

and seeking to function like a machine. When you want to lead these types of innovations, you must use hierarchy as little as possible and give your people as much space and flexibility as you can. This is why it is so important to build unique departments or units that focus on innovation, and to make sure that a different culture will be a main characteristic inside these units. It is common to imagine cultures of organizations with different metaphors.¹⁹⁵ During the Industrial Revolution, many organizations were built like machines – to improve productivity in the organization. A main metaphor for organizations in the DE should be “flux and transformation”¹⁹⁶ – flux as one of the main drivers to take the organization successfully into the future, and transformation to successfully realize the new dreams.

EPILOGUE AND PERSONAL NOTES

“Too good to be true.” This is the answer that I gave thousands of times when I was asked how my year in Washington, D.C. was going. I had arrived with a few goals, but couldn’t have imagined that this year would change my life and be a kind of tipping point for the rest of it. The first mission for the year was to improve my English. After two weeks I decided that my American Dream was to work to make my English as good as my Hebrew. I knew that it was unrealistic, but in the U.S., everyone has his or her own American Dream, and a main pillar of American culture is that you can achieve your dreams if you work hard enough. To try to make this dream a reality, I shifted all of my life to English. I bought a laptop without Hebrew characters, changed the settings in my smartphone to English, and started to talk with my wife and my Israeli friends in English. I still have a long way to go. This book began as part of the dream, but after a few weeks the book took on a life of its own.

The National Defense University is really an amazing place that gives one the ability and the facilities to learn and build

a global network. We were 70 international students from 54 countries; there were also a few hundred American students (from the military, government, and private sectors). The concept of how we studied together helped build strong relationships, and it is clear that this networking process will be used throughout our lives. Moreover, the international students' program is, in one word: amazing! It consisted of an excellent team, a fascinating program, and educational trips all over the US.

The biggest change that "just happened" to me during this year is a new framework to look at Israel as part of the world. Throughout my life, I often found myself thinking about Israel – what we need to change, the challenges we face, and how we can overcome the challenges. For the first time, during the year at the NDU, I began to think about Israel as part of the world – which it is a really dramatic change for me.

The process of writing this book was an exciting journey. I began it without understanding the end state. I also began the journey knowing that it could lead to a dead end. The process required examining basic assumptions, renouncing old paradigms, and adopting new ones. It opened doors that did not previously exist and enabled dreaming of new things. A few times, I felt like someone who embarked on a new route, sometimes got wounded, and even lost blood (because the route is unpaved and full of thorns), and sometimes comes to a precipice, or a dead end, and has to go all the way back. Thankfully, during the difficult times, the end result usually involved exciting breakthroughs that paved the way for new paths.

During my exciting journey, I found myself talking about AI and about the idea of The Human-Machine Team every day, with different people, and in different places. These discussions greatly helped me organize my thoughts, change my concepts, and to coin my words. I need to thank hundreds of people – friends, colleagues, family, and many others. I need to apologize to the people who met me for different reasons and I talked to them only about AI. My eldest daughter, nine years old at the time, used to say to me during this journey, "Daddy, I must tell you AI is not so interesting and is not the most important thing in our lives."

The future is already here, but it is not divided equally.¹⁹⁷ This means that usually the big things that we will see over the next few years are already here, but just in specific areas and not as part of the mainstream. In the future, these unique things will be part of our everyday lives, and new inventions will be unique. After a few more years, the next one-of-a-kind invention will become the mainstream and so on. This book has attempted to take our nations and organizations years ahead. Many of the ideas that we talked about are already here, and we "just" need to take them from the periphery and deliver them to the center of the stage and to the center of organizations.

The "clash of civilizations" is a famous theory created by Samuel Huntington. He claimed that people's cultural and religious identities will be the primary source of conflict, and that future wars will be fought between cultures, and not between countries. According to Huntington, "This is not to advocate the desirability of conflicts between civilizations. It is to set

forth a descriptive hypothesis as to what the future may be like." In addition, the clash of civilizations, for him, represents a development of history. In the past, world history was mainly about the struggles between monarchs, nations, and ideologies, such as seen within Western civilization. However, after the end of the Cold War, world politics moved into a new phase, in which non-Western civilizations are no longer the exploited recipients of Western civilization, but rather have become additional actors joining the West to shape and move world history. The Digital Era is a historic perspective to describe our own era, when a big revolution is taking place. The Human-Machine Team seeks to deal with the new challenge when the Clash of Civilizations meets the Digital Era and creates "data civilizations." On the one hand, "the world is flat" and everyone can communicate with everyone else 24/7, and all over the world; on the other hand, the world is *not* flat, and every civilization lives in its own "data civilization."¹⁹⁸

The Human-Machine Team is just part of the beginning of the journey that nations and organizations must make in order to acquire the new potentials that the era of AI is bringing. Using the terminology of Thomas Kuhn's book (mentioned in the Preface), *The Structure of Scientific Revolutions*, we are a transition generation, which entails confronting numerous and complex challenges. The competition between enemies and rivals is a competition of learning. It seems to me that in the next few years, the learning competition will take place primarily in the field in which *human intelligence and artificial intelligence are merging*. Nations, organizations, and companies

that build the best Human-Machine Team – based on the concept of FAST – will have a huge advantage in the future that is already the present.

The End

Or, in fact, just the beginning of the future.