BOOK REVIEW

Judul	: *Human/Machine: The Future of Our Partnership with Machines*
Penulis	: Daniel Newman/Olivier Blanchard
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In the past ten years, the mainstream media suggests that we should worry that smart machines might steal away specific jobs. If the case is about millions of jobless due to smart machines which are capable of carrying out cheaper and more efficient tasks, this has increased the list of 21st century fears. It is worth remembering that the process itself goes back a long way. I feel a little relieved after reading this book.

A short recap of human-machine partnership in history from million years back to Artificial Intelligence (AI) is presented in chapter 1. In this chapter Daniel Newman and Oliver Blanchard highlight how tasks have been taken by machines, how automation has taken low labour and tasks that require skills. However, they also highlight how new jobs, new businesses, new skills grow. Automation is viewed as a means of increasing human potential, shifting human capital from low-value to high value tasks. In the next chapter, the state of human machine-partnership is explored. The partnership is evaluated and discussed, i.e. the importance of finding common ground, from cost to benefit, and what the future will look like. Toward the end of this chapter Daniel Newman and Oliver Blanchard illustrate clearly how machines can help workers become better at adapting to change.

In Chapter 3, Daniel Newman and Olivier Blanchard, both analysts, of the futurum research, engrave some basic questions such as 'what is the next human-machine partnership? What does this mean for both businesses and workers? What does this mean to consumers? And what does this mean for the world's education and training infrastructure?'

In Chapters 4 and 5, Daniel Newman and Olivier Blanchard give propositions to businesses and workers. They start by looking at the decade of digital transformation road map, and followed by three steps as a suggestion in transforming business. They also suggested some changes in IT and HR; they call it '*a new chapter in internal collaboration*', which

stresses on keeping the balance of collaboration between AI and humans and what types of human machine partnerships should be prioritized. Hiring and training for a new class of machine-adjacent roles become an important issue in the HR and IT department. Not only should the business prepare for the next age of human machine partnerships, but also the workers. Daniel Newman and Oliver Blanchard start their exemplification by giving illustrations of future careers in the age of the smart machine. The common worries of workers in the era of smart machines or popular term 'human versus machines' are discussed in the light of embracing the smart machines. Their illustrations and analyses are based on their expertise as CEO of Broadsuite Media Group and analysts for big technology brands exploring digital transformation and how it is influencing the enterprise. After presenting the astonishing illustrations, they give advice on how to augment themselves towards becoming a more valuable worker by thinking of 'what colour will be the collars of tomorrow'. At the end of this chapter, specific advice for key job categories is presented.

In chapter 6, how educational institutions should prepare for the next age of human-machine partnerships is probed. For most educational institutions, leaving 20th-century education behind is confusing. Daniel Newman and Oliver Blanchard propose the 'radical' separation of education and job training. Ten practical considerations challenging the education sector are well illustrated;

(1) Education and job training not serving the same function.
(2) The case for rebooting education (when successive incremental improvements to an obsolete system are no longer enough).
(3) Rebuilding education from the ground up: letting form and purpose define function.
(4) Elementary education in the age of magical objects: teaching children to find balance between analogue and digital tools.
(5) Designing secondary education environments, experiences and methodologies for AI driven economy.
(6) Remote learning, mixed reality and AI: how to use digital technologies to enrich and broaden the meaning of "presence" in educational environments.
(7) Essential new subjects for the digital age.
(8) Economic considerations.
(9) Looking at the private sector for new educational and job training opportunities: culture values, methods and the future of private-public partnership.
(10) Adapting traditional educational institutions to a new world of human-machine partnership.

In Chapter 7, Daniel Newman and Oliver Blanchard give detailed illustrations of automation in the home, office and public services. There will be behaviour adjustment in the society, despite worries that some tasks will be taken by robots. Their illustration is in the light of the positive side "smart automation is about saving time and allowing humans to focus on more valuable tasks". Issues around privacy are also

discussed in this chapter. To end this burning chapter, Daniel Newman and Oliver Blanchard state that the future of human-machine partnership as assisting, enhancing and augmenting consumer choices and capabilities is a lot more exciting than worrisome.

In Chapter 8, how technology companies should prepare for the next age of human machine partnerships is put, again, in the light of positive perspective. They point out that technology companies have the duty to protect their technologies from being misused; a tool must always be designed with its user in mind. Toward the end of this chapter, they remind us that AI or smart machines are not meant to make decisions for humans.

In the final chapter, Daniel Newman and Oliver Blanchard settle their illustrations; automation is not the enemy as long as we do not make it our enemy; automation headcount potential; displacement should never mean replacement.

Getting solid backup from their investigations and views was encouraging. Daniel Newman and Olivier Blanchard also add the warning that it would be in the best interest of everyone to prepare for this new partnership with machines. The authors have put plenty of thought and time into this subject, and presented a book full of facts.

I recommend this book, especially for university students and anyone who is still in the job market. Although there is repetition of thoughts in the book, the message is clear; anyone can be a flourishing part of the future economy, and the time to prepare for it is now.