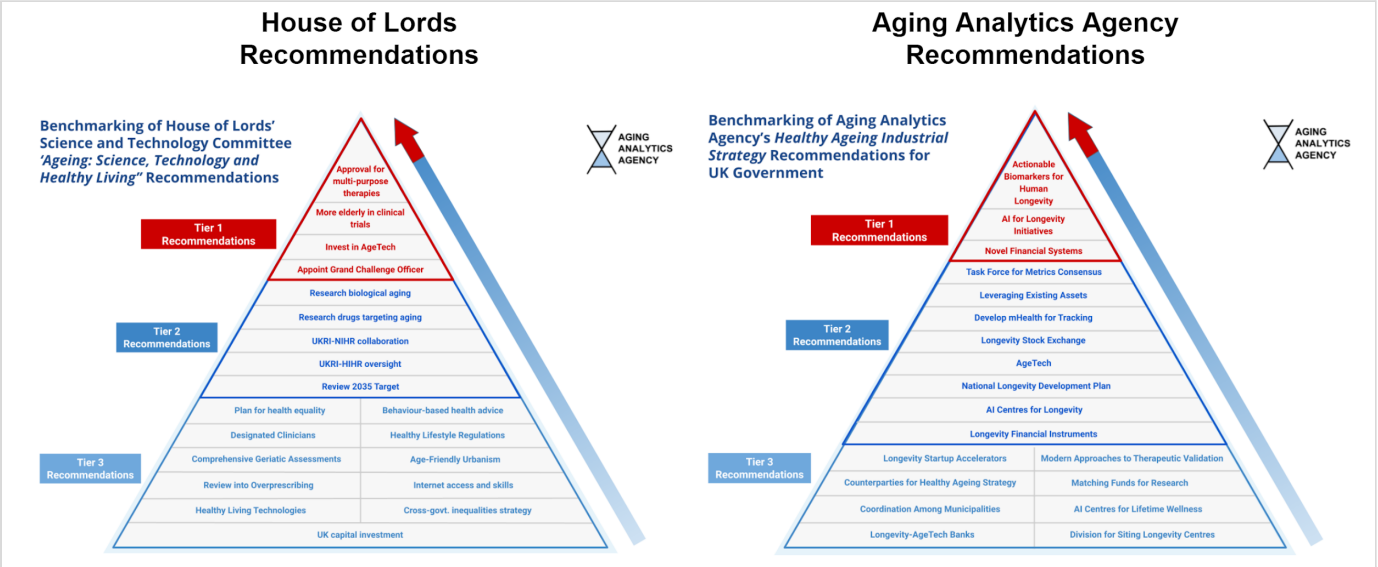
AGING ANALYTICS AGENCY

PRESS RELEASE

Aging Analytics Agency Releases Benchmarking of House of Lords Science & Technology Committee's Healthy Ageing Recommendations to UK Government

100+ Page Report and Interactive IT Platform Features Detailed Analysis, Comprehensive Commentary & Tangible Benchmarking of UK House of Lords' Science and Technology Select Committee "Ageing: Science, Technology and Healthy Living" Report



8th of April 2021, 10:00 CET, London, UK - Aging Analytics Agency Response to 'Ageing: Science, Technology and Healthy Living' Report presents a detailed analysis, commentary and benchmarking of the full set of recommendations made to the UK Government by the House of Lords Science and Technology Select Committee on how the nation can strengthen its approach to the "Healthy Ageing" Industrial Strategy Grand Challenge and maximize its likelihood of meeting the government's stated goal of adding 5 extra years of Health-Adjusted Life Expectancy (HALE) to its citizens by the year 2035.

The official response has been prepared by Aging Analytics Agency and released in the form of a 100+ page report and associated interactive IT-Platform, and is intended for use by both the UK Healthy Ageing Industrial Strategy Challenge Fund and the UK House of Lords Science and Technology Select Committee, as well as other relevant stakeholders and policy-makers, in order to inform future discussions and debates and to provide tangible, data-driven inputs and insights into both parties' ongoing planning and Industrial Strategy revisions, with the aim of optimizing the design, ambition and vision, as well as the tracking and execution, of the government's 2035 National Healthy Longevity goal.

As a Supporting Partner for the UK All-Party Parliamentary Group for Longevity, a Founding Partner of the APPG for Longevity secretariat Longevity International and an Official Member of the United Nations NGO Committee on Ageing, Aging Analytics Agency has been active in the realm of UK and international Longevity Policy and Governance for several years now, utilizing AI-driven big data analytics benchmark and profile national and local industry strategies, Longevity policy initiatives and strategies. The production of this response, detailed analysis and benchmarking project marks the most recent development in the company's continued strategic prioritization of national and international Longevity Policy and Governance analytics.

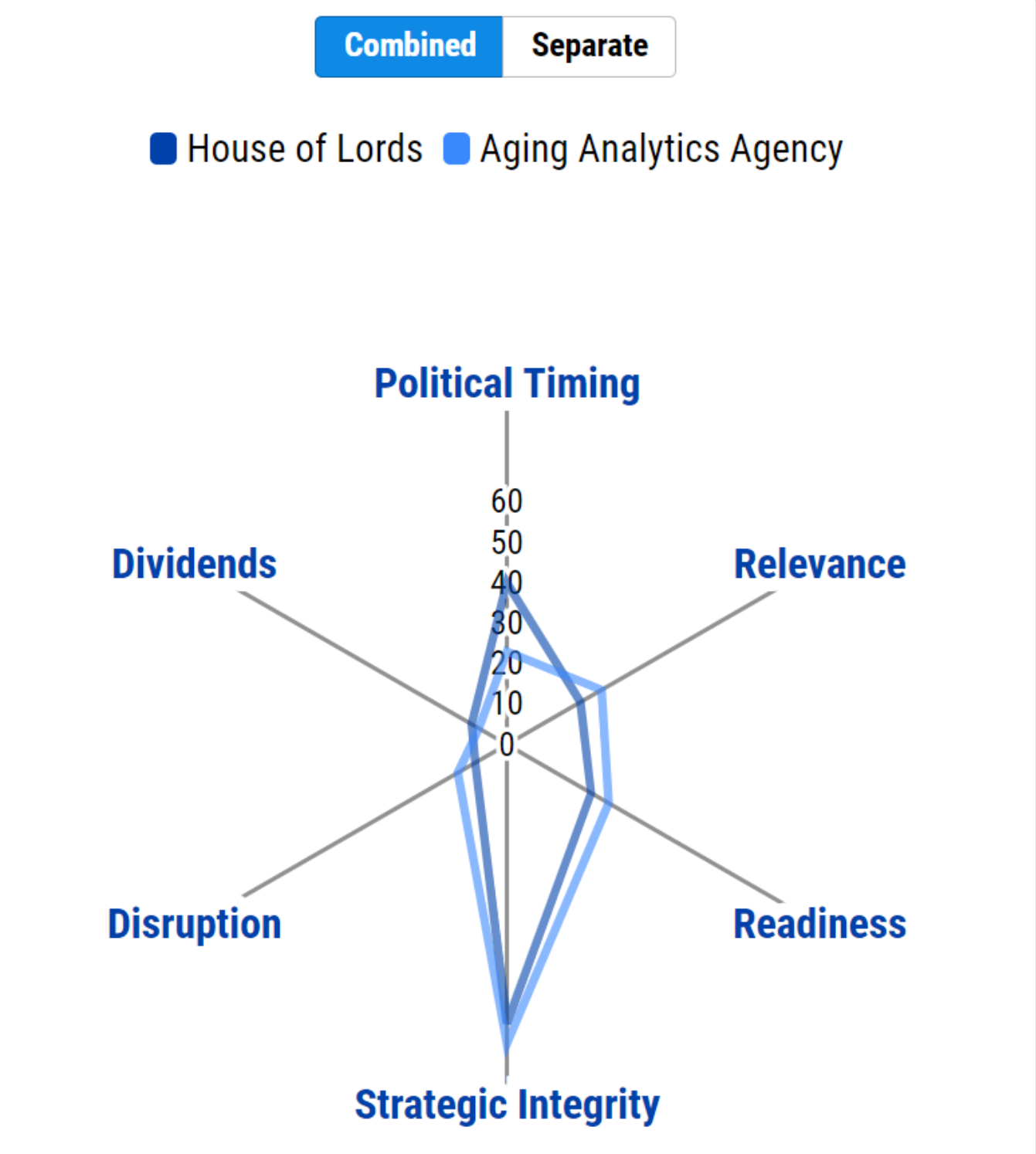
Link to Report and IT-Platform: www.aginganalytics.com/house-of-lords-response

At the beginning of 2021, the House of Lords Science and Technology Select Committee released '*Ageing: Science, Technology and Healthy Living*', a document containing a number of concerns and criticisms of the UK Government's current management of the Aging Society Grand Challenge, a part of the industrial strategy laid out in 2017 by the Department of Business, Energy and Industrial Strategy

(BEIS) and in particular the goal (stated within the strategy literature and subsequently restated by government ministers) of adding 5 years of additional Healthy Longevity to UK residents by the year 2035. Interspersed with these concerns were a total of 22 recommendations for the government on how to adjust and improve its strategy, which, the Committee argues, is not on ttrack to meet its 2035 target.

Aging Analytics Agency originally provided evidence for the House of Lords Science and Technology Select Committee's '*Ageing: Science, Technology and Healthy Living*' in 2019, during their initial call for inputs, in which the company included its own set of recommendations on how the UK government can maximize the strength, relevancy and execution of its Healthy Ageing Industrial Strategy. The 2021 official response to that report prepared by Aging Analytics Agency also presents an updated set of those initial recommendations, compared side by side to the recommendations presented in the House of Lords Science and Technology Select Committee report, and subjected to the same benchmarking framework.

Recommendations Comparative Analysis (Interactive Harmonization Graph)



Key Take-Aways and Major Conclusions from the Analysis and Benchmarking

Overall, while the House of Lords Science and Technology Select Committee's recommendations help to optimise the government's existing efforts, a greater focus is needed on identifying the paths of greatest project, market and technology readiness. At each stage it must be asked: are we utilising existing assets most effectively? If developing a clinical program, what are the biomarkers we need and why? If developing biomarkers, what is the minimum viable panel of biomarkers needed, and have they been prioritized according to both precision *and* actionability, scalability and market readiness? When identifying that panel, it should be asked: is there a potential for digital biomarkers?

As the Committee's diligent critique of government policy demonstrates, the UK has the political will to succeed in this arena. But the UK is the first democracy of its large size to attempt to increase National Healthy Longevity on such a timescale, and this makes coordination and an ability to effectively identify and allocate relevant existing assets an unprecedented challenge - albeit one that the UK has both the political commitment and the resources to face and to surpass, provided that it adopts a more sophisticated, modern, data-driven and *methodologically* ambitious approach to the management, coordination and execution of those resources, and the tracking of progress towards its goals.

The Longevity Industry has undoubtedly reached a point where politics has become one of the most important factors on which its future depends. The political, economic, and industrial capital that municipal and national governments control and dispense is larger than any other industry stake-holder, and the stakes are proportionately higher, given that they are tasked with maintaining and optimising the wellbeing and quality of life of their national population, and the size, integrity and stability of their national economy - or, in other words, the health and wealth of their nation.

The future of both the Longevity Industry and the state of the UK's National Healthy Longevity must begin with the government using its powers of coordination to emulate the experience of countries such as Singapore, which have the smallest gaps between life expectancy and HALE. Only then will there become apparent a need for biomedical innovation in order to progress past this point. If the UK government fully invests its resources and political will into this approach - utilizing its many existing strengths and resources in synergy rather than isolation, utilizing sophisticated and modern approaches for analytics and benchmarking to adopt best-case examples internationally, and using modern, market-ready technologies to both execute and track progress on its mission towards adding 5 extra years of HALE by 2035 - it may find it has not hit a speed limit after all.

There are many low hanging fruits to be found. With a more discerning approach to biomarkers and network of labs set up to formulate an actionable, easily-implementable panel of ageing biomarkers, the UK can take its first steps toward bootstrapping our way to a fully fledged Longevity Industry and make health the new wealth. At some point however, this will require a true "National Longevity Development Plan" involving cross-departmental coordination across ministries of health, social welfare, finance, economy, industry and trade, which starts with but extends beyond the UK's Healthy Ageing Industrial Strategy, and which positions the goals and mandates of that Industrial Strategy as its central concern.

This is more politically viable than it may sound at first. The general public is suffering from "covid fatigue", and are afraid that future unprepared governments may react to future pandemics with more lockdowns. Accusations of "lack of coordination" are now standard forms of political attack from opposition parties around the world. Broad public sentiment has become increasingly tolerant of seemingly extreme and expensive preventive measures to ensure the nation and the economy are never caught off guard in such a way again. As such, the government has renewed political capital to make unprecedented things happen. One central take-away from the analysis presented by this project is that the UK government has the potential to take full advantage of the various facts and advice listed in this document, and both to expand the scope of its Ageing Society Grand Challenge goals, and to accelerate and streamline its execution, and that the only fundamental roadblock in place is the methods they are using for strategy formulation, execution and progress tracking.

As documented in Aging Analytics Agency's Q2 2019 special analytical case study '*National Longevity Development Plans: Global Overview*', the UK has one of the most ambitious industrial strategies in the world - at least on paper - and the one most closely approximating a fully fledged National Longevity Development Plan. But, having drawn such an ambitious roadmap, the UK government appears too willing to continue down its chosen route "in 2nd gear". The UK has updated its vision, but has not updated its methods.

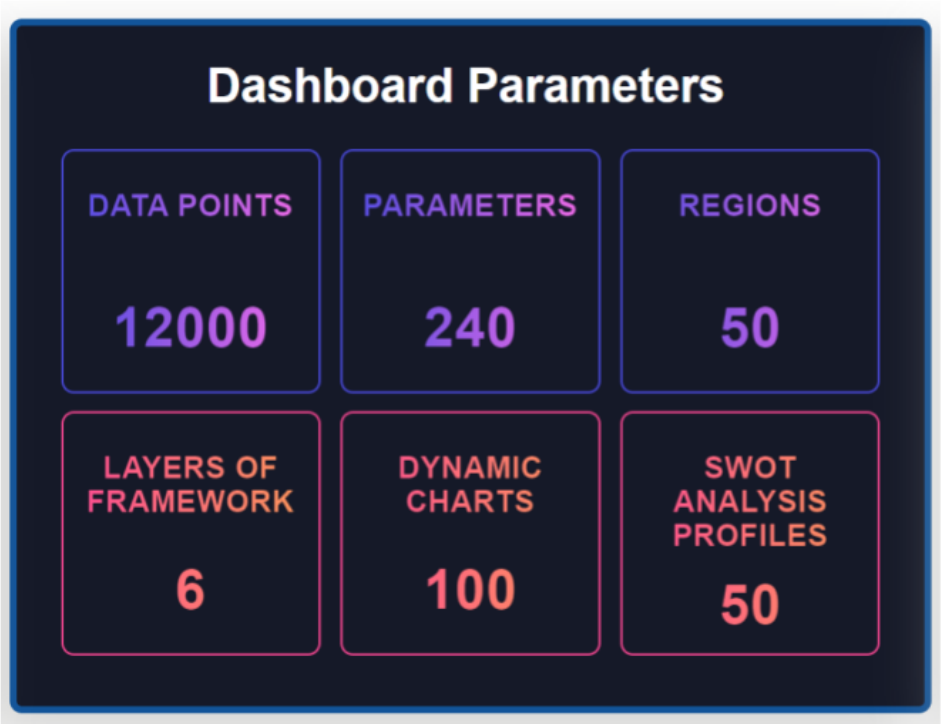
The UK government and it advisory bodies need to develop an understanding of when and how progress in one sector can help shorten the road ahead in another sector. More than brute technological innovation in one particular sector or another, what is needed is harmonisation and deeper analytics to identify best and worst case approaches, track developments and milestones. On paper, the UK Industrial Strategy *already* appears to be conceived with all the relevant synergies in mind, but this kind of thinking needs to actually be *applied in practice* to the Aging Society Grand Challenge. The UK government must give itself permission to take the obvious steps in applying this form of strategic thinking to the Ageing Society challenge before they can legitimately claim to be at any kind fundamental bottleneck or roadblock. And, above all else, the ambitions, sophistication and rigour of the tools they use to execute and track progress in their strategy needs to match the ambitions, sophistication and rigour of the strategy itself.

Brief Summary of Aging Analytics Agency Recommendations to UK Government in Response to House of Lords Science and Technology Committee's Recommendations

- Utilizing the UK's existing strengths and resources to their full extent, in synergy rather than in isolation, is key to achieving their 2035 Healthy Longevity goal.
- Prioritise funding, support and development-to-scale of market-ready approaches and solutions to alleviate the 'market readiness' problem that constitutes the largest and foremost bottleneck on progress towards the attainment of the government's 2035 goal, while simultaneously supporting the development of a more optimal industry, academic, legal, regulatory and financial infrastructure to support longer-term R&D stage projects to keep their momentum going past the 2035 goal.
- Prioritise funding, support and investment into high-impact and market-ready sectors including AgeTech, Preventive Medicine, AI for Longevity.
- Prioritise funding, support and investment into actionable biomarkers of Longevity and the development of a consensus framework of actionable, market-ready panels of biomarkers of ageing and Longevity that can be used to more precisely implement the early diagnostic tools and preventive medicine technologies and approaches that will constitute the nation's largest short-term gains in optimizing population-level HALE, and which can be used to quantitatively track progress towards the 2035 goal.
- Utilise, in a cross-sector manner, the NIH's existing prioritisation of mHealth to maximise synergy. The UK government already recognizes mHealth as a major method of preventing NCDs in the UK population. The same commitment and recognition should hold for Ageing Society.
- Seeking synergies between the UK Ageing Society and AI Industrial Strategies, in synergy rather than isolation, should be explicitly prioritized.
- Explore and leverage the UK's existing strength in banking, finance and financial services to support the development of financial sectors of the Longevity Industry so as to optimise socially inclusive financial wellness among the elderly.

The specific set of recommendations provided by Aging Analytics Agency in the report and associated IT-Platform, as well as the analytical frameworks used to conduct Longevity Policy recommendation benchmarking and comparative analysis, have been partially informed by the ongoing development of Aging Analytics Agency's [Longevity Policy and Governance Dashboard](#).

The dashboard uses Big Data analytics, AI, and deep learning algorithms for the profiling, comparative analysis, benchmarking, automated SWOT analysis and semi-automated practical recommendations for national and municipal Longevity Policy strategies and initiatives tuned to the specifics of individual territories, providing the necessary set of tools to enable national governments, individual economy, healthcare and industrial development industries, international policy organizations and other responsible stakeholders to formulate and implement policies and development strategies capable of transforming the challenge of ageing into the opportunity of Healthy Longevity for the mutual benefit of their citizens and their economy.



- Reinforcement learning for comparative Longevity Policy analysis
- Longevity policy initiative and development plan benchmarking (ranking)
- Semi-automated SWOT analysis on region-specific Longevity governance and policy projects
- Semi-automated Practical recommendations to optimize Longevity policy and governance strategy

While the project is still in development (and the dashboard currently available in alpha format), several more advanced features will be rolled out as part of the dashboard Beta release, scheduled for release in Q3-Q4 2021, including reinforcement learning for comparative Longevity Policy analysis, automated Longevity policy initiative and development plan benchmarking (ranking), automated SWOT analysis on region-specific Longevity governance and policy projects and semi-automated Practical recommendations to optimize Longevity policy and governance strategy.

As this and other projects clearly demonstrate, governments now have all required technologies and tools available to improve the health of their citizens, optimize public health and industrial strategy development and execution via the use of modern analytical approaches, and a failure to do so is entirely the result of a lack of will, responsibility and foresight, rather than sheer capacity, technology or resources. However, only those governments willing to embrace the integral use of modern technologies and deep AI-driven comparative analytics to optimize their political and industrial Longevity strategies will be likely to succeed.

The need for more sophisticated, data-driven and transparent approaches to Longevity Policy formulation, optimization, progress-tracking and execution become even more apparent considering that Longevity Policy is beginning to be embraced in the UK on a municipal level as well. Aging Analytics Agency was recently appointed by MIDAS, the inward investment arm of the Greater Manchester Combined Authority, to conduct an analytical survey and profiling of the municipality's healthy ageing assets (companies, investors, R&D Hubs, etc), to strengthen and help the local Manchester government to meet the goals set out in their Local Healthy Ageing Industrial Strategy, evidencing that the development of committed *local* Healthy Ageing Industrial Strategies in the UK as well. And while Manchester appears to be the first, it is likely that others will soon follow.

If national and municipal governments fully invest their resources and political will into this approach - utilizing their many existing strengths and resources in synergy rather than isolation, utilizing sophisticated and modern approaches for analytics and benchmarking to adopt best-case examples internationally, prioritize support and development-to-scale of maximally market-ready technologies with the greatest

short-term practical impact on society, and the use of modern technologies and more sophisticated, quantitative, data-driven analytical systems and approaches to both execute and track progress on their goals, they are likely not only to neutralize some of the most dangerous sources of economic and societal instability on the horizon, but to reap the full economic and societal benefits of transforming the challenge and deficit of ageing population into the opportunity and asset of National Healthy Longevity.

The future of Longevity Policy and Governance is bright, and Aging Analytics Agency is proud to be pushing forward developments in this arena as a major part of its overall strategic agenda for 2021 and beyond.

About Aging Analytics Agency

Aging Analytics Agency is the flagship Longevity-focused analytical subsidiary of Deep Knowledge Group, current serving as a supporting partner for the UK All-Party Parliamentary Group for Longevity, a Founding Partner of the APPG for Longevity Secretariat Longevity International, and an official member organization of the United Nations NGO Committee on Ageing. It is the only specialized analytics agency in the world that focuses exclusively on the emerging Longevity Industry. They are recognized internationally as the premier analytics agency for advanced data analysis, industry reports and next-generation infographics on the topics of Aging and Longevity. Now in its 7th year, Aging Analytics Agency has been on the frontlines of Longevity Analytics since the inception of the industry.

For press, media, partnership and consultancy inquiries, please contact **info@aginganalytics.com**