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THE **END OF EMPLOYMENT** AND THE
RISE OF CROWD-BASED CAPITALISM

ARUN SUNDARARAJAN

THE SHARING ECONOMY

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Sharing isn't new. Giving someone a ride, having a guest in your spare room, running errands for someone, participating in a supper club—these are not revolutionary concepts. What is new, in the “sharing economy,” is that you are not helping a friend for free; you are providing these services to a stranger for money. In this book, Arun Sundararajan, an expert on the sharing economy, explains the transition to what he describes as “crowd-based capitalism”—a new way of organizing economic activity that may supplant the traditional corporate-centered model. Drawing on extensive research and numerous real-world examples, Sundararajan explains the basics of crowd-based capitalism: he describes the intriguing mix of “gift” and “market” in its transactions, demystifies emerging blockchain technologies, and clarifies the dizzying array of emerging on-demand platforms. He considers how this new paradigm changes economic growth and the future of work, suggesting possible new directions for self-regulatory organizations, labor law, and funding our social safety net.

Find more information at <https://mitpress.mit.edu/sharing-economy>.

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ARUN SUNDARARAJAN is a Professor at New York University's Stern School of Business. A recognized authority on the sharing economy, he has published op-eds and commentary in such publications as *Time*, the *New Yorker*, the *New York Times*, *Wired*, *Le Monde*, *Harvard Business Review*, and the *Financial Times*.

“Sundararajan offers an insightful guide to the forces shaping our economy today—and tomorrow.”

HAL VARIAN, Chief Economist, Google

“[Sundararajan's] case for optimism is compelling in large part because it comes from a business-school wonk and not a ‘sharing!’ proselytizer devoted to the literal meaning of the word.”

The Washington Post

“Fortunes have already been made in the sharing economy, yet the biggest impact on business and our daily lives is yet to come. There's no better guide to this transformation than Arun Sundararajan's book.” ERIK BRYNJOLFSSON, coauthor of *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*

“Sundararajan has taken all the loose talk about the sharing economy and given it a rigorous and readable treatment.” CLAY SHIRKY, author of *Cognitive Surplus* and *Here Comes Everybody*

“This smartphone-enabled, venture capital-fueled phenomenon cries out for a biography, a taxonomy, and an impact analysis. In *The Sharing Economy*, Sundararajan supplies all of those things.” *strategy + business*

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THE SHARING ECONOMY



The Sharing Economy

The End of Employment and the Rise of Crowd-Based Capitalism

Arun Sundararajan

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The Sharing Economy

For my parents, who taught me how to write; my sister Anu, who showed me, through her prose and poetry, how it's done well; and my dearest little girl Maya, who inspires me every day to imagine and create a better future.

Author's Note and Acknowledgments

This is my first book, so I am tempted to reach far back into the past to acknowledge all of the people who have shaped the thinking it contains. To ensure that this note does not rival a book chapter in its length, I am forced to focus on a select few. If I have inadvertently failed to include you, and you know me, then you know that I'm both forgetful and grateful. Thank you. (And visit <http://oz.stern.nyu.edu/thanksforsharing> where I will continue to update this note.)

I see the changes we label “the sharing economy” as the current phase of an ongoing evolution of the economy and society that is shaped in part by digital technologies. This is the topic of my program of research and scholarship at NYU. When I began investigating this evolution many years ago, two colleagues—Vasant Dhar and Roy Radner—were especially important intellectual influences and mentors. As I have continued to study the economics and sociology of digital technologies over the past decade, I have benefitted immensely from conversations with a number of current and former colleagues at NYU, including Ulrich Baer, David Backus, Yannis Bakos, Luis Cabral, Rohit Deo, Cynthia Franklin, Scott Galloway, Anindya Ghose, Peter Henry, John Horton, Joanne Hvala, Panos Ipeirotis, Srikanth Jagabathula, Sarah Labowitz, Natalia Levina, Hila Lifshitz-Assaf, Geeta Menon, Elizabeth Morrison, Beth Murray, Rika Nazem, Jessica Neville, Mandy Osborne, Patrick Perry, Michael Posner, Foster Provost, Paul Romer, Clay Shirky, Kristen Sosulski, Raghu Sundaram, Prasanna Tambe, Jamie Tobias, Alexander Tuzhilin, Mike Uretsky, Timothy Van Zandt, Niobe Way, Lawrence White, Norman White, Luke Williams, and Eitan Zemel. I am also eternally grateful to Sharon Kim and Shirley Lau, who inject some semblance of organization and structure into my professional life, and without whom I would not have managed to create the time to write this book.

I have had hundreds of conversations with executives, activists, policy makers, and thinkers connected to the sharing economy. I recount many

of these in the book, and am particularly happy that Jennifer Billock, Brian Chesky, Antonin Leonard, Adam Ludwin, Frédéric Mazella, Benjamin Tincq, and John Zimmer took the time to sit down and speak to me specifically in connection with its writing. Numerous other fascinating conversations have helped me fit together the pieces of the complex puzzle that is the sharing economy. Some that were quite influential early on were with Odile Beniflah, Lauren Capelin, Shelby Clark, Sunil Paul, Jessica Scorpio, Erica Swallow, Molly Turner, and Hal Varian. Some of the others that were especially notable and/or frequent were with Bhavish Aggarwal, Alisha Ali, Douglas Atkin, Michel Avital, Emily Badger, Mara Balestrini, Yochai Benkler, Rachel Botsman, danah boyd, Nathan Blecharczyk, Jennifer Bradley, Erik Brynjolfsson, Valentina Carbone, Emily Castor, David Chiu, Marc-David Chokrun, Sonal Choksi, Peter Coles, Chip Conley, Ariane Conrad, Arnab Das, Cristian Fleming (and his team at the Public Society), Richard Florida, Natalie Foster, Justin Fox, Liz Gannes, Lisa Gansky, Marina Gorbis, Neal Gorenflo, Alison Griswold, Vijay Gurbaxani, Tanner Hackett, Aassia Haroon Haq, Scott Heiferman, Jeremy Heimans, Sara Horowitz, Sam Hodges, Milicent Johnson, Noah Karesh, Stephane Kasriel, Sarah Kessler, David Kirkpatrick, Marjo Koivisto, Karim Lakhani, Kevin Laws, Michael Luca, Benita Matofska, Andrew McAfee, Ryan McKillen, Lesa Mitchell, Amy Nelson, Jeff Nickerson, Melissa O'Young, Janelle Orsi, Jeremy Osborn, Jeremiah Owyang (to whom I owe a special debt of gratitude for his remarkably selfless sharing of ideas and data), Wrede Petersmeyer, Ai-Jen Poo, Andrew Rasiej, Simone Ross, Anita Roth, Chelsea Rustrum, Carolyn Said, Marcela Sapone, Marie Schneegans, Trebor Scholz, Swati Sharma, Clay Shirky, Dane Stangler, Alex Stephany, James Surowiecki, Jason Tanz, Marie Ternes, Henry Timms, Viv Wang, Cheng Wei, Adam Werbach, Jamie Wong, Caroline Woolard, and numerous members of the OuiShare collective (including Flore Berlingen, Julie Braka, Albert Cañigual, Simone Cicero, Javier Creus, Arthur De Grave, Elena Denaro, Diana Fillipova, Marguerite Grandjean, Asmaa Guedira, Ana Manzanedo, Bernie Mitchell, Edwin Mootoosamy, Ruhi Shamim, Maeva Tordo and especially Francesca Pick).

I have also benefitted from numerous focused discussions about specific topic areas. These include conversations with: Neha Gondal about the sociology of the sharing economy; Ravi Bapna, Verena Butt d'Espous, Juan Cartagena, Chris Dellarocas, Alok Gupta, and Sarah Rice about trust; Paul Daugherty, Peter Evans, Geoffrey Parker, Anand Shah, Marshall Van Alstyne, and Bruce Weinelt about platforms; Brad Burnham, Kanyi Maqubela, Simon Rothman, Craig Shapiro, and Albert Wenger

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Although I have been captivated by the sharing economy for many years now, the emergence of this book was catalyzed by a series of email messages that my editor at the MIT Press, Emily Taber, sent me in April 2015. She was simply amazing in the months that followed as I rapidly wrote the first two drafts of the book. If you ever write a first book, I hope you are fortunate enough to have an editor like Emily. Through this process, I have also been privileged to benefit from the sage advice of the legendary literary agent Raphael Sagalyn and publicity guru Rimjhim Dey. I am grateful to numerous others at the MIT Press, including Marcy Ross (for her infinite patience as I constantly shifted revision deadlines), Jane Macdonald, and Colleen Lanick. Mary Bagg was an amazing copy-editor, and Kate Eichhorn helped me develop the flow of the book early in its evolution. I am also thankful to my wonderful friend Rakhi Varma for agreeing to undertake the hazardous mission of reading and giving me feedback on my first draft of this book, and to four anonymous book referees for their comments.

As I scripted and refined this book over the summer and fall of 2015, my (now twelve-year old) daughter Maya frequently had to deal with the inconvenience of a distracted father with an unusually busy work schedule, a situation she accepted with a quiet understanding well beyond her years. As the pages of content emerged, she shared in the excitement of creating something new, and marveled at a project whose scale could be quantified in the tens of thousands of words. She motivates me to imagine, and aspire to fashion, a better future. I hope the ideas in this book, in some small way, will help us find this future for her generation. (Meanwhile, she is pleased that I am finally done writing.)

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