How to Adapt to Technological Change in a Futureproof Way*

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Kevin Roose: Futureproof: 9 Rules for Humans in the Age of Automation Random House, 2021, p. 256 ISBN: 978-0593133347 Hungarian translation: Jövőbiztos – Kilenc szabály az ember számára az automatizálás korában Pallas Athéné Könyvkiadó, Budapest, 2021, p. 189 ISBN: 978-963-573-049-0

Readers have recently been exposed to a deluge of books and studies on technology, digitalisation and their impact on society. However, these typically offer little practical advice about people's day-to-day lives, and how to successfully adapt to and navigate today's world dominated by information technology. In his book, *Futureproof – 9 Rules for Humans in the Age of Automation, Kevin Roose* aims to do precisely this, namely to present the characteristics of the stakeholders and institutions that have successfully adapted to technological challenges, and to provide practical advice and rules for readers about handling the challenges caused by disruptive technologies; in other words, how to become 'futureproof'.

The author of the book is a technology columnist for *The New York Times* who made it to the '30 Under 30' list of Forbes in 2015. Roose graduated from Brown University, worked as the news director for Fusion, an American television company, and has been writing for *The New York Times* since 2017 in his column 'The Shift'. His pieces mainly focus on the connections and correlations between technology, business and culture, and he regularly discusses the social impact of artificial intelligence and social media as well as the challenges posed by new, emerging technologies. He is the author of several popular books. Besides technology, he has also explored the difficulties faced by graduates working in the financial sector and the issues of university culture.

^{*} 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.

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Unlike most similarly themed books, Roose's primary focus is not on whether artificial intelligence and robots will take away jobs from people, when to expect technological singularity or how people can cooperate with machines. Instead, he tries to establish how people can live human lives in a world principally run by machines, and what those uniquely human skills are that machines are not expected to have.

The book has two main parts. In the first part, entitled 'The Machines', using expert interviews, scientific studies and other literature, the author presents the developments that are already having a profound transformative effect on society, and lists the reasons that are anticipated to accelerate these developments even more in coming years. He then reviews the characteristics of institutions that have successfully adapted to technological challenges. In the second part, called 'The Rules', Roose mainly puts forward proposals and recommendations on how to handle the challenges caused by disruptive technologies. He presents a total of nine specific recommendations that can help people become futureproof without losing their human self, while mitigating the most negative effects of modern technology. Although today's technological changes are often apparently unique, the author cites several historical examples when a stakeholder or institution was able to successfully manage the challenges posed by new technologies.

In Chapter 1, *Birth of a Suboptimist,* he lists the most important arguments of Al optimists and examines how justified claims such as 'we have been here before, and it turned out to be fine' or 'AI will make our jobs better, by doing the boring parts for us' are. The author points out that such arguments may hold true in a historical perspective, but in practice the current technological transition will entail quite serious social frictions and difficulties, just like in earlier industrial revolutions. This is partly because, due to the nature of technology, the disappearing and newly established jobs will not be in the same fields, which will inevitably lead to social conflict.

Chapter 2 is entitled *The Myth of the Robot-Proof Job*. The author uses history to illustrate that even though people often think that certain jobs are 'robot-proof', meaning that automation and algorithms will not be able to replace them even in the medium term, this is a fallacy. Historical experience and current developments actually suggest that no job is really 'robot-proof'.

In the next chapter, Roose then turns to examining *how machines replace people*. He cites numerous examples of the processes where machines actually 'invisibly' reduce the demand for human labour. This happens gradually, rather than immediately and directly, in the form of wage cuts, unfilled positions and the failure to replace workers who switched jobs.

Chapter 4, called *The Algorithmic Manager*, shows that the typical automation process at the workplace is usually assumed to involve machines that perform low-level routine tasks that are typically not very complicated. Algorithms are not considered to be able to perform much more complex tasks than that nowadays. But this is not the case, as some AI solutions can already carry out mid-level management duties.

In the last chapter of the first part, *Beware of Boring Bots*, the author argues that the robots posing the biggest threat to jobs and society are actually the automated solutions that take over 'boring' bureaucratic and back-office tasks. This is because such bots, called 'boring bots' by the author, are already good enough to take away jobs, but they are not advanced or innovative enough to create jobs in new fields.

In the second part of the book, called 'The Rules', the author formulates useful recommendations for appropriately managing the most important issues related to technological progress in people's personal lives. The author claims that by adhering to these nine 'rules', people can retain their human roles and reduce the risks caused by technological progress nowadays and in the longer run as well.

The first and eighth rules ('Be surprising, social and scarce' and 'Learn machine-age humanities') are basically about characteristics that need to be enhanced to make it difficult for machines to replace people. Spontaneity, being people-centric, meeting social needs, using unique approaches and associations, and handling rare but risky situations with a low margin of error are all skills in which humans may outperform machines in the medium term. The ability to distinguish based on different aspects, reviewing and applying a nuanced approach to ethical questions and resolving such questions as well as concentration are all skills in which humans can be better than machines for a long time to come.

The second, third and sixth rules ('Quit hustling', 'Demote your devices' and 'Treat AI like a chimp army') teach readers that it is important to keep some distance from machines in people's personal lives, whether that seems difficult or not. This is because modern technological solutions are very convenient (digital personal assistants, recommender algorithms), but they actually create the 'tyranny of convenience', and it is increasingly difficult to escape this. That is why awareness is important in such issues. In this context, the author offers practical advice related to 'digital detox'. Another important point is to have reservations regarding algorithmic solutions, regardless of how advanced they seem, as they are produced by machines, and the consequences of the problems caused by the misguided or premature application of AI will eventually be borne by humans. As the author puts it: 'If the chimp army destroys the office, [...] nobody's going to be mad at the chimps'. The fourth, fifth and ninth rules mainly focus on the role people should play in work and the areas where people should enhance their skills. The recommendations 'Leave handprints' and 'Don't be an endpoint' suggest that in the race against machines, the human touch or 'artisanship' can create added value. It has to be borne in mind that no one should become an 'endpoint', so people's jobs should not be about ensuring the connection between various systems or carrying out the instructions of an algorithm. Instead, proactivity and creativity should be emphasised. The rule 'Arm the rebels' is also connected to this, as it points out the importance of being open to, and proactively using, new innovations in the age of technological progress.

Finally, the seventh rule ('Build big nets and small webs') is about paying special attention to the relations and opportunities in society and people's own environment in the age of dynamic technological progress. Society as a whole can help those who struggle with technological changes, and at the micro level smaller 'webs' can be created so that 'if change comes to our doorstep, we'll have what we need to get by'.

Although for now technology fundamentally influences people's day-to-day lives, people typically get little practical help in successfully adapting to and navigating this 'tech-driven' and dynamic world. Therefore *Futureproof – 9 Rules for Humans in the Age of Automation by Kevin Roose* should be read by everyone who is interested in the topic and wishes to receive practical advice and constructive, pragmatic recommendations about being 'futureproof'.