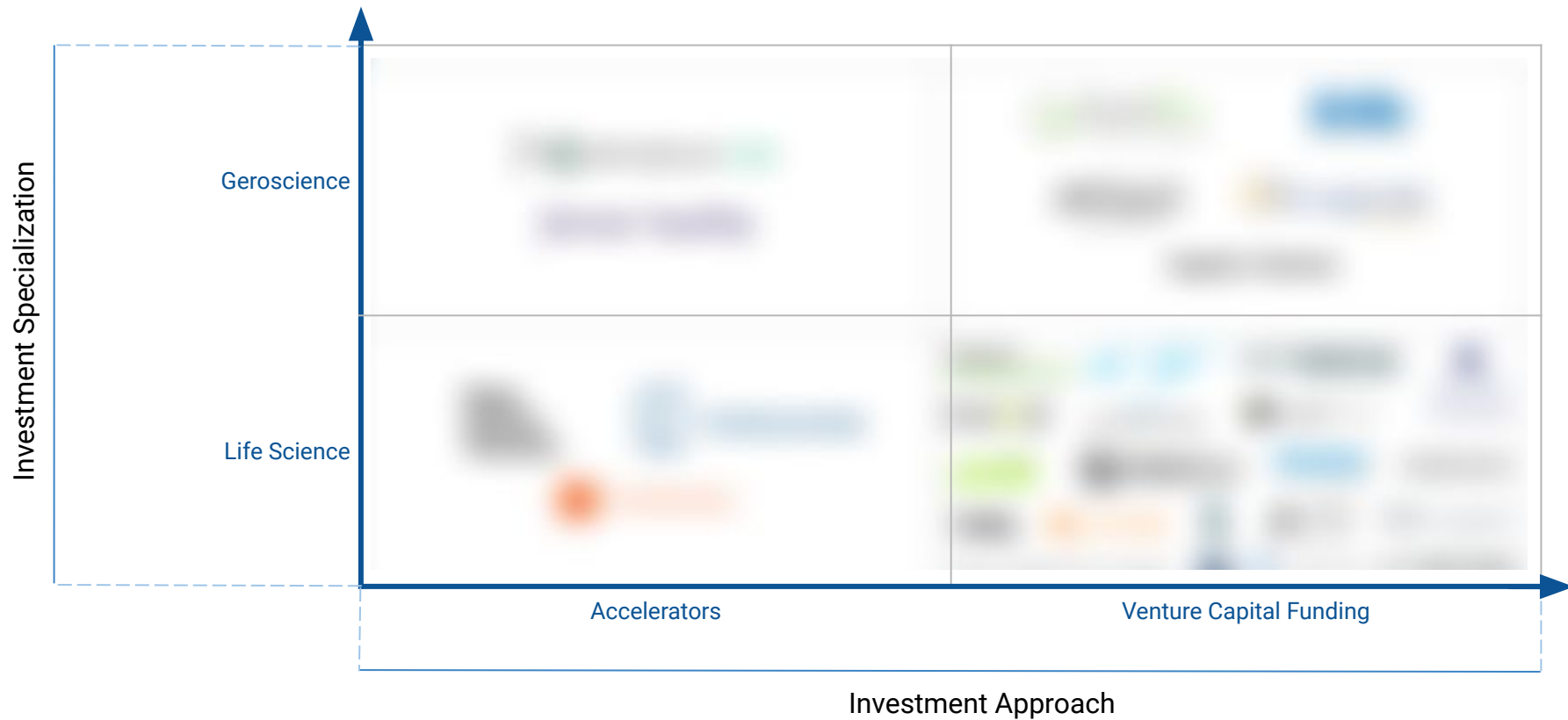


The system will enable targeted and intelligent smart-matching between investors and portfolio candidates based on specified sectors and qualifying criteria (e.g. highly-targeted ratios of rankings in specific areas).

Risk vs. Diversification Analysis of Leading Longevity Investment Funds

	Longevity Investment Fund	Investment Focus	Research Focus	Funding Round Focus	Geographical Distribution of Assets	Investment Strategy
1	Liberty Venture Partners	Diversified Portfolio	Human Life Extension	Diversified Portfolio	Diversified	Competitive
2	Longitude Capital	Diversified Portfolio	Human Life Extension	Diversified Portfolio	Concentrated	Competitive
3	F Prime Capital	Diversified Portfolio	Human Life Extension	Diversified Portfolio	Diversified	Competitive
4	Generative Ventures	Digital Health	Human Life Extension	Early Stage Venture	Concentrated	Middle Risk Level
5	Quon Ventures	Digital Health	Human Life Extension	Early Stage Venture	Diversified	Middle Risk Level
6	Advent Life Sciences	Drug Discovery	Human Life Extension	Diversified Portfolio	Diversified	Middle Risk Level
7	Fusion Capital Partners	Drug Discovery	Human Life Extension	Diversified Portfolio	Diversified	Middle Risk Level
8	Longevity Vision Fund	Diversified Portfolio	Preclinical Trials (Mice)	Early Stage Venture	Diversified	Middle Risk Level
9	RA Capital Management	Drug Discovery	Human Life Extension	Diversified Portfolio	Diversified	Middle Risk Level
10	Quoniam	Drug Discovery	Preclinical Trials (Mice)	Diversified Portfolio	Diversified	Middle Risk Level
11	V Coordinator	Diversified Portfolio	Diversified	Early Stage Venture	Diversified	Middle Risk Level
12	Sciencelife	Digital Health	Human Life Extension	Early Stage Venture	Concentrated	Middle Risk Level
13	Front Seat Capital	Diversified Portfolio	Human Life Extension	Early Stage Venture	Diversified	Middle Risk Level
14	Regenerative Longevity Investment Venture Fund	Diversified Portfolio	Human Life Extension	Late Stage Venture	Concentrated	Middle Risk Level
15	Technic Capital	Digital Health	Human Life Extension	Early Stage Venture	Concentrated	Middle Risk Level

Investment Analytics: Investment Specialization vs. Investment Approach

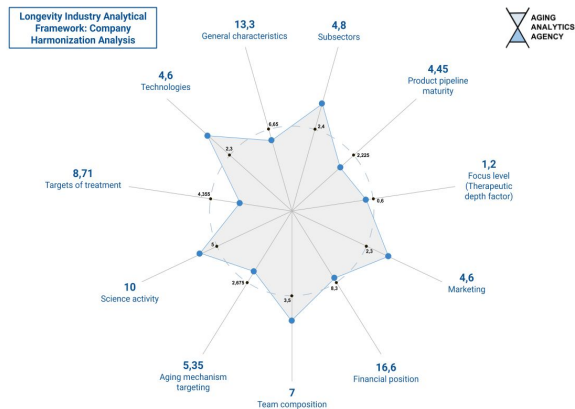
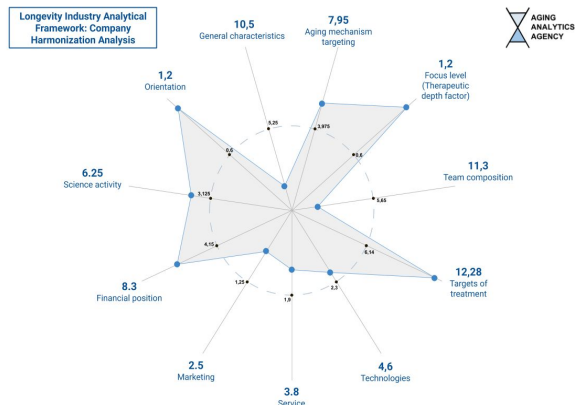


Longevity Industry Analytical Framework



Number of employees					Biochemistry level	Number of licensed patents	Endocrinology	Loss of proteostasis	Product type	Ratio of funding to patents filed and grants	Basic research on Biology of Aging	
Scientists / employees ratio	Media mentions				Genomic	Number of collaborations with scientific establishments	Maternal-Fetal medicine	Deregulated nutrient sensing	Stage of business's life cycle	R&D depth	Regenerative medicine	
Technologists / employees ratio	Geroscience R&D	Size of product pipeline			Customers interest level	Proteins and Cell signaling	H-index	Infectious disease	Mitochondrial dysfunction	Collaboration	Ratio of investment to IP produced	Drug discovery services
Business development & investment specialists / employees ratio	P4 Medicine	Product regulation			Participation in big industry conferences	Cellular	Grants	Dermatology	Cellular senescence	Affiliations	Number of investors	Personalized medicine
Top managers' qualification	AgeTech	Omics	Product Readiness Level	Sponsorship activities	Tissue level	Participating in scientific conferences	Urogyneecology	Stem cell exhaustion	IT expenditures	Amount of investments	AI - Machine learning and Deep Learning application	
Advisory Board h-index	Novel Financial System	Data processing	Technology Readiness Level (TRL)	Events attended	Organs	Clinical trials	Immunology	Altered intercellular communication	Precarity factor	Number of subsidiary companies	Geroprotectors studies	
Team composition	Main Subsectors	Technologies	Product pipeline maturity	Marketing	Focus level (Therapeutic depth factor)	Science activity	Targets of treatment	Aging mechanism targeting	General characteristics	Financial position	Specialization	

SUBSECTORS						
Geroscience R&D	Rejuvenation Biotechnology	Gene Therapy	Geroprotectors	Regenerative Medicine	Nutraceuticals	Basic Research on Biology of Aging
P4 Medicine	Personalized Diagnostics	Personalized Prognostics	Personalized QALY & HALE Estimation	Personalized Biomarker Analysis	Personalized in vivo & in silico drug testing	Preventive Therapies
AgeTech	Novel Retirement Plans	FinTech for the Elderly	Continuing Education	Cognitive Enhancement	NextGen Mobile Apps for the Elderly	Entertainment for the Elderly
Novel Financial System	Longevity Index Fund	Longevity Stock Exchange	Longevity Derivatives	Longevity Hedge Fund	AgeTech Bank	Longevity Trust
TECHNOLOGIES						
Omics	Genomics	Epigenomics	Metabolomics	Proteomics	Lipidomics	Glycomics
	Transcriptomics	Foodomics	Nutritional genomics	Pharmacogenomics	Pharmacomicrobiomics	Toxicogenomics
Data processing	Big Data	Symbolic AI / Machine Learning	Deep Neural Networks / Deep Learning	Cloud Computing	Bioinformatics	



Comparative Analysis of Longevity Companies

Company	High number of Longevity experts, large volume of scientific papers	High TRL (measure of market readiness)	Number of clinical trials completed, ongoing and planned	Management with history of successful IPO, merger and acquisitions	Large team and budget allocation for advanced R&D	Use of unique technology and IP
Astellas						
BMS						
Daiichi Sankyo						
Eli Lilly						
Roche						
Schering-Plough						
Takeda Pharmaceutical						
Novartis						
Pfizer Inc.						
Abbott Laboratories						
Amgen						
Boehringer Ingelheim						
Merck & Co.						
Novo Nordisk						
Sanofi						
Sumitomo Dainippon Pharma						
Teva Pharmaceuticals						
Vertex Pharmaceuticals						
Zinc						
Alkermes						
Horizon Therapeutics						
Moderna						
Regeneron						
Bluebird bio						
CRISPR Therapeutics						
Intellia Therapeutics						
Moderna						

Top 20 Longevity Investors

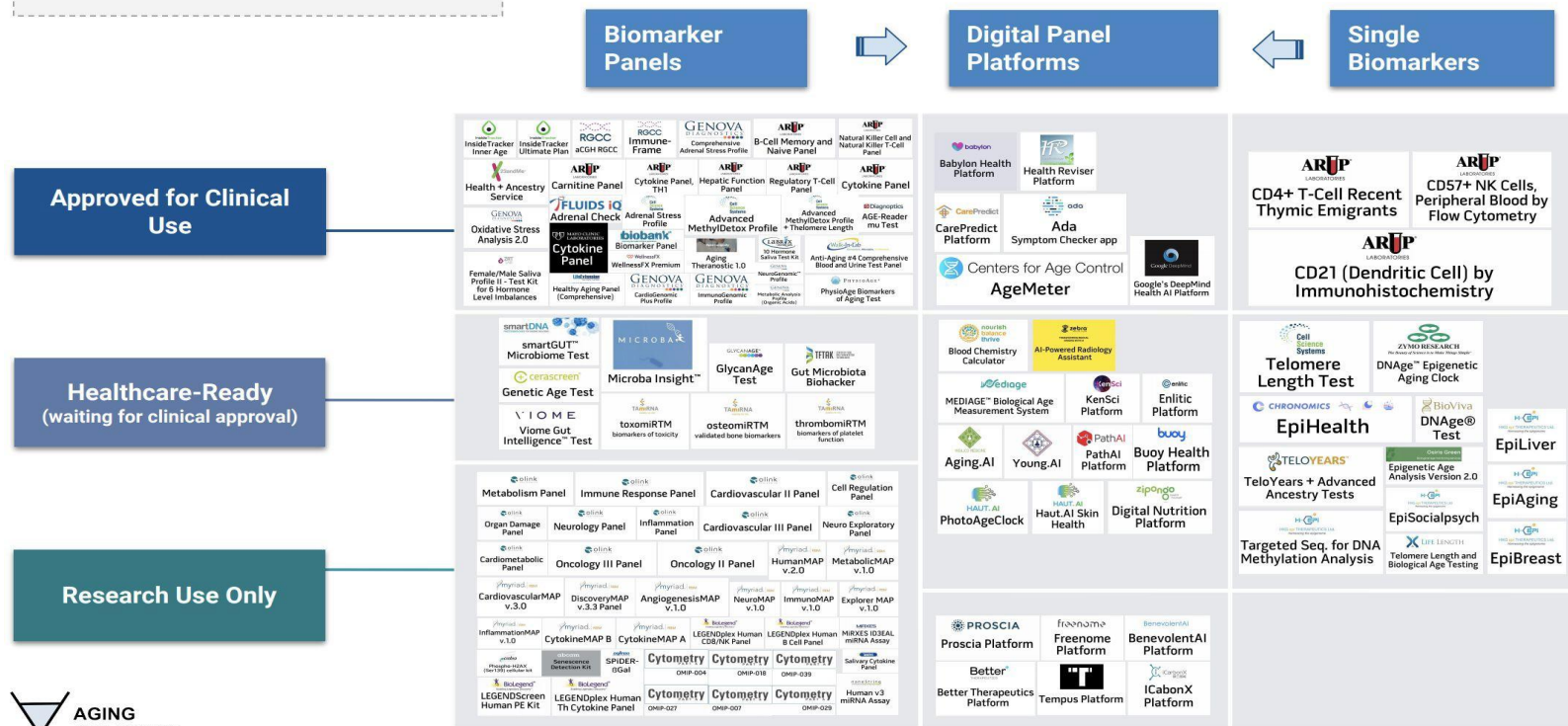
Top Longevity Companies	←	Investments overall	INVESTORS	Investments Overall	→	Top Longevity Companies
		9	 Y Combinator	 Sequoia Capital	9	 
		8	 GV	 GV Fund	8	 
 Insitro		8	 GV	 Data Collective DVC	8	 
 		8	 AME Group Ventures	 StarFund	7	
 		6	 Khosla Ventures	 Andreessen Horowitz	6	 
		6	 Novartis Capital Partners	 Pulse Capital	5	 
		5	 General Catalyst	 StarX	4	
		4	 Novartis Capital	 Novartis	4	  
		4	 Novartis Ventures	 Draper Associates	4	
 GENS HEALTH-CARE		3	 Novartis Ventures	 GV Startups	3	



Biomarkers of Longevity as the Tangible Metrics for Investment Decisions

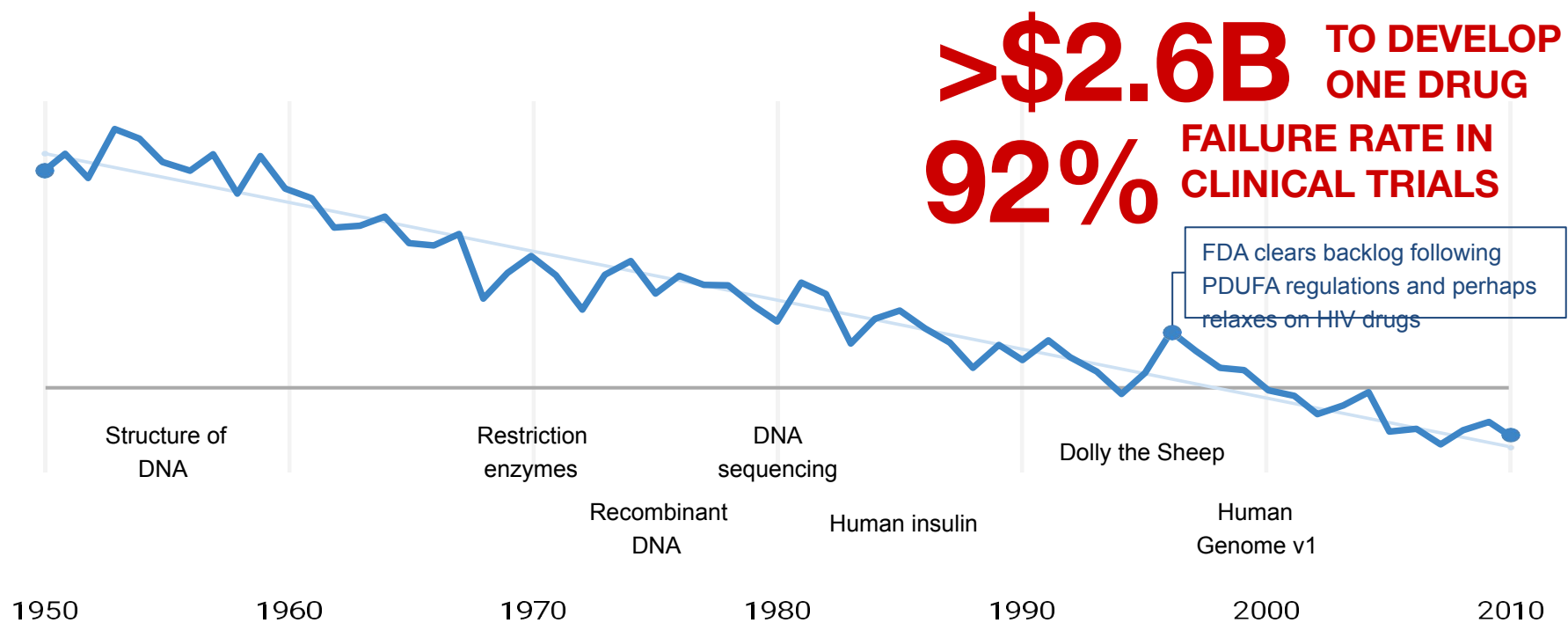
Approved for Clinical Use - 41
Healthcare-Ready - 33
Research Use Only - 45

1st edition: Selection and Current Status, 2019



Pharma Efficiency is Declining Steadily

NMEs per \$B R&D spent (inflation adjusted)



Bernstein Research: The Long View - R&D Productivity, 2010

59 NEW DRUGS launched in 2018



What if Geroscience (Science of Aging) Fails to Deliver?
Separating Hype from Reality: Pragmatic Optimism for the Longevity Industry

Drug Discovery in Longevity

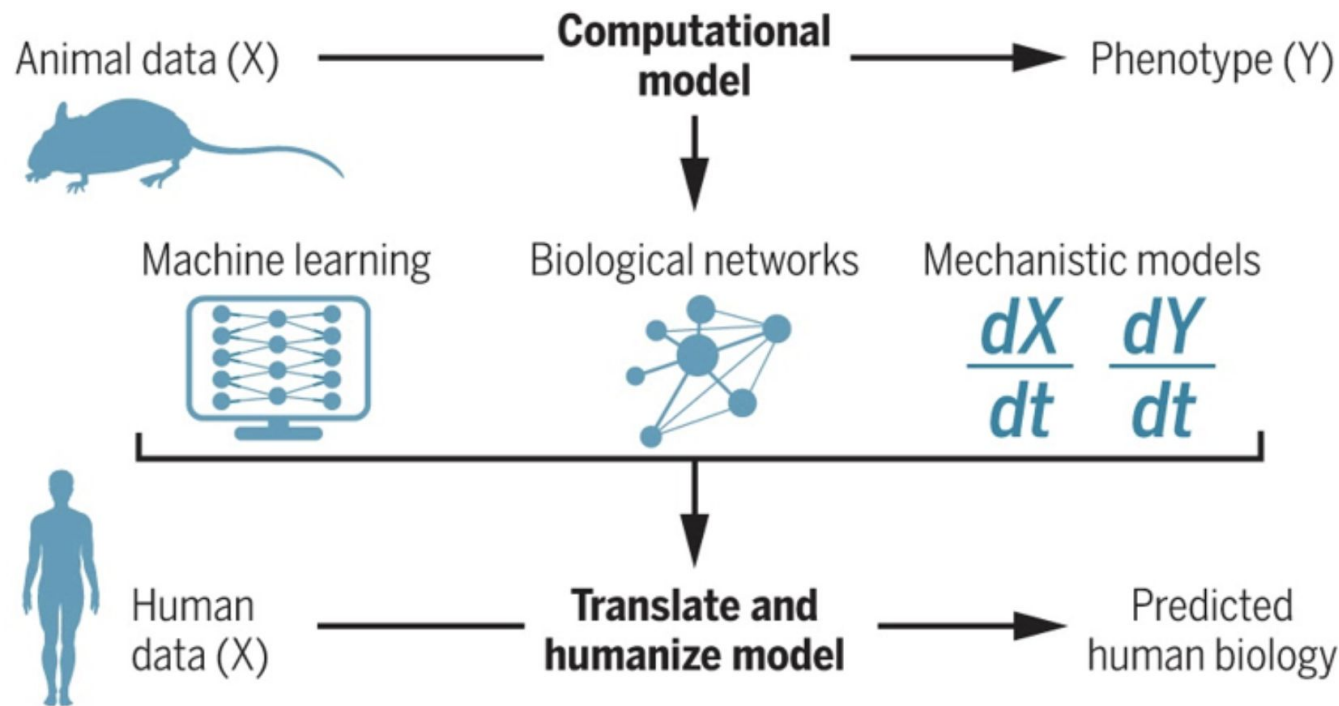
From Mice to
Human

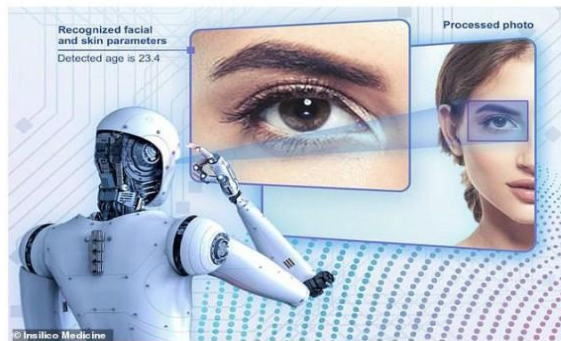
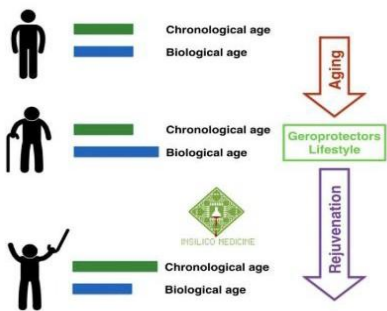
99%

FAILURE RATE IN
CLINICAL TRIALS

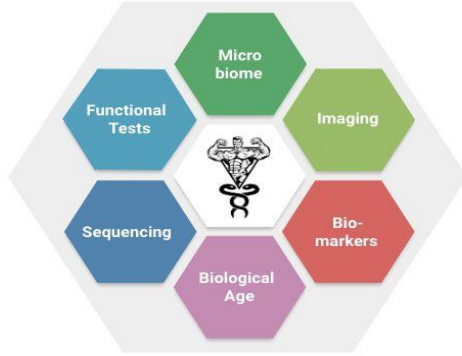
Systems model-based cross-species translation




Translating computational systems models of molecular (X) to phenotypic (Y) associations from animal models to humans provides a powerful framework for translating therapeutic concepts from preclinical to clinical stages.





Development of “Minimum Viable” and “Most Comprehensive” Panels of Biomarkers of Ageing



-  Unfulfilled biomarkers
-  Validated biomarkers adopted in practice
-  Experimental biomarkers adopted in practice



Biomarker panel



Timeline

Technological due-diligence for venture investors to evaluate the claims of emerging companies whether their technologies can deliver actual results on humans will be made available in detailed formats.

An analytical panel could also be launched for InsurTech-HealthTech companies focused on the retails clients. Currently we are aware of at least 6 companies working on similar types of solutions, and we can envision the emergence of another 10-20 such companies in the next 2-3 years.

Depending on the management, scientific team, and business executive team, we will see a variety of specific structuring of biomarker panels and actual analytical/financial products based on them.



Longevity Governance Big Data Analytical Dashboard

Longevity Governance Dashboard

Full Analysis

SWOT Analysis

Interactive MindMaps

Comparison Charts

3D Visualisation

Benchmarking Charts

COVID-19 Dashboard

Full Big Data Analysis



View More

SWOT Analysis



View More

National Healthy Longevity Interactive MindMaps



View More

Health-Adjusted Life Expectancy (HALE) Gap and Life Expectancy

Health-Adjusted Life Expectancy (HALE) Benchmarking

Dynamic Comparison Charts



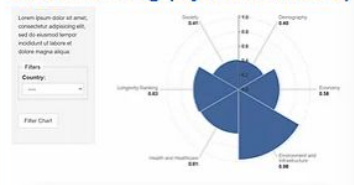
View More

Longevity Progressiveness 3D Visualisation



View More

Longevity Progressiveness Benchmarking (Dynamic Charts)



View More

12,000
Data Points

240
Parameters

50
Regions

6 Layer
Framework

100 Dynamic
Charts

50 SWOT
Profiles

Longevity Governance Dashboard



**12,000
Data Points**

**240
Parameters**

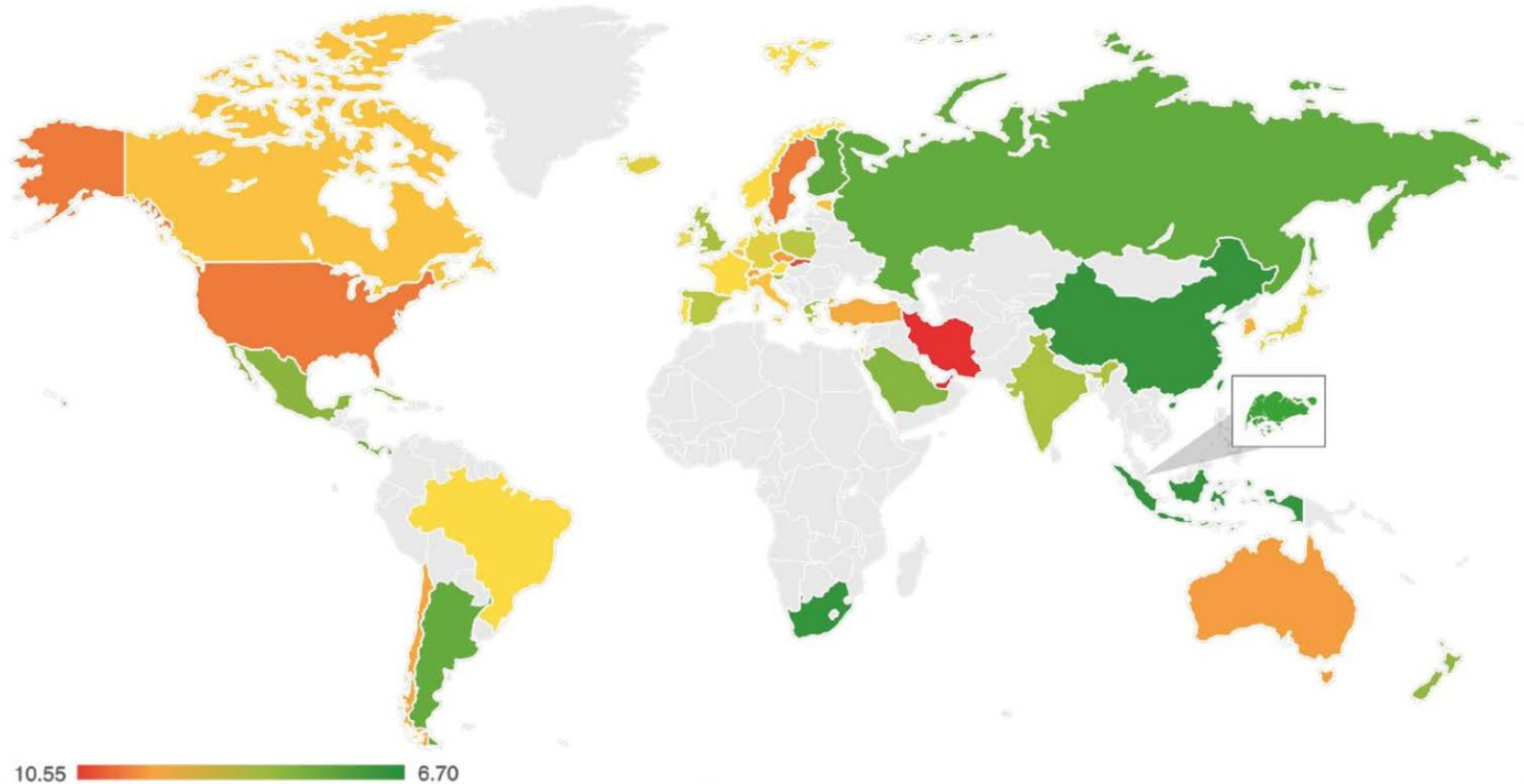
**50
Regions**

**6 Layer
Framework**

**100+
Dynamic
Charts**

**50
SWOT Profiles**

Country Ranking by Size of Gap Between Healthy Longevity and Life Expectancy

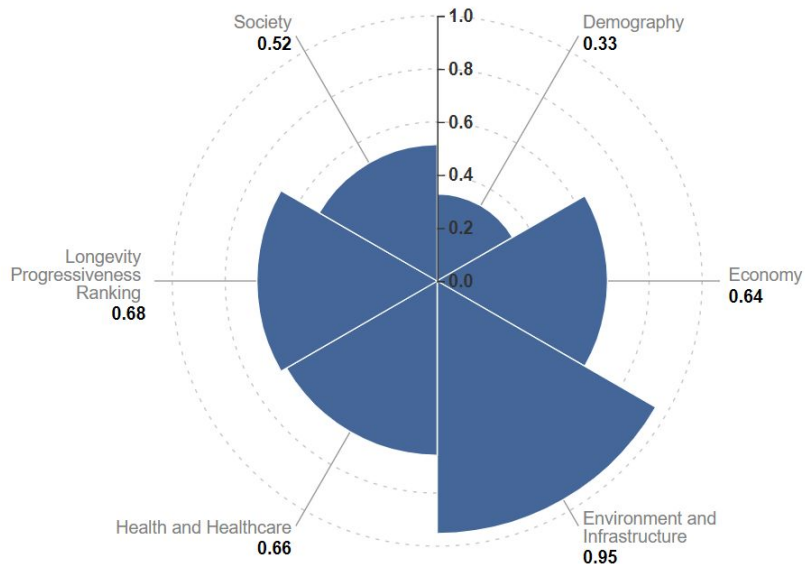


Longevity Governance Analytics Interactive Charts

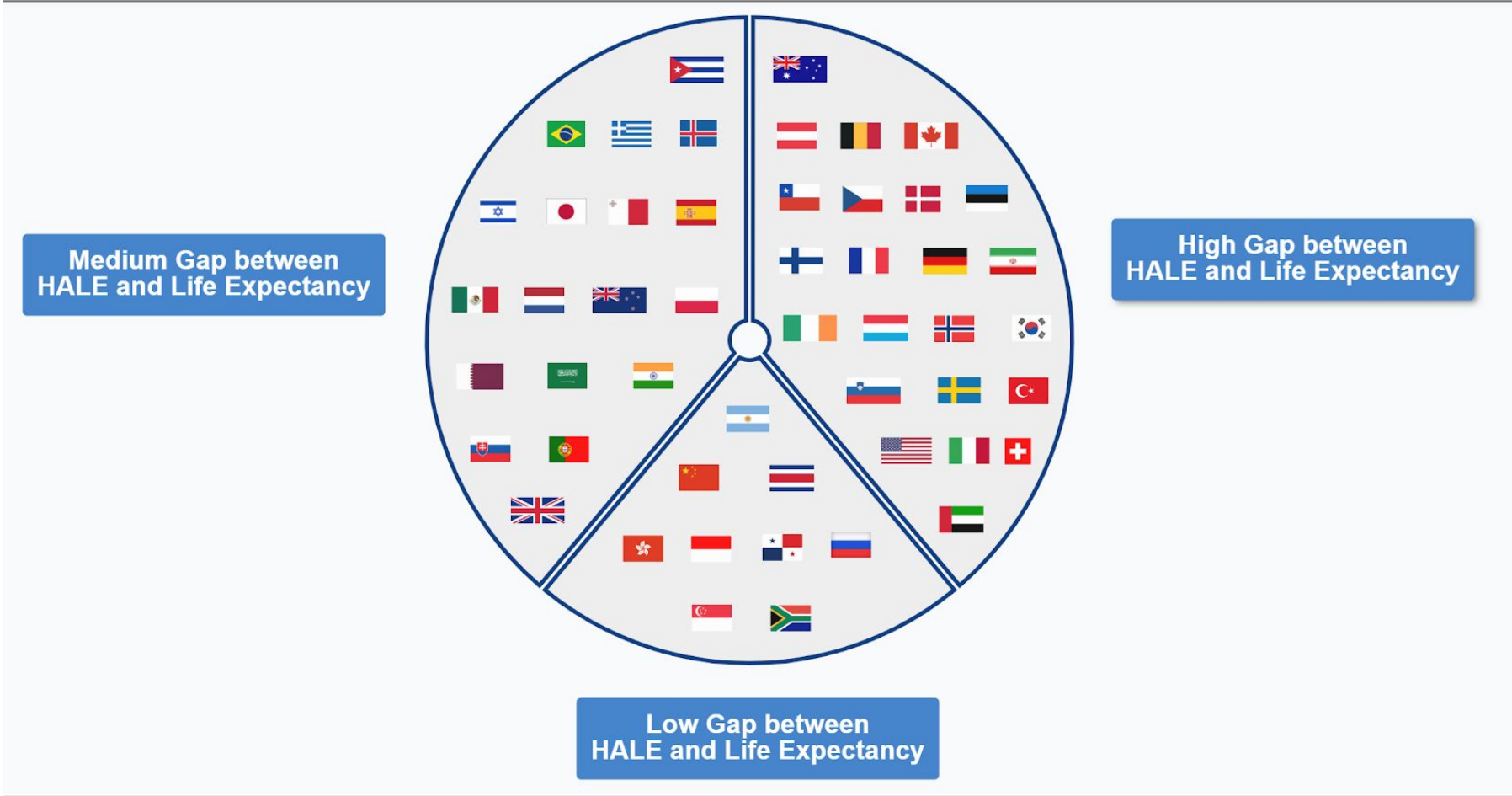
Longevity Governance Analytics

Filter Chart

United Kingdom



Global Healthy Longevity Landscape Overview (Gap between HALE and Life Expectancy)



Interactive Longevity Charts: Health, Economy, Comparisons



Longevity
Industry
Dashboards

Home
Landscape

Infographics
Investors

Profiles
Analytics

Statistics
Contact Us

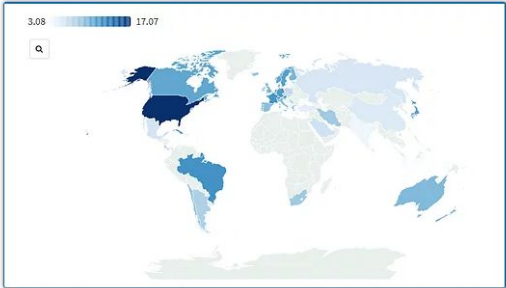
National Plans

Dynamic Charts

Search For...

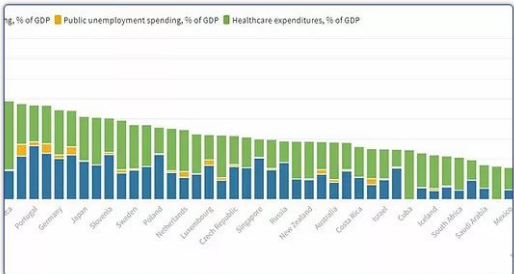
Log In

Dynamic Economic Charts



View More

Dynamic Comparison Charts



View More

Dynamic Health Charts



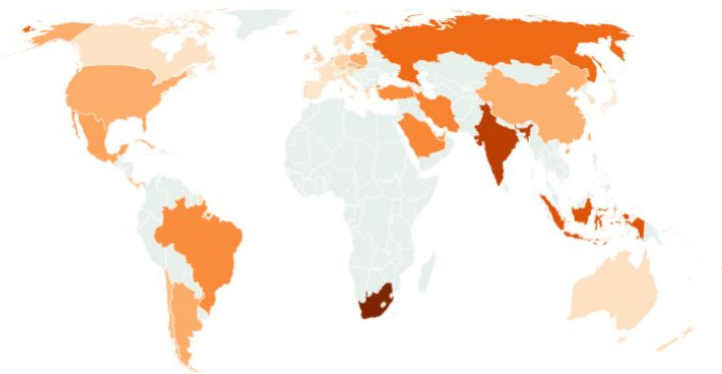
View More

Interactive Longevity Charts: Health, Economy, Comparisons

Dynamic Health Graphs

HALE and Life Expectancy: Factors Affecting HALE - Both Sexes
HALE

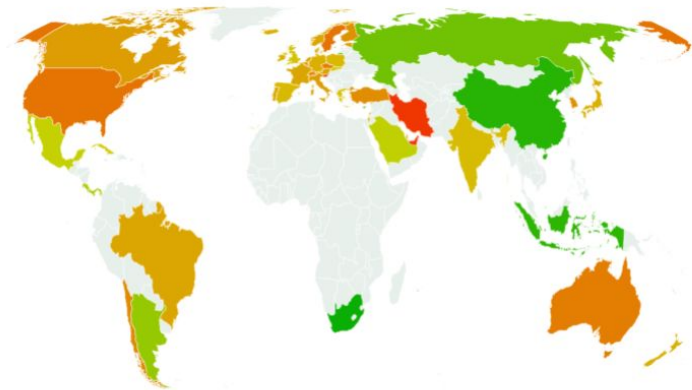
55.7 76.2



Source: [World Bank](#)

Gap between Life Expectancy at Birth and HALE, years

6.5 11



Full Big Data Analysis

Big Data Framework

Regions Ranking

Causal Analysis

Big Data Analysis

Current Trends

Practical Recommendations

Introduction & Big Data Comparative Analysis Framework



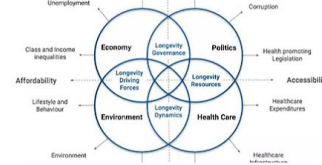
View More

Longevity Progressiveness Ranking of 50 Regions



View More

Major Factors Determining Healthy Longevity

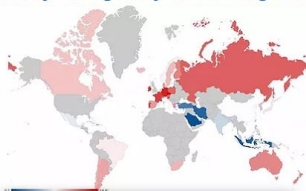


View More

50 Regions
SWOT Profiles

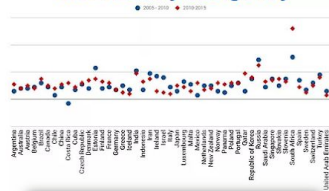
COVID-19
Dashboard

Big Data Comparative Analysis: Healthy Longevity in 50 Regions



View More

Current Trends in Life Expectancy and Healthy Longevity



View More

Conclusions and Practical Recommendations



View More

10,000
Data Points

2,000
Parameters

50
Regions

6 Layer
Framework

100 Dynamic
Charts

50 SWOT
Profiles

National Longevity Industrial Strategy in the UK

***The Example of the UK
All-Party Parliamentary Group
for Longevity***

All Party Parliamentary Group for Longevity



“This is a very important group looking at the most important single issue for society in the next 30 years”

— Sir John Bött, Regius Professor of Medicine at Oxford University

Purpose

The All Party Parliamentary Group (APPG) for Longevity was set up in March 2019 to address the scientific, technological and socio-economic issues relating to our ageing demographic and promote living younger, healthier and longer lives. The APPG is aiming to produce, with partners and experts, a draft National Strategy by end 2019 setting out what the United Kingdom needs to do to meet the goal set by Government of five more years of healthy life expectancy by 2035 (HLE + 5) and at the same time to close the large social gap in healthy life expectancy. Through an ambitious action plan in 2020, the APPG aims to turn the ‘problem’ of ageing into one of the most promising opportunities of the 21st century – and secure Britain’s place as a global leader in longevity by providing access to the ‘longevity dividend’ to everyone equitably in society.

To contact us please email
APPG@longevityinternational.org

The Governance Framework for the APPG can be viewed [here](#); the most recent Income & Expenditure Statement is available [here](#).



Launch of APPG for Longevity, House of Commons, 7 May 2019

The Secretariat with Rt Hon Damian Green MP (APPG Chair), The Lord Filkin CBE (Advisory Board Chair), Professor Andrew Scott (Advisory Board Member) and Rt Hon Matt Hancock MP, Secretary of State for Health and Social Care.



All Party Parliamentary
Group for Longevity

The Health of the Nation

A Strategy for Healthier
Longer Lives

February 2020



THE 2ND INTERNATIONAL LONGEVITY POLICY AND GOVERNANCE SUMMIT

Dmitry Kaminskiy on COVID-19 Analytics & Longevity Governance Dashboards at the APPG for Longevity Secretariat's 2nd Annual Summit



Dr Richard Siow



Alex Zhavoronkov



Lynne Cox



Andrew Scott



Dr Cassandra Coburn



Dr Alex Mihailidis



Sergey Young



Mr Inamura Takuma



H.E. Dr. Al Amiri



Lord Geoff Filkin



Tina Woods



Rt Hon Damian Green MP



Robert Lechler



Brian Kennedy



John Godfrey



Ms Joanna Benz



Kenji Shibuya



Adriane Berg



Stephen Johnston



COVID-19 Big Data Analytics Dashboard

COVID-19 Regional Safety Assessment

250 Countries, Regions & Territories

140+
Parameters

250+
Countries and Regions

35000+
Data Points

30 Indicators

**11 Proprietary
Parameters**

6 Categories

**80+ Infographic
Charts**

9 Correlations

**6 Proprietary
Indicators**

COVID-19 Regional Safety Assessment Analytical Framework



Quarantine Efficiency

Scale of Quarantine

Quarantine Timeline

Criminal Penalties for Violating Quarantine

Economic Support for Quarantined Citizens

Economic Supply Chain Freezing

Travel Restrictions

Government Efficiency of Risk Management

Level of Security and Defense Advancement

Rapid Emergency Mobilization

Efficiency of Government Structure

Economic Sustainability

Pandemic Readiness

Legislative Efficiency

Monitoring and Detection

Monitoring Systems & Disaster Management

Scope of Diagnostic Methods

Testing Efficiency

AI for Diagnostics and Prognostics

Government Surveillance Technology for Monitoring

Reliability and Transparency of Data

Healthcare Readiness

COVID-19 Equipment Availability

Mobilization of New Healthcare Resources

Quantity and Quality of Medical Staff

Level of Healthcare Progressiveness

Level of Technological Advancement

Epidemiology System Level of Development

Regional Resiliency

Infection Spread Risk

Culture Specifics and Societal Discipline

Level of Modern Sanitization Methods

Demography

Chronic Diseases

Geopolitical Vulnerability

Emergency Preparedness

Societal Emergency Resilience

Emergency Military Mobilization Experience

Surveillance Capabilities

Previous National Emergency Experience

COVID-19 Regional Safety Index: Data Sources

Data collection is an essential stage of the research. Accurate data collection is essential to maintaining the integrity of research. To answer relevant questions of the working paper and evaluate outcomes, data used for this analysis was collected from credible sources.

World Health Organization

World Bank Open Data

Peer-Reviewed Scientific Publications

E-Government Development Index

UNdata

IndexMundi

World Population Review

EuropePMC

GHS Index

WCRF International

OECD Data

Government Reports

Worldometers

Human Development Index

Corruption Perceptions Index

Our World in Data

TheGlobalEconomy.com

The Lancet

WORLD LIFE EXPECTANCY

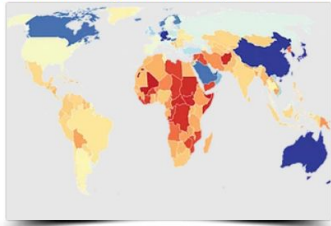
ProCon.org

GeoEconomic
Dashboard

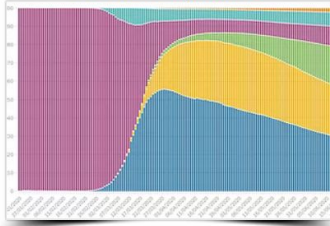
COVID-19 Global Analytics Dashboard

-  Quarantine Efficiency
-  Government Efficiency
-  Monitoring & Detection
-  Healthcare Readiness
-  Country Vulnerability
-  Emergency Preparedness

COVID-19 Regional Safety Assessment


[View More](#)

COVID-19 Dynamics


[View More](#)

List of Regions

Full List of 250 Regions, Countries and Territories

COVID-19 Regional Safety Assessment
List of 250 Regions, Countries and Territories

Region	Country	Region	Country	Region	Country	Region	Country
Africa	Algeria	Asia	China	Europe	France	North America	USA
South America	Brazil	Oceania	Australia	Europe	Germany	North America	Canada
Europe	Italy	Asia	India	Europe	Spain	North America	Mexico
Europe	UK	Asia	Japan	Europe	Sweden	North America	USA
Europe	Poland	Asia	South Korea	Europe	Norway	North America	USA
Europe	Czech Republic	Asia	Thailand	Europe	Denmark	North America	USA
Europe	Slovakia	Asia	Vietnam	Europe	Finland	North America	USA
Europe	Hungary	Asia	Philippines	Europe	Iceland	North America	USA
Europe	Slovenia	Asia	Malaysia	Europe	Lithuania	North America	USA
Europe	Croatia	Asia	Singapore	Europe	Romania	North America	USA
Europe	Bulgaria	Asia	Indonesia	Europe	Latvia	North America	USA
Europe	Greece	Asia	Myanmar	Europe	Estonia	North America	USA
Europe	Turkey	Asia	Burma	Europe	Belgium	North America	USA
Europe	Iran	Asia	Laos	Europe	Netherlands	North America	USA
Europe	Saudi Arabia	Asia	Cambodia	Europe	Austria	North America	USA
Europe	UAE	Asia	Timor-Leste	Europe	Switzerland	North America	USA
Europe	Qatar	Asia	East Timor	Europe	Luxembourg	North America	USA
Europe	Oman	Asia	Maldives	Europe	Belarus	North America	USA
Europe	Yemen	Asia	Sri Lanka	Europe	Ukraine	North America	USA
Europe	Somalia	Asia	Nepal	Europe	Poland	North America	USA
Europe	Ethiopia	Asia	Bhutan	Europe	Czech Republic	North America	USA
Europe	Kenya	Asia	Lebanon	Europe	Slovakia	North America	USA
Europe	Uganda	Asia	Israel	Europe	Hungary	North America	USA
Europe	Rwanda	Asia	Jordan	Europe	Slovenia	North America	USA
Europe	Burundi	Asia	Palestine	Europe	Croatia	North America	USA
Europe	Tanzania	Asia	West Bank	Europe	Bulgaria	North America	USA
Europe	Malawi	Asia	Gaza	Europe	Greece	North America	USA
Europe	Mozambique	Asia	Jerusalem	Europe	Turkey	North America	USA
Europe	Zambia	Asia	Hebron	Europe	Iran	North America	USA
Europe	Botswana	Asia	Ramallah	Europe	Saudi Arabia	North America	USA
Europe	Lesotho	Asia	Nablus	Europe	UAE	North America	USA
Europe	Swaziland	Asia	Tulkarm	Europe	Qatar	North America	USA
Europe	Eswatini	Asia	Beit Lahm	Europe	Oman	North America	USA
Europe	Comoros	Asia	Qalqilya	Europe	Yemen	North America	USA
Europe	Madagascar	Asia	Ramallah	Europe	Somalia	North America	USA
Europe	Reunion	Asia	Beit Sahur	Europe	Ethiopia	North America	USA
Europe	Mayotte	Asia	Beit Nuba	Europe	Kenya	North America	USA
Europe	Antarctica	Asia	Beit Fajjar	Europe	Rwanda	North America	USA
Europe		Asia	Beit Marwan	Europe	Burundi	North America	USA
Europe		Asia	Beit Murtajana	Europe	Tanzania	North America	USA
Europe		Asia	Beit Umm al-Ramh	Europe	Malawi	North America	USA
Europe		Asia	Beit Umm al-Ramh	Europe	Mozambique	North America	USA
Europe		Asia	Beit Umm al-Ramh	Europe	Zambia	North America	USA
Europe		Asia	Beit Umm al-Ramh	Europe	Botswana	North America	USA
Europe		Asia	Beit Umm al-Ramh	Europe	Lesotho	North America	USA
Europe		Asia	Beit Umm al-Ramh	Europe	Swaziland	North America	USA
Europe		Asia	Beit Umm al-Ramh	Europe	Eswatini	North America	USA
Europe		Asia	Beit Umm al-Ramh	Europe	Comoros	North America	USA
Europe		Asia	Beit Umm al-Ramh	Europe	Madagascar	North America	USA
Europe		Asia	Beit Umm al-Ramh	Europe	Reunion	North America	USA
Europe		Asia	Beit Umm al-Ramh	Europe	Mayotte	North America	USA
Europe		Asia	Beit Umm al-Ramh	Europe	Antarctica	North America	USA
Europe		Asia	Beit Umm al-Ramh	Europe		North America	USA

[View More](#)

MedTech IT-Platform

Safety Score of 30 Regions

COVID-19 Interactive Mindmaps

35,000+

Data Points

Were used in this
special analytical
case study

Regional Distribution

Africa

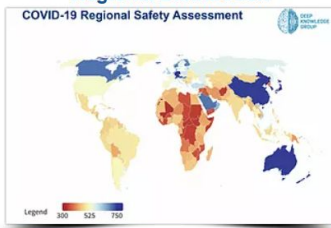
Asia & Oceania

Americas

Europe

Middle East

COVID-19 Regional Safety Assessment Regional Distribution


[View More](#)

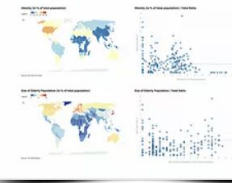
Methodology

Analytical Framework and Methodology


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Correlation Between Indicators

Correlation between ratio of fatal cases and other indicators


[View More](#)

Correlation between ratio of
fatal cases and other
indicators

Obesity

Population
Density

Diabetes
prevalence

Incidence of
tuberculosis

Current
health
expenditure

Number of
Doctors

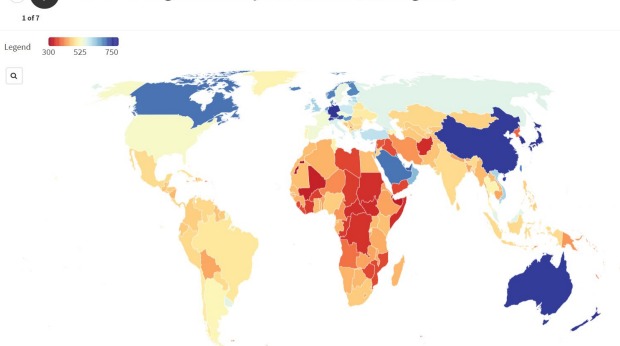
COVID-19 Regional Safety Assessment 250 Countries, Regions & Territories

140+
Parameters

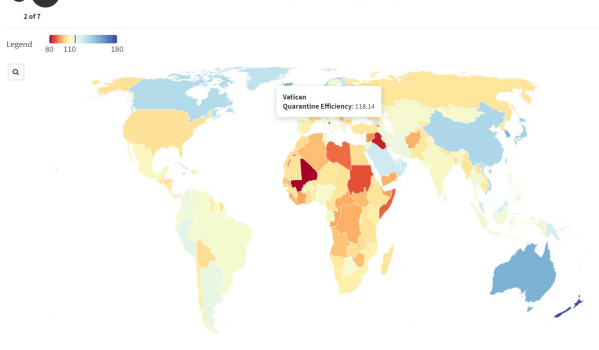
250+
Countries and Regions

35000+
Data Points

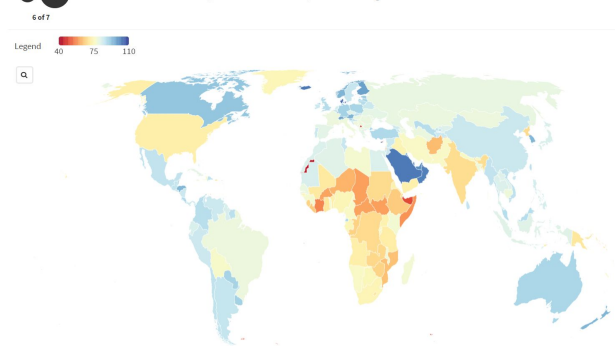
COVID-19 Regional Safety Assessment (250 Regions)



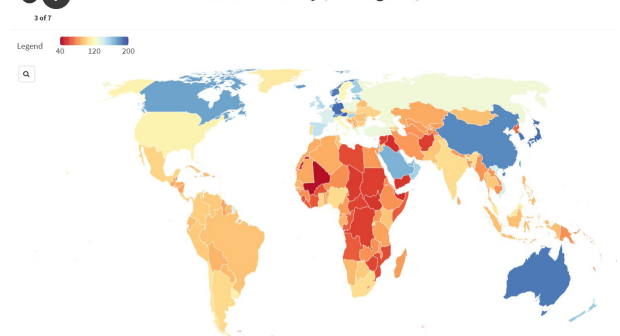
COVID-19 Quarantine Efficiency (250 Regions)



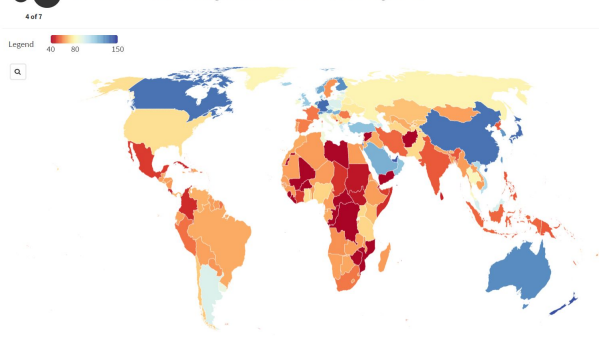
COVID-19 Country vulnerability (250 Regions)



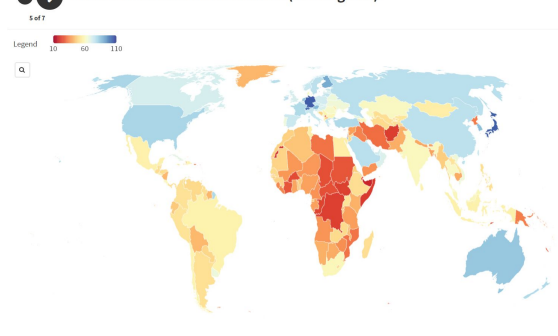
COVID-19 Government Efficiency (250 Regions)



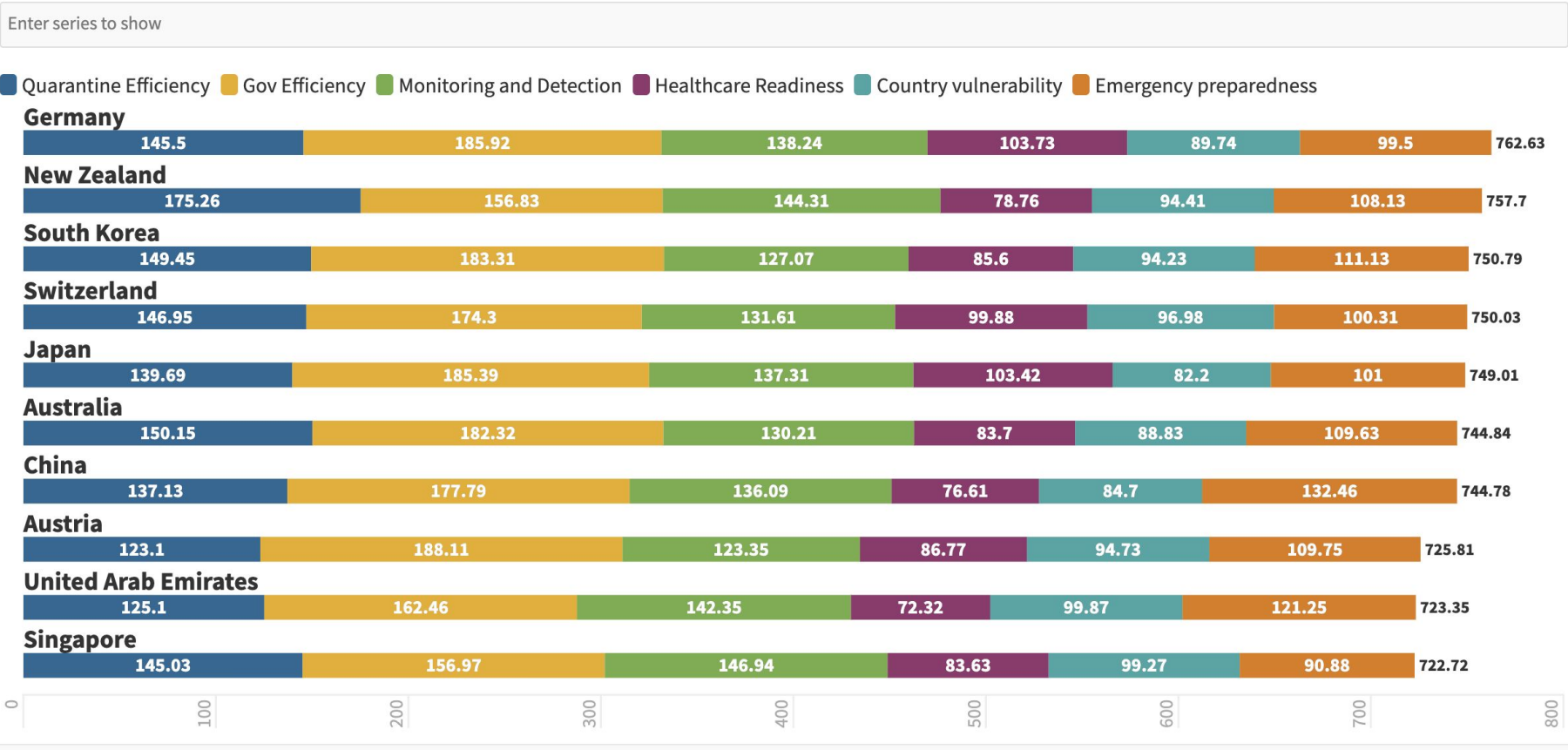
COVID-19 Monitoring and Detection (250 Regions)



COVID-19 Healthcare Readiness (250 Regions)



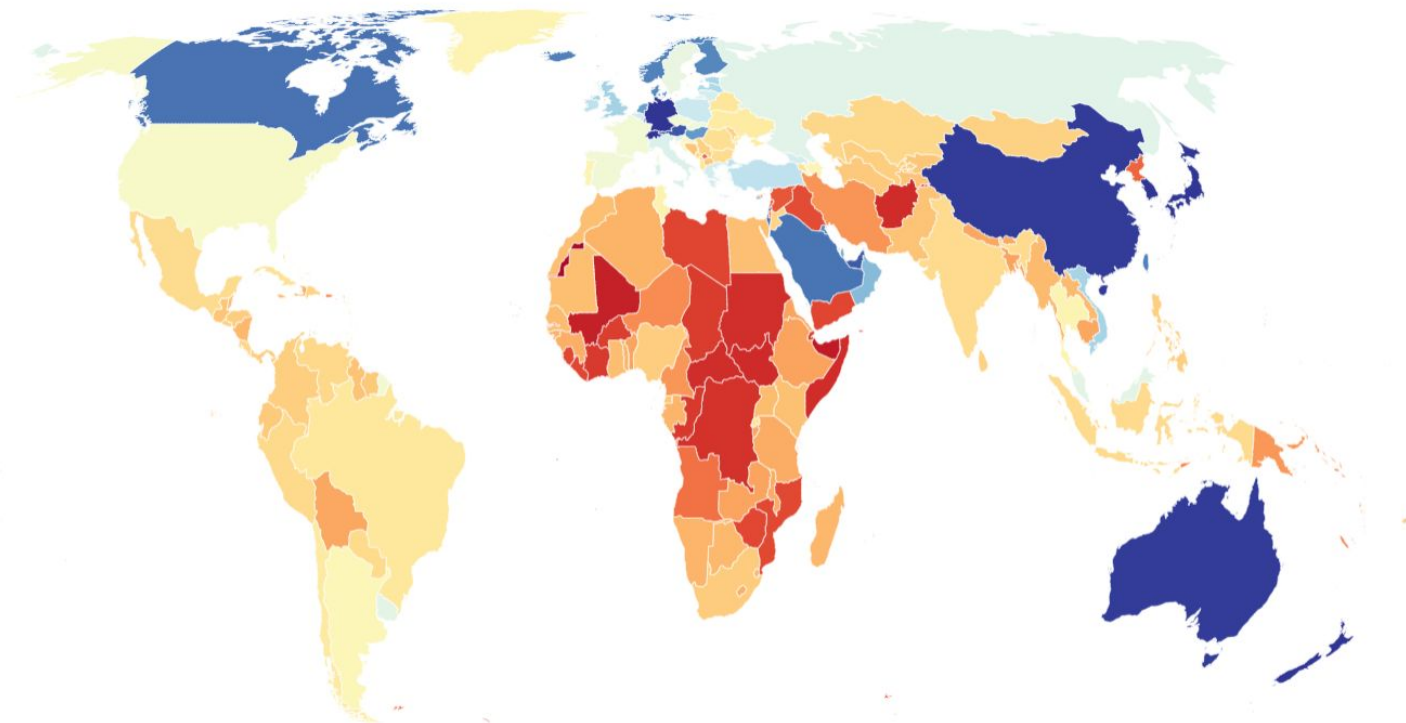
COVID-19 Regional Safety Assessment (30 Countries & Regions)





COVID-19 Regional Safety Assessment (250 Regions)

1 of 7



DER SPIEGEL

"According to a ranking, the Federal Republic is currently the safest and most stable country in Europe and even the second safest in the world. Only Israel manages the crisis better, according to the country comparison of the London Deep Knowledge Group (DKG), which is exclusively available to SPIEGEL."

[Read Article](#)**NIKKEI ASIAN REVIEW**

"The countries that will be able to provide long-lasting protection for their citizens, and stay stable, they will to some extent automatically attract financial activity," Dmitry Kaminsky, DKG's founder and managing partner, told the Nikkei Asian Review."

[Read Article](#)

"The Palestinians benefit from the Israeli assistance, since Israel was just ranked the safest country in the world during the pandemic by the Deep Knowledge Group." - Fox News says."

[Read Article](#)

DEEP KNOWLEDGE GROUP'S COVID-19 RANKINGS ON NATIONAL TV CHANNELS GLOBALLY



"Germany is the safest country in Europe, with Greece in 30th place and Cyprus in 29th place. In their research, DKG analysts took into account many different criteria, such as the validity of restrictive measures, the number of quarantine violations, the range of travel bans, the number of diagnostic tests and the availability of hospital beds."

[Read Article](#)**Esquire**

"Deep Knowledge Ventures, which is focused on health care and longevity technology, ranked 20 countries in Asia Pacific on these parameters: lowest likelihood of infection, lowest chance of mortality, and highest likelihood of recovery based on efficiency of quarantine and government management, monitoring and detection, and emergency treatment readiness."

[Read Article](#)**Forbes**

"The Deep Knowledge Group, a respected a consortium of commercial and non-profit organizations, has just published an interim review of measures to combat the COVID-19 pandemic, including a "Safety Countries Ranking" of the 40 countries that are doing the best job of protecting their citizens against coronavirus."

[Read Article](#)**RTL**

"In order to assemble the ranking, DKG analysts gathered information on several factors, including the period of lockdown and the number of confinement infractions per country. Other indicators are travel bans, coronavirus testing and how well hospitals are equipped in each country."

[Read Article](#)**WELT**

"According to Deep Knowledge Group Germany manages extremely well to protect its population against the dangers of coronavirus. In an analysis by the Hong Kong and London-based company, Germany ranks the second worldwide when it comes to providing security and dealing with the crisis."

[Read Article](#)**The Washington Times**

"A list of the world's 10 current "safest countries," compiled by the London-based Deep Knowledge Group, includes classic European-style parliamentary democracies (Israel, Australia and New Zealand), densely populated city-states (Singapore and Hong Kong) and totalitarian (China)."

[Read Article](#)**Forbes**

"Deep Knowledge Group has developed advanced analytical frameworks to analyze this data. The results are presented in the form of open source country rankings to help people and governments make informed decisions that maximize beneficial outcomes for humanity."

[Read Article](#)**DER SPIEGEL**

"Internationally, its crisis management is praised. In the country comparison of the London Deep Knowledge Group on the corona crisis, Germany is currently the safest and most stable country in Europe and the second safest in the world, with Israel as the front runner. Spahn can be celebrated and gives interviews to international broadcasters such as CNN."

[Read Article](#)**euronews.**

"According to research by Deep Knowledge Group, the COVID-19 crisis is best managed by Israel on a global scale. Germany is the second and South Korea is the third. Deep Knowledge Group, a London-based artificial intelligence and data analysis company."

[Read Article](#)**RTL****כאן 11**

INTERNATIONAL DEVELOPMENT INSTITUTIONS AND NON-GOVERNMENTAL ORGANIZATIONS



The United Nations Office for the Coordination of Humanitarian Affairs (OCHA) in the Central African Republic

OCHA in the Central African Republic retweeted about Deep Knowledge Group's COVID-19 Safety Ranking published on 26th of August 2020.



Deep Knowledge Group
@DeepTech_VC



#Covid19 #CARCrisis

#COVID_19 reduces #safety and constrains #economy and #SDGs in #LDC. 🇳🇬
#CentralAfricanRepublic is #248 of 250 countries, territories, and regions in the #Covid_Safety_Assessment. 📄 dkv.global/covid-safety-a...

@OMSCentrafrique
@UNHCR_CAR
@OCHA_CAR
@UNICEF_CAR

3 GOOD HEALTH AND WELL-BEING

17 PARTNERSHIPS FOR THE GOALS



Saudi American Public Relation Affairs Committee

SAPRAC tweeted about Deep Knowledge Group's COVID-19 Safety Ranking published on 26th of August 2020.



SAPRAC
@SapracOrg



According to Deep Knowledge Group, #SaudiArabia is the 12th safest country for #Covid19

Via @Forbes



The 100 Safest Countries For COVID-19: Updated



NOTABLE PERSONS



Hong Nam-ki

Deputy Prime Minister of South Korea

Hong Nam-ki posted about Deep Knowledge Group's COVID-19 Safety Ranking published on 26th of August 2020.



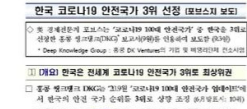
홍남기

...

'한국이 코로나19 100대 안전국가중 3위로 선정' 되었다고 미국 포브스紙(Forbes) 보도

> 미국 경제전문지 포브스紙(Forbes, 9.3일)는 홍콩 기반의 싱크탱크 DKG(Deep Knowledge Group)의 연구보고서를 인용하여 '한국이 코로나19 100대 안전국가중 3위'라고 보도했습니다.

동 보고서는 전 세계 250개국을 대상으로 코로나19와 관련된 경제, 정치, 보건 · 의료의 안전성을 평가하였습니다. 이는 방역효율성, 위기대응능력 등 6개 카테고리, 30개 지표, 140개 변수에 대해 빅데이터 기법을 활용, 분석 · 평가하여 각각의 안전점수를 산출한 것입니다. ...



TOP TIER PRESS



KBS WORLD Radio

South Korea Media

KBS WORLD Radio, Korea's flagship public international broadcaster, wrote about Deep Knowledge Group's COVID-19 Safety Ranking published on 26th of August 2020.



KBS WORLD 1000 News Topics Entertainment Programs

Domestic

Minister Praises S. Korea for Forbes Ranking as 3rd Safest Country for COVID-19

Writer: 2020-09-16 15:51:51 Update: 2020-09-16 15:56:07

< >



NOTABLE PERSONS



Karin Prien
German Minister

German Minister of Education, Science and Culture, Karin Prien, tweeted Der Spiegel Article about Deep Knowledge Group's COVID-19 Rankings published on 14th of April 2020.



Karin Prien
@PrienKarin

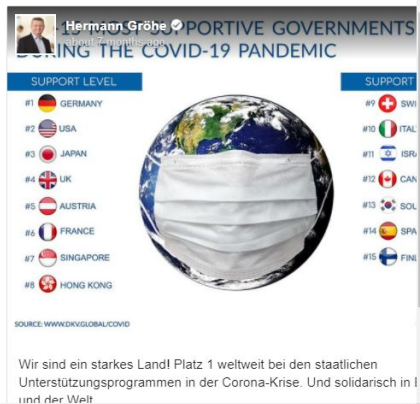
Im Ländervergleich liegt Deutschland sehr weit vorn:

"Deutschland hat im Vergleich zu den anderen Ländern derzeit das beste Sicherheits- und Stabilitätsranking in Europa und gehört auch weltweit zu den führenden Nationen in Sachen Krisenmanagement."



Hermann Gröhe
Former Minister of Health

Hermann Gröhe is a German lawyer and politician of the Christian Democratic Union who served as Minister of Health in the third cabinet of Chancellor Angela Merkel from 2013 until 2018.



GOVERNMENTAL BODIES



The Saudi Government Communication Center

Ministry of Media

The Government Communication Center is one of the vital arms of the Ministry of Information, whose main task is to strengthen and integrate the tools of government communication. The Center tweeted about Deep Knowledge Group's COVID-19 Safety Ranking published on 4th of June 2020.



تقرير دولي: المملكة في المركز الـ 17 عالميًا في مواجهة جائحة كورونا، على صعيد الأمان الصحي وفعالية الوقاية والرعاية. #التواصل_الحكومي



في المواجهة الناجحة لكورونا
المملكة في المركز 17
بين 200 دولة حول العالم

وفقًا لتقرير بحثي دولي استند إلى أرقام كبرى المنظمات الدولية

عن وزارة الإعلام



GOVERNMENTAL BODIES



Dubai Tourism

Government Office

Dubai's Department of Tourism and Commerce Marketing tweeted about Deep Knowledge Group's COVID-19 Safety Ranking published on 4th of June 2020.



#UAE ranks first in the Arab region and 11th globally in @Forbes' list "The 100 Safest Countries In The World For COVID-19" bit.ly/2XHHamx



FORMER PRESIDENT



Alain Berset
Former President of Switzerland

Alain Berset is Federal Councillor, Head of the Federal Department of Home Affairs (DFI) and former President of the Swiss Confederation. Alain Berset mentioned Deep Knowledge Group's COVID-19 Safety Ranking published on 4th of June 2020 on his Twitter account.



PRIME MINISTER



Benjamin Netanyahu
Prime Minister of Israel

Prime Minister of Israel, Benjamin Netanyahu several times tweeted about Deep Knowledge Group's COVID-19 Rankings published both on 31st of March 2020 and 14th of April 2020.



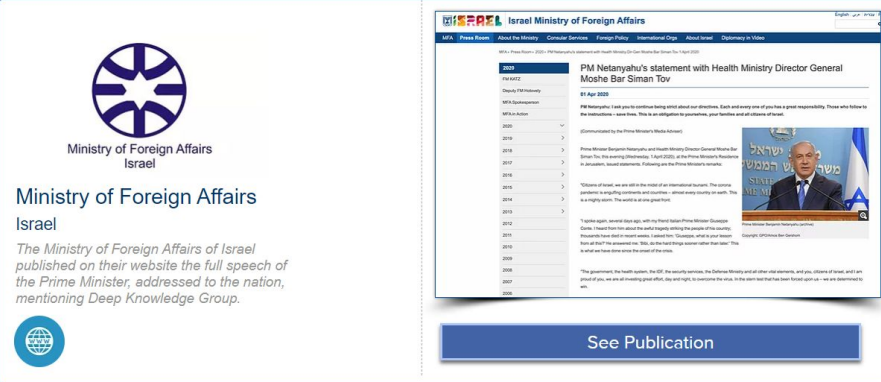
GOVERNMENTAL BODIES

The Federal Department of Foreign Affairs presents



House of Switzerland Federal Department of Foreign Affairs

House of Switzerland is managed by Presence Switzerland, the unit of the Federal Department of Foreign Affairs that is competent for the image of Switzerland abroad, and implements the strategy of the Federal Council on Switzerland's communication abroad. House of Switzerland tweeted about Deep Knowledge Group's COVID-19 Safety Ranking published on 4th of June 2020.





Brasil Pension Funds Industry

Brasil Pension Funds Industry Overview



Recent **reform** of Brasil's Pension System

306 pension funds

7.2 million people market

\$239 billion in assets

LATAM Pension Funds Industry



Populations today are relatively **youthful**

Population ageing and its impacts are fast **approaching**

Policy and industrial strategy innovation necessary **today**

LATAM Financial Industry - Major Sectors of Opportunity



LONGEVITY FINTECH

PENSIONTECH

AGE FRIENDLY BANKING

INSURTECH

INVESTMENTS IN LONGEVITY

LATAM FINTECH LANDSCAPE OVERVIEW 2020



BRASIL



MEXICO



COLOMBIA



CHILE



Mac Margolis

Last Updated on October 21 2020, 5:24 PM

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Biden's Covid-19 warning, Airbnb IPO, Saudi Aramco bonds

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Online competitors are eating into market share and WhatsApp has launched a new payments service



FT

Top Rated 2020

30 October - 20 November 2020

FINANCIALS MARCH 26, 2020 / 11:10 PM / UPDATED 8 MONTHS AGO

UPDATE 1-Brazil opens funding for fintechs through state development bank

By Carolina Mandl

3 MIN READ



(Adds monetary council decision, confirming previous story)

SAO PAULO, March 26 (Reuters) - Brazil's monetary council on Thursday said the country's fintechs will be able to obtain funding from development bank BNDES, as their usual financing channels have dried up due to coronavirus-linked market tensions.

The authority also said that fintechs will be allowed to issue credit cards as an alternative source of revenue.

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DEALS

General Atlantic Leads \$300 Million Growth Round for Brazilian Fintech Company

The new funding round for Neon Pagamentos comes less than a year after the company announced it had raised \$92 million for a previous financing round.

By Laura Cooper

Updated Sept. 1, 2020 11:00 pm ET

Growth-equity firm General Atlantic has led a \$300 million funding round for Brazilian financial technology company Neon Pagamentos SA to help foster the company's continued growth.



AG Net Lease has flexible
real estate capital solutions
for single tenant users.

Brasil is the Leading LATAM FinTech Hub



- As of 2018, reestablished itself as the FinTech authority in LATAM with over 500 startups.
- In 2020, JPMorgan-backed Brazilian FinTech company FitBank Pagamentos Eletronicos SA announced expansion to US and Mexico.

AMERICAN BANKER

LEADERS POLICY & REGULATION COMMUNITY BANKING CREDIT UNIONS MORE

FINTECH

JPMorgan-backed Brazil fintech plans to expand in U.S., Mexico

September 22, 2020, 2:49 p.m. EDT 2 Min Read

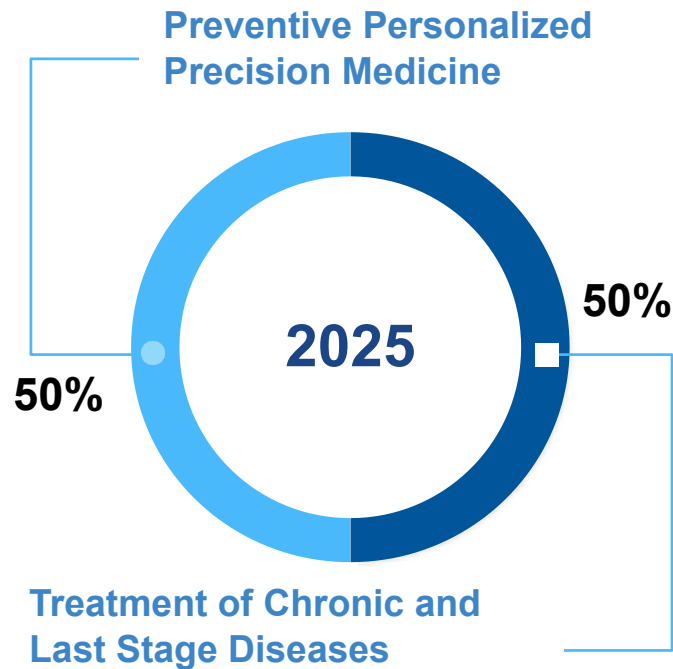
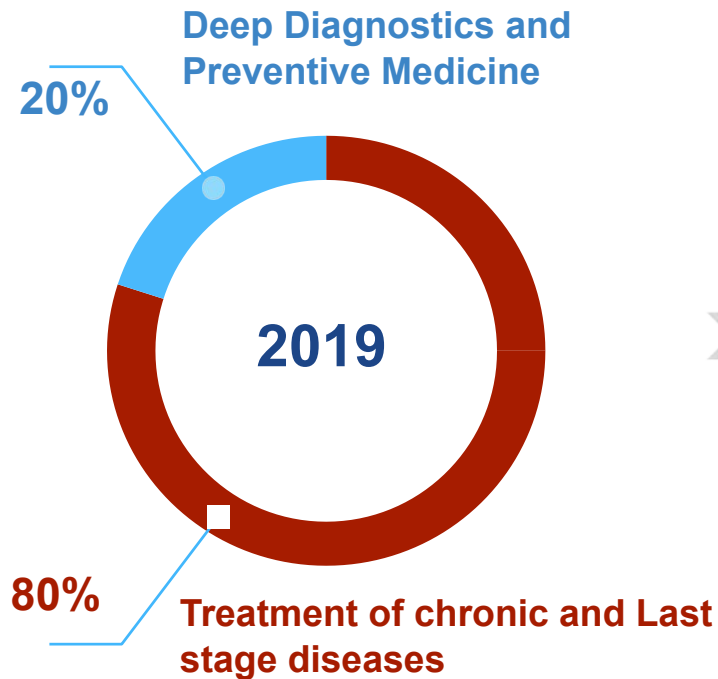


FitBank Pagamentos Eletronicos SA, a Brazilian fintech backed by JPMorgan Chase, plans to open a U.S. office in the first half of 2021.

Evolution of Longevity Industry

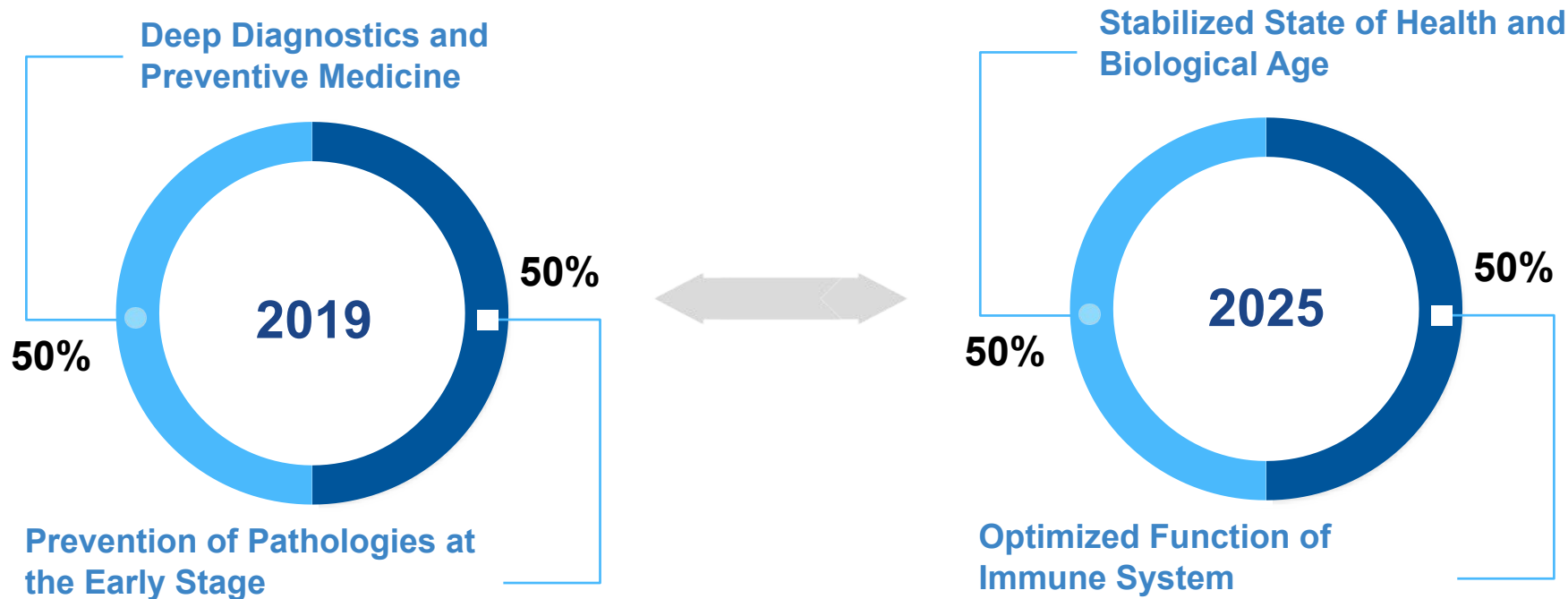


Paradigm Shift from Treatment to Prevention





The New Frontier - from Precision Medicine to Precision Health



**1 Trillion Dollar over 10 years
for Progressive Development
of the Longevity Industry**

100 Billions per year

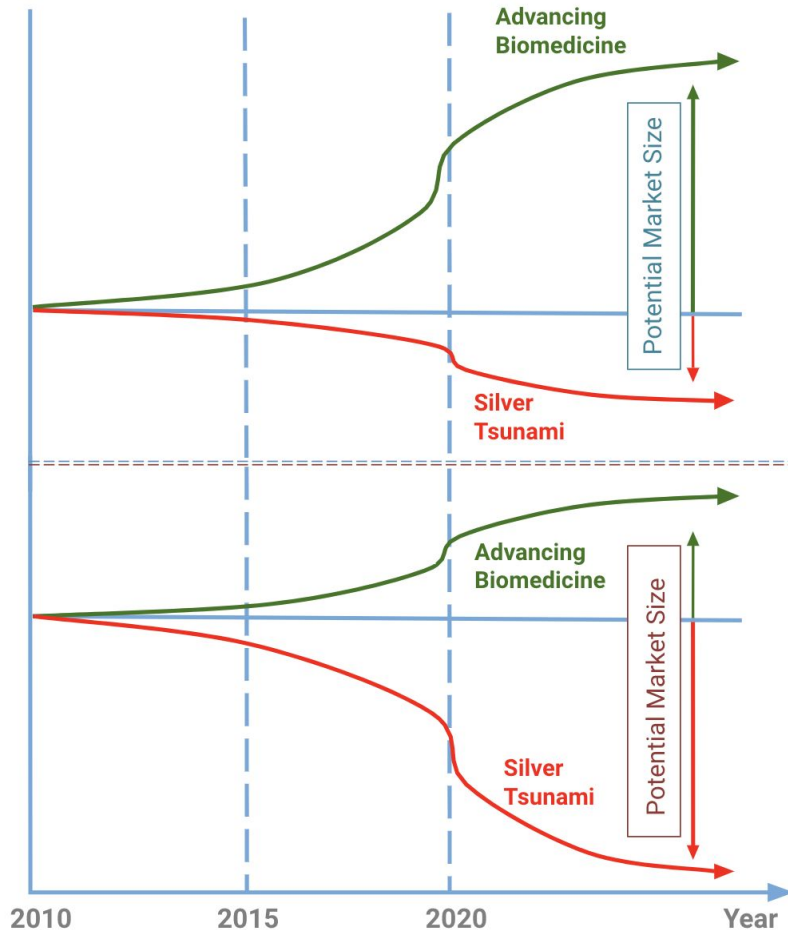
150 Billions Annual Budget on the R&D in Cancer Research

Cancer is Only 1 Age Related Specific Disease

Cancer 10 years ago was considered as almost sentence to death

Now Cancer is considered as a very complex, but treatable in most cases disease

Two Possible Scenarios of Longevity MegaTrends

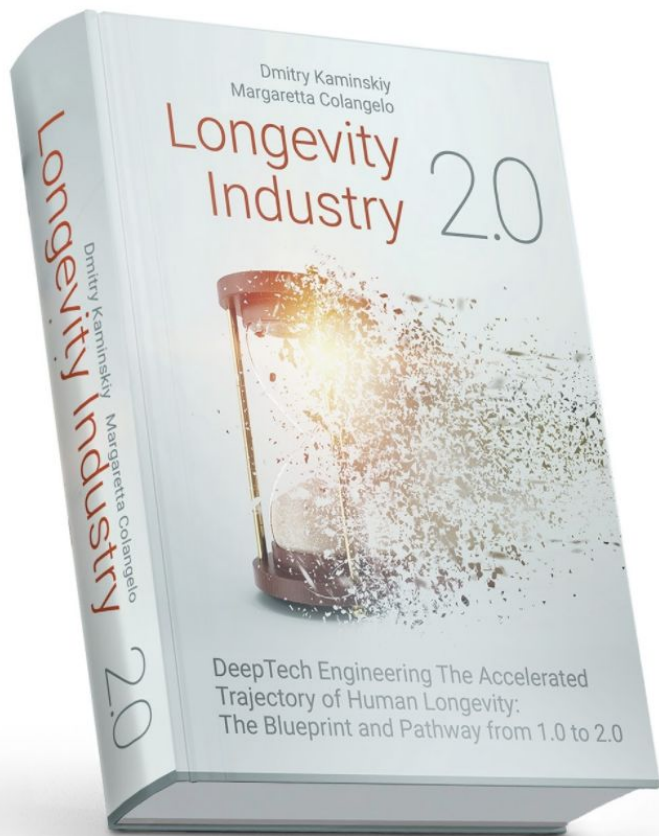
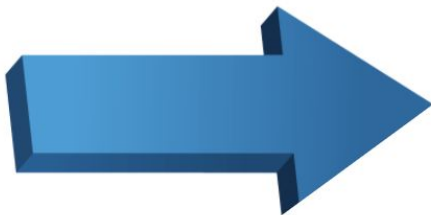
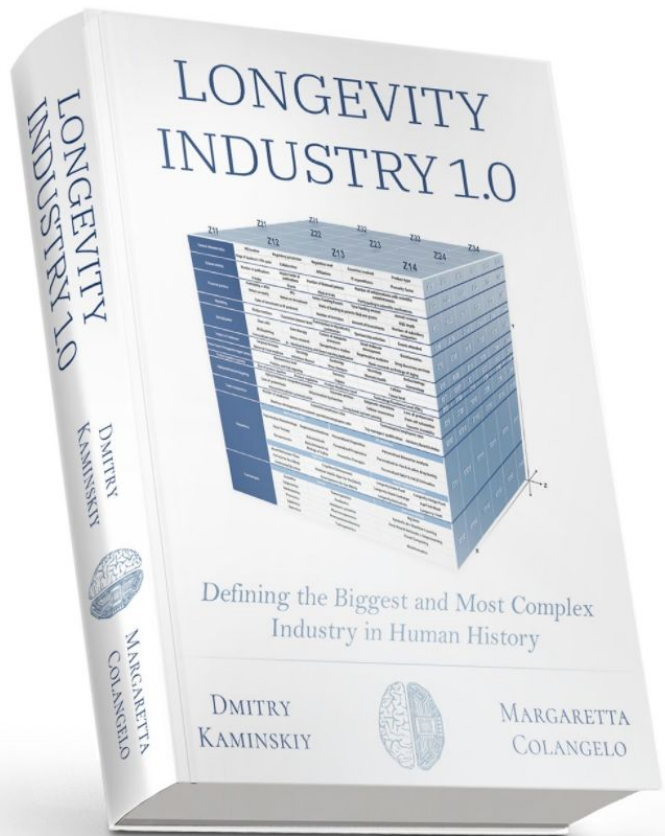


Positive Scenario

Most progressive and technocracy-driven countries will work proactively to address these issues and implement a positive scenario. Financial institutions operating in those regions should have sophisticated long-term forecasting to reformulate their business models in order to minimize the challenges and to maximize the utilization of opportunities associated with these two opposed megatrends.

Pessimistic Scenario

In reality, most countries will fail to address these challenges in advance due to a lack of will and technological capability, missing their window of opportunity to benefit from the progress in biomedicine, and to neutralize the worst effects of population ageing. Financial institutions operating in those regions should utilize pragmatic forecasting, and to adjust and optimize their business models accordingly.



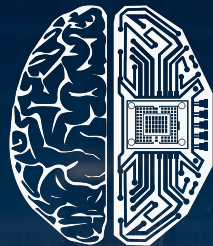
Longevity Science and Technology Should Become a Commodity

Investable, Tradable, Bankable

There Should be Created and Structured Modern Financial Instruments, Products and Derivatives

**There Should be Established New Type of Financial Institutions,
such as:**

- Longevity Bank**
- Longevity Exchange Traded Funds**
- Specialised Longevity Stock Exchange**



Deep Knowledge Group

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