## The Art of Ageing\*

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Dmitry Kaminskiy – Margaretta Colangelo:

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

Deep Knowledge Group, 2020, p. 449.

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A Hosszúélet-ipar 1.0 – A legnagyobb és legkomplexebb iparág az emberiség

történetében

Pallas Athéné Könyvkiadó, 2023, p. 402.

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We all know that doing and not doing something are two different things. And the same holds true for doing something and doing something *right*. When someone excels in something, that is an art. And the same is true for ageing. Everyone would like to live a long, healthy life, but only few people *want* this: there is also a distinction here. *Longevity Industry 1.0: Defining the Biggest and Most Complex Industry in Human History* by *Dmitry Kaminskiy* and *Margaretta Colangelo* helps people in the latter group in finding the opportunities they can use to slow down ageing and stay healthy throughout their lives.

During my entire career in gerontology, what vexed me the most was the lack of a *complete, comprehensive overview* of research into ageing. Everyone got lost in the details, dealing with their own narrow discipline, with barely any thought for gerontology as a whole. Even I was only focused on research and theoretical gerontology, and had very little overview of the other fields in ageing. This only changed when I had to teach gerontology at the university, because I could hardly start teaching without knowing the various areas myself.

I can safely say that *Longevity Industry 1.0* is the book I was waiting for, as it summarises everything there is to know about ageing, and I was very glad that I was asked to be the book's technical editor. Of course, this is only Version 1.0, but it already outlines the correct approach to ageing and living a long life. The authors

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<sup>\*</sup> The papers in this issue contain the views of the authors which are not necessarily the same as the official views of the Magyar Nemzeti Bank.

describe their ideas and broad results in four parts, presenting everything there is to know about ageing today, such as:

- I. Longevity Mega-Complexity: Challenges, Issues, Opportunities
- II. Longevity Policy and Governance
- III. Longevity Financial Industry
- IV. Longevity Industry (Science, Technology & Biomedicine)

The first part talks about the immensely complex issue of ageing. The authors argue that it is "the biggest and most complex industry in human history", and I am inclined to agree. This is because researching gerontology is not enough in itself, the results should also be applied, and this topic has to be addressed in its full complexity rather than from a single aspect. The authors attempt to do exactly this, although they are not gerontologists themselves: Kaminskiy is an investor, while Colangelo is an expert in technological innovation. But one does not have to be a gerontologist to see that merely studying ageing will not be enough for practical implementation. The two authors founded the "Deep Knowledge Group" (https://www.dkv.global/), where ageing is examined in its full complexity in the spirit of the motto: "Knowledge is Power, Deep Knowledge is Transcendent Power".

They realised that an intricate issue can only be understood in its complexity, and the results of gerontology can only be applied in practice with an elaborate approach. Managing complexity requires the use of artificial intelligence (AI), the results of gerontology (Longevity), biotechnology (BioTech), pharmaceuticals research (Pharma), the financial technology (FinTech), space technology (SpaceTech), the differences between genders (FemTech), the available knowledge has to be processed (data science), and last but not least a field can only develop fully and flourish when accompanied by the appropriate investments (InvestTech).

The second part describes other technologies, such as GovTech and social implementation "technologies". National and intergovernmental initiatives as well as independent and municipal programmes are also discussed. Readers also learn about the top-performing countries in these technologies, as well as their ideas and strategies regarding the longevity industry. For example, the Swiss "Longevity Valley" is presented (by way of analogy with the Silicon Valley), along with the achievements of the UK and the US in the longevity industry. The authors suspect that in the future the governments that will be able to remain in power will be those that recognise the importance of the longevity industry, making it their top priority in their national agendas.

Part III discusses in detail the financial aspects of the longevity industry in particular. Like every sector, the financial sector has to identify the tremendous opportunities

offered by the longevity industry. The book describes the emerging financial trends and new financial systems that have, among other things, adapted to the needs of the elderly, the number of whom continues to increase, along with their economic weight. To ensure that a healthy, long life is coupled with prosperity, the rise of financing institutions focusing on longevity (e.g. banks, pension funds, health funds) is required, and in fact, vital. This chapter also talks about several existing examples, which could be applied by other nations, too.

Part IV is about the longevity industry itself, along with the science (gerontology) and various technologies, such as precision medicine, and the experts in the discipline are also presented by contributing professionals. One needs to give credit to the authors who have realised that the scientific topics need to be discussed by professionals. Readers also get a glimpse of the results of gerontology and receive tips for living a long life. The differences between the two genders in terms of ageing are also mentioned, as this is a factor that must be taken into account. It is understood that summarising, processing and understanding this vast amount of knowledge requires "superhuman" skills. I also found during my research that this discipline and the results were so complex and diverse that I was unable to review and integrate every result. However, this is now facilitated by the increasingly "smart" artificial intelligence (AI), which can analyse data, explore trends and make findings that may otherwise remain unidentified during research. It comes as no surprise that artificial intelligence can "spot" things that may be overlooked by humans. It is therefore crucial to use AI in researching ageing and in the longevity industry, without it we would be in the dark for a long time. The importance of artificial intelligence is illustrated by the fact that certain corporate boards already have a "spot" reserved for AI, which may even have veto rights during decisionmaking.

All in all, this is a much-needed book that fills a long-standing void. Studying this book would be vital for almost everyone who wishes to live a long, healthy life. At the same time, it is particularly useful for people in finance in preparing for the inevitable changes. Gerontologist will also find it a real treat, and we can hardly wait for the next instalment in the series: Longevity Industry 2.0 – DeepTech Engineering the Accelerated Trajectory of Human Longevity: The Blueprint and Pathway from Longevity Industry 1.0 to 2.0. We are getting closer to treating ageing as an art.