Foreword

This working paper series represents original research and case studies undertaken as part of the Entrepreneurship and Policy Initiative at Columbia University’s School of International and Public Affairs (SIPA). Launched in 2016 with funding from the Nasdaq Educational Foundation, the Entrepreneurship and Policy Initiative engages scholars, entrepreneurs, and leaders from the public and private sectors to advance the study of innovation, digital technology, and public policy. It is also part of SIPA’s broader Tech & Policy Initiative, which explores the intersection of digital technology, data, and public policy, with a particular focus on research, training, and convening in the areas of cybersecurity, internet governance, and the digital economy.

From the SIPA Dean’s Challenge Grant for graduate student ventures to new academic research and major convening, SIPA is a thriving place for entrepreneurship and the study of digital technology. The Entrepreneurship & Policy Initiative has supported research in three areas: Cities & Innovation; Digital Innovation & Entrepreneurial Solutions; and Emerging Global Digital Policy. This Initiative draws on faculty leadership from SIPA, Columbia Business School, and the University-wide Columbia Entrepreneurship program.

SIPA has also hosted high-level events, discussions, and expert workshops on issues such as the future of entrepreneurship in heartland America (featuring Steve Case, CEO of Revolution); the implication of Amazon’s proposed headquarters in New York City; how cities spur civic technology (co-hosted with Sidewalk Labs), and more. We have convened workshops on civic technology in urban governance and a co-hosted a workshop with McKinsey & Company that examined the evolving policy frameworks around The Internet of Things (IoT) in Brazil and China. SIPA also has supported several fellows and entrepreneurs in residence, new courses and research.

In brief, the enclosed collection of working papers and case studies consider:

**Cities and Innovation:** Hollie Russon Gilman, SIPA Fellow on Technology & Policy and Lecturer, writes about the New York City entrepreneurship ecosystem and how the creation of Silicon Alley in New York is distinct from other similar ecosystems such as Silicon Valley. Euan Robertson, Chief Operating Officer at the Simons Foundation and former Chief Operating Officer of the New York City Economic Development Corporation (NYCEDC), authors a case study on how challenge competitions foster the growth of entrepreneurship in cities.

**Digital Innovation & Entrepreneurial Solutions:** Sarah Holloway, SIPA Lecturer and Director, Management Specialization, looks at the Global Education Technology landscape and how technology is being championed in the education landscape. Anya Schiffrin, SIPA Lecturer and Director Technology, Media, and Communications specialization, writes on the range of startups seeking to address the problem of online disinformation, how businesses target hate speech and disinformation, and the role for government in curtailing certain speech online. Eli Noam, Director, Columbia Institute for Tele-Information and Professor of Finance and Economics at Columbia Business School authors a paper on the macro-economics of cryptocurrencies and argues for a balance between encouraging entrepreneurialism and bolstering institutions and monetary balance. Leon Perlman, founder and director of the Digital Financial Services Observatory at the Columbia Institute for Tele-Information, shares his views on regulation of the financial components of the crypto-economy.
Emerging Global Digital Policy: Arvind Panagariya, SIPA Professor of Economics and the Jagdish Bhagwati Professor of Indian Political Economy, writes on India’s digital ID system, Aadhaar, and its application across the public, private and non-profit sector. SIPA Visiting Professor Ronaldo Lemos from the Institute for Technology & Society in Rio de Janeiro provides a comprehensive analysis on the opportunities for Brazil associated with developing a robust policy framework for the Internet of Things. Finally, case writer Kirsten Lundberg explores Shenzhen, China, and the role of government in creating an entrepreneurial ecosystem that has fostered policies to enable thriving tech-focused small to mid-size businesses.

Our hope is that the enclosed papers, and SIPA’s Entrepreneurship and Policy Initiative more broadly, will continue to expand understanding of major challenges and opportunities associated with digital technology and entrepreneurship, while preparing the next generation to navigate an increasingly complex, interconnected, and digital world.

Merit E. Janow

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In 2016, the Nasdaq Educational Foundation awarded the Columbia University School of International and Public Affairs (SIPA) a multi-year grant to support initiatives at the intersection of digital entrepreneurship and public policy. Over the past three years, SIPA has undertaken new research, introduced new pedagogy, launched student venture competitions, and convened policy forums that have engaged scholars across Columbia University as well as entrepreneurs and leaders from both the public and private sectors. New research has covered three broad areas: Cities & Innovation; Digital Innovation & Entrepreneurial Solutions; and Emerging Global Digital Policy. Specific topics have included global education technology; cryptocurrencies and the new technologies of money; the urban innovation environment, with a focus on New York City; government measures to support the digital economy in Brazil, Shenzhen, China, and India; and entrepreneurship focused on addressing misinformation.

With special thanks to the Nasdaq Educational Foundation for its support of SIPA's Entrepreneurship and Policy Initiative.
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