

gube određena prava. Ali, te su promjene u Hrvatskoj nužne, ako se želi očuvati društvena struktura u promijenjenim uvjetima života i rada u postkorona razdoblju.

Ako bismo pokušali sažeti najvažnije poruke ove vrijedne i zanimljive knjige, potrebno je podsjetiti kako su u velikim krizama potrebne reforme uvijek i političke prirode. U složenim kriznim uvjetima perspektive su uvijek slojevite, a rješenja jako zahtjevna. Pitom i političari i građani moraju biti svjesni kako složeni postupci donošenja odluka u demokratskom društvu stvaraju mogućnost da loše politike zamijene bolji i odgovorniji donositelji odluka, koji se neće bojati promjena. Stoga autori s pravom na str. 242 podsjećaju na dobro poznatu, a prečesto zaboravljenu ideju kako je *uza svaki potez vlade vezan neki interes – potpora skupina koje očekuju korist od promjene i otpor skupina koje očekuju štetu.*

Knjiga završava više nego vrijednim preporukama za bolju pripremu hrvatskog društva i političara za neke buduće moguće krizne uvjete. Posebno je pohvalno kako je revidirano izdanje ove publikacije prevedeno na engleski i objavljeno kao *Corona Economics: The Five Horsemen of the Apocalypse* u izdanju European Liberal Forum iz Brüsselsa te je dostupno na mrežnoj stranici <https://www.liberalforum.eu/wp-content/uploads/2021/05/Coronaeconomics-web.pdf>.

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THE FEELING ECONOMY: HOW ARTIFICIAL INTELLIGENCE IS CREATING THE ERA OF EMPATHY

Rust Roland and Huang Ming-Hui

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Introduction

“The Feeling Economy: How Artificial Intelligence Is Creating the Era of Empathy”, a book written by distinguished business scholars, professors Rust and Huang from the University of Maryland and National Taiwan University, looks at the ramifications of developing AI for the population. To help demystify the levels of intelligence required of AI, the book classifies different types of economy using three concepts: mechanical (physical), thinking, and feeling economy regarding the relationship with AI primarily, but not exclusively. The transition from goods-based economy to services-based economy and the intersection of these with the levels of intelligence are captured uniquely. Using numerous examples, the book emphasises the fundamental cognitive implications of AI growth when viewed in light of prior technological surges. This book presents a realistic roadmap that illustrates the risks and opportunities accompanying AI growth for society. The thesis of the book is that AI has been tasked with thinking, pushing humans – managers and consumers to focus on interpersonal relationships and empathy.

The Feeling Economy is an economy in which the majority of people’s work and wages are jobs or tasks that utilise their personal feelings. Easy tasks like communicating with people, building and maintaining relationships, and influencing others are often referred to as “soft” aspects of a job. These tasks are reserved for well necessari-

tates workers who have excellent emotional intelligence (EQ) and social skills. Skills such as people skills are widely regarded as technical skills in the Thinking Economy and are even more important. Therefore, in contrast to the “hard” service Thinking Economy (such as engineers), the “soft” service economy will be plentiful, and jobs that emphasise soft skills will be booming.

In the Feeling Economy, people are responsible for feeling activities, and machines are responsible for thinking activities. This could cause an upheaval in the current social order. In the Thinking Economy, groups that currently enjoy a competitive advantage may find that it declines in the Feeling Economy. Traditional socially disadvantaged groups (e.g., ethnic minorities, women) will be much more significant in the Feeling Economy.

The importance of the book

The book provides a detailed analysis of the emergence of the Feeling Economy due to AI allowing both analytical and intuitive tasks. The book discusses how management and customer interactions are affected by AI. The book covers the accelerated emergence of the Feeling Economy as a result of population density and demographics. The Feeling Economy focuses on the moral, ethical, and governance aspects and brings novelty to this insufficiently researched area that reflects its scientific and social significance.

Artificial intelligence, defined by the Oxford dictionary, refers to “the theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages”¹.

Artificial intelligence is a field of study focused on creating software or machines that replicate human intelligence’s cognitive abilities and perform tasks typically performed by humans. According to Russell and Norvig, the term “artificial intelligence” is used “when a machine mimics the cognitive functions associated with other human minds, such as learning and problem-solving”².

Artificial intelligence (AI) has a significant impact on the evolution of numerous economic and educational sectors and the overall quality of people’s lives³.

Authors

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Professor Ming-Hui Huang is a Distinguished Professor at the National Taiwan University, Taiwan. Her primary work is about using technology and strategy, their hybridisation and the significant impact that they both have on services.

The authors have done significant academic work in business, so they help companies to navigate the ethical and managerial implications of AI.

Structure of the book

Regarding the structure of the book “The Feeling Economy: How Artificial Intelligence Is Creating the Era of Empathy”, the book is written in 179 pages and organised into four parts with 16 chapters. The chapters discuss various aspects of an artificial intelligence concept and its impact

¹ Oxford Languages Artificial Intelligence definition. Retrieved from: [https://languages.oup.com/google-dictionary-en/\(10.7.2021.\)](https://languages.oup.com/google-dictionary-en/(10.7.2021.))

² Russell, S., & Norvig, P. (2003). *Artificial Intelligence: A Modern Approach*. London: Pearson.

³ Hassanien, A., Darwish, A., & El-Aska, H. (2020). *Machine Learning and Data Mining in Aerospace Technology*. Springer Nature Switzerland AG.

on business, politics, education and society. The first part of the book (after the Introduction) discusses artificial intelligence's economic components (Chapters 2, 3, 4). In contrast, the second part of the book (chapters 5-11) describes the components of the Feeling economy. The third part of the book is composed of only one chapter, the twelfth, and it discusses Moral, Ethical, and Governance Implications of AI. The remaining components organised in a specific way within the fourth part of the book (chapters 13-16), as the authors describe, are looking "forward from the Feeling Economy" and are giving future implications and conclusions on the subject of the book.

In Introduction, Chapter 1, the authors bring a preamble to the major areas that the book addresses, like strategies and development of artificial intelligence, the nature of the Feeling Economy and its impact on consumers and society and outline the book.

Chapters two, three and four describe the areas that are created by AI, the Physical, Thinking and Feeling Economy: "The Physical Economy" (Chapter 2), "The Thinking Economy" (Chapter 3), and "The Feeling Economy" (Chapter 4), demonstrating how these eras are determined by the level of development of AI. The authors find that the age of The Physical Economy flourishing in developed economies is over. Even if manufacturing does return, however, AI will perform jobs that were once occupied by humans. Even the pillars of the Physical Economy are finding ways to automate tasks with AI, eliminating the need for human workers. Despite these workers losing their jobs from the old Economy, there are even more ones out there who were just as affected by the transition to the Thinking Economy. Many questions remain unanswered about how to handle the displaced workers. Also, the authors emphasise that, at the moment, current machines are unable to work with intuition. When machines au-

tomate the analysis of data, humans should put more emphasis on intuitive thought.

The Feeling Economy is closely described within chapters five to eleven. The "Age of Emoji" explained in Chapter 5 describes the emergence of an emotionally charged era and states that Feeling Economy represents "an era in which emotion is prized". In Chapter 6, called "Jobs that Feel", the authors discuss how human jobs are changing within the influence of information technology, and conclude that the future lies in teamwork (AI and HI), whereas artificial intelligence will coordinate with human intelligence in a way that AI will act as the technical expert while human beings take on the role of people expert.

The book recognises the role of the women and in the chapter entitled "The Era of Women" (Chapter 7) the authors forecast a period of elevated status for women in the Feeling Economy. In contrast, "Politics that Feel" (Chapter 8) examines how people choose politicians in the Feeling Economy and the opportunities that Feeling Economy provides for populist politicians.

Chapter 9, entitled "How Education Must Change", discusses how the Feeling Economy will transform education, suggesting that education must transform from the form of its existence in Physical Economy and Thinking Economy in order to evolve to a new, improved form with a particular importance of continuing education, group work and focus on communication skills. The new concept, in a way, is diminishing the significance of STEM skills (science, technology, engineering, and mathematics).

AI for Consumers" (Chapter 10) demonstrates how AI is transforming the lives of peoples' everyday lives and points out that consumers can have a machine-to-machine connection when it comes to addressing a business entity (e.g., buying products online through a website or app). Since there is

little emotional connection made between humans and this method, in order to match the consumer's emotional reaction, customer service representatives must become even more empathetic, which increases the emotional focus of the customer.

Chapter 11, "Management in the Feeling Economy", demonstrates how management will need to adapt to the new environment, while Chapter 12, "Moral, Ethical, and Governance Implications," discusses how society might adapt to the Feeling Economy's dislocations, such as job losses, wealth inequality, human atrophy, privacy concerns and like.

Chapters 13 to 16 look ahead from the perspective of the Feeling Economy. Chapter 13 discusses research efforts and early attempts to use artificial intelligence to enhance creativity. In contrast, Chapter 14, "AI for Feeling", summarises research aimed at developing AI capable of reliably recognising and responding to emotion.

Chapter 15, "Beyond the Feeling Economy", explores the concept of the singularity at the point at which AI outperforms humans in all domains (physical, cognitive and affective) and considers both optimistic and apocalyptic outcomes. Finally, Chapter 16, "Conclusions," brings the book to a close.

Concluding remarks

As the authors have stated, the book's central thesis is: "As AI assumes more thinking tasks, humans will emphasise feeling", and the theory and empirical research they have conducted provide initial support for this theory. According to the authors, by 2036 workers will have a higher importance for feeling tasks than for thinking tasks. Even in technical jobs, the authors are forecasting an increase in the importance of feeling tasks.

Innovative technologies are already unpending our world, with much of the cognition and decision-making previously re-

served for humans becoming the province of artificial intelligence. However, that will be the beginning. This will bring about a "Feeling Economy", where everyone benefits from the fact that AI will be thinking, and humans will be "doing the feeling".

The Feeling Economy is a specific framework for thinking about how AI will change not only the Economy, but also everyday life. The book is presented in an easy-to-read and fast-paced manner. The authors make predictions about how artificial intelligence will transform jobs, education, politics, governance, and ethics. Information that is timely and easily accessible has been seasoned with provocative opinions and it aims to help the reader develop new thoughts about their hopes, dreams, and fears about a future where AI is implemented.

The idea of the book presented is that artificial intelligence is taking on increasing amounts of mechanical and cognitive tasks, leaving humans to concentrate on those that require feeling. The authors consider that this will drastically alter what people do for a living, how they lead their personal lives, and who they are. It will be tough for companies, consumers, and governments alike to deal with this massive shift. People of all socioeconomic statuses must all prepare for the Feeling Economy as well.

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