



Columbia Institute
for Tele-Information



COLUMBIA | SIPA
School of International and Public Affairs

The Future of Employment in the Digital Economy

September 7th
2018

SIPA 1501

2:00pm-4:30pm

Background

A critical issue facing the US economy is the transformative effect of the internet on the nature of work and employment. There is growth, innovation, productivity rise, and price reductions. But there is also offshoring, disruption, automation, squeeze of retailing, and others. These shifts have been exacerbated by new technologies and have affected the 2016 US Presidential campaign.

This conference, “The Future of Employment in the Digital Economy” deals with those topics. It is a joint event of the Columbia Business School and SIPA. Its starting point is the unveiling of a new book, *Digitized Labor: The Impact of the Internet on Employment*, edited by Lorenzo Pupillo (Centre for European Policy Studies, Brussels), Leonard Waverman (Dean, DeGroote School of Business, McMaster University, Canada), and Eli Noam (Garrett Professor of Public Policy and Business Responsibility, Columbia Business School and Director, Columbia Institute for Tele-Information.) The book and the three panels of the conference will address these topics:

- Is the Internet a net creator of jobs? What are the impacts on income distribution?
- How are job profiles changed by the digital economy?

What models can facilitate adjustment without slowing innovation?

WIFI Information

WIFI is available in the room. Connect to SSID “Columbia University”. You should then have WIFI access.

Agenda

2:00pm - Welcome and overview: Lorenzo Pupillo, Leonard Waverman, Eli Noam

2:05pm – Panel 1: Digital Challenges in the US

- Linda Bell, Provost, Barnard College, moderator and speaker
- Eli Noam, Professor of Economics, Columbia Business School
- Haig Nalbantian, Senior Partner, Mercer Workforce Sciences Institute

2:50pm – Panel 2: International Dimensions

- Lorenzo Pupillo, Centre for European Policy Studies, Brussels, moderator and speaker
- Paolo Naticchioni, Associate Professor, University of Roma Tre, Italy
- Robert Cohen, Fellow, Economic Strategy Institute

3:35pm – Panel 3: Next Challenges

- Leonard Waverman, Dean, DeGroote School of Business, Canada, moderator and speaker
- David Viviano, Chief Economist, SAG-AFTRA (Labor Union)
- Robert Atkinson, President, Information Technology and Innovation Foundation

4:20pm – General Discussion

4:30pm – Concluding Remarks

Bios:



Eli M. Noam

Director, **Columbia Institute for Tele-Information**

Professor of Finance and Economics

Garrett Professor of Public Policy and Business Responsibility

Columbia University Business School

Professor of Economics and Finance at the Columbia Business School since 1976, and its Garrett Professor of Public Policy and Business Responsibility. Served for three years as a Commissioner for Public Services of New York State. Appointed by the White House to the President's IT Advisory Committee. Director of the Columbia Institute for Tele-Information, a research center focusing on management and policy issues in telecommunications, internet, and electronic mass media. He has also taught at Columbia Law School, Princeton University's Economics Department and Woodrow Wilson School, and the University of St. Gallen, and is active in the development of electronic distance education. Noam has published 29 books and over 350 articles in economics journals, law reviews, and interdisciplinary journals. His recent books include *Broadband Networks and Smart Grids* (Springer, 2013); *Media Ownership and Concentration in America* (Oxford, 2009); *Peer to Peer Video* (Springer, 2008); and *Ultrabroadband* (IDATE, 2008). He is completing a 4-volume series on *Media Management*, and leads a 30-country team on international media ownership. Chairman of the International Media Management Association (2012-14).

Noam has been a member of advisory boards for the Federal government's telecommunications network, and of the IRS computer system, of the National Computer Systems Laboratory, the National Commission on the Status of Women in Computing, the Governor's Task Force on New Media, and of the Intek Corporation. His academic, advisory, and non-profit board and trustee memberships include the Nexus Mundi Foundation (Chairman), Jones International University (the first accredited online university), the Electronic Privacy Information Center, and several committees of the National Research Council. Noam is a Fellow of the World Economic Forum, a member of the Council on Foreign Relations, and a commercially rated pilot. He served in the Israel Air Force in the 1967 and 1973 wars, and is an active search and rescue pilot

with the Civil Air Patrol (1st Lt.). He is married to Nadine Strossen, a law professor and national president of the American Civil Liberties Union for 18 years. He received the degrees of BA, MA, Ph.D (Economics) and JD from Harvard University, and honorary doctorates from the University of Munich (2006) and the University of Marseilles (2008).



Lorenzo Pupillo

Associate Senior Research Fellow and Head of the
Cybersecurity
CEPS

Dr. Lorenzo Pupillo is an Associate Senior Research Fellow and Head of the Cybersecurity @CEPS Initiative. Before joining CEPS, he served as an Executive Director in the Public & Regulatory Affairs Unit of Telecom Italia developing the company's global public policies for Internet, Cyber-Security, Next Generation Networks. He also managed Telecom Italia's relations with the OECD, the ITU and other international associations and organizations. Previously, Dr. Pupillo held a variety of senior positions in the Strategy, Business Development and Learning Services divisions of Telecom Italia. He is an economist by training and has worked in many areas of telecommunications demand and regulatory analysis, publishing four books on Internet Policy and many papers in applied econometrics and industrial organization. He has served as an advisor to the Global Information and Communication Technologies Department of the World Bank. Before joining Telecom Italia, he was member of the technical staff at AT&T Bell Laboratories in Murray Hill - New Jersey - and he worked as senior economist for governmental institutions. Dr. Pupillo is also an affiliated researcher at Columbia Institute for Tele Information at Columbia Business School and serves on numerous scientific and advisory boards around the globe. He obtained a Ph.D. and an M.A. from University of Pennsylvania, an MBA from Istituto Adriano Olivetti in Ancona Italy and an MS in Mathematics from University of Rome.



Leonard Waverman
Dean
DeGroot School of Business at McMaster University

Leonard Waverman began his term as dean of the DeGroot School of Business at McMaster University in January 2013.

Dr. Waverman is a world-renowned expert in international telecommunications and global resources management.

He specializes in microeconomics and industrial organization, economics of telecommunications, energy and resource economics, international trade, public utility and public enterprise economics. His current research focuses on the impact developments in the telecommunication industry have on growth and productivity. He has authored the influential Connectivity Scorecard, an annual index that ranks countries according to how advanced their communications networks are in promoting productivity and growth.

Dr. Waverman has consulted widely on energy, natural resources, telecommunications, and competition policy matters in Canada, the United States, and Europe.

He earned his B. Com. and MA from the University of Toronto and his PhD in economics from MIT. He has been a professor of economics at the University of Toronto and the London Business School and Dean of the Haskayne School of Business as well as professor of strategy at the University of Calgary.



Linda Bell
Provost & Dean of the Faculty, Claire Tow Professor of
Economics
Barnard

Linda A. Bell is the Provost and Dean of the Faculty at Barnard College, where she is also Claire Tow Professor of Economics. Previous to joining Barnard, Professor Bell was the Provost and John B. Hurford Professor of Economics at Haverford College. Provost Bell is also a research fellow at the Institute for the Study of Labor (IZA) in Bonn, Germany and a senior consultant for the labor practice group of the National Economic Research Associates.

Previously, Provost Bell was a senior economist in the research department of the Federal Reserve Bank of New York and project faculty on a Danish Research

Council-funded initiative at the Aarhus Business School in Denmark. She has served as a Board Member on the Committee on the Status of Women in the Economics Profession of the American Economic Association and has held visiting faculty appointments at the Woodrow Wilson School at Princeton University, the John F. Kennedy School of Government at Harvard University, and at Stanford University. Provost Bell received her Ph.D. from Harvard University in 1986 and her bachelor degree from the University of Pennsylvania in 1981, where she was a University Scholar. In her varied professional and scholarly capacities, Provost Bell has served as a consultant to the World Bank and the US Department of Labor. In addition to her academic work and teaching, she has been active in the American Association of University Professors, first in the capacity as Chair of the Committee on Faculty Compensation, where she authored the Association's Annual Faculty Compensation Report from 1997-2001, and as a National Council Representative from 2003-2006.

Provost Bell is an empirical economist specializing in labor markets and public policy. She has written and lectured extensively on the topic of compensation, union concessions, and hours of work in the US and Europe. Her recent research focuses on the determination of gender compensation differences in executive pay in large US corporations generally, and on female mentorship at the executive level specifically. Her work has been published in the Journal of Labor Economics, Labour, Industrial and Labor Relations Review, Economic Journal, Economic Letters, Proceedings of the ILLR, and the Federal Reserve Bank Quarterly Review.



Haig Nalbantian

Senior Partner

Mercer Workforce Sciences Institute

Haig R. Nalbantian is a Senior Partner at Mercer and a founder/leader of Mercer's Workforce Sciences Institute. A labor /organizational economist, he has been instrumental in developing Mercer's unique capability to measure the economic impact of human capital practices. Those capabilities have been applied in numerous projects he has directed for leading companies in the U.S. and abroad. In over twenty-five years of consulting, Haig has worked with many high-profile organizations to introduce or strengthen their use of evidence-based human capital management.

Haig came to Mercer from National Economic Research Associates which he

joined in 1989. Earlier, he was on the faculty of economics at New York University and was a research scientist at its C.V. Starr Center for Applied Economics. He is an internationally recognized expert on incentives, human capital measurement and management and their links to organizational performance. He has published widely on these topics in books and articles in leading academic and professional journals. His Harvard Business Review article, “Making Mobility Matter,” won the Academy of Management’s 2010 award for “Outstanding Practitioner-oriented Publication” in 2009.

Nalbantian co-authored the prize-winning book on human capital measurement and management, *Play to Your Strengths* (McGraw Hill, 2004). He is also editor of and chief contributor to the book, *Incentives, Cooperation and Risk Sharing* and is a frequent speaker before industry groups, professional associations and academic audiences. He led the research team and co-authored the 2012 World Economic Forum/Mercer study of global talent mobility, “Talent Mobility Good Practices.” Currently he is leading Mercer’s research, in conjunction with Stanford University’s Center on Longevity, on gauging the contribution of older workers. Haig earned his BA in English and Economics at New York University and his graduate degrees in economics from Columbia University.



Paolo Naticchioni
Associate Professor
University of Roma Tre

Paolo Naticchioni is associate professor at the University of Roma Tre (Department of Political Science and CREI). He received his Ph.D. in Economics from the Université Catholique de Louvain (2008), where he also received a M.Sc. in Economics. He also received a PhD in Economics from the University of Rome La Sapienza (2004). He is the secretary of the Italian Association of Labour Economics (AIEL, since 2016), and he cooperates with the research partnership between the University of Rome La Sapienza and Isfol (since 2002) and with the Center for Labour and Economic Growth (CeLEG) at LUISS (since 2009).

His research interests include labour economics (in particular topics such as inequality, unions and wage bargaining, wage dynamics, trade and the labour market), urban economics (mainly the analysis of urban wage premia), political

economy (political selection and commitment), economics of education, economics of happiness, program evaluation.



Robert Cohen
Fellow
Economic Strategy Institute

Robert B. Cohen, is a senior fellow at the Economic Strategy Institute where he heads a new study, “The economics and business impacts of the “New IP,” cloud computing, SDN, NFV, big data and the Internet of Things. His interest is to evaluate productivity gains and employment and output benefits linked to the “New IP.” Dr. Cohen has been the Director of the Enterprise Cloud Leadership Council of the TM Forum. He has worked for the European Commission’s Directorate General XIII and served as chair of New York’s High Tech Council. He holds an MA and Ph.D. in economics from the New School for Social Research and a BA from Swarthmore. He is the author, co-author or co-editor of five books.



David Viviano
Chief Economist
SAG-AFTRA

David Viviano is Chief Economist at SAG-AFTRA and leads its Office of Media & Labor Economics. Viviano and his team conduct in-depth analysis of the media landscape on an ongoing basis, analyzing its implications for the working lives of SAG-AFTRA members.

Viviano holds a Master of Business Administration degree from Cornell University and a Bachelor of Arts degree in film studies from Wesleyan University.



Robert D. Atkinson
President
Information Technology and Innovation Foundation

As founder and president of the Information Technology and Innovation Foundation (ITIF), recognized as the world’s top think tank for science and technology policy, Robert D. Atkinson leads a prolific team of policy analysts and fellows that is successfully shaping the debate and setting the agenda on a host of critical issues at the intersection of technological innovation and public policy.

He is an internationally recognized scholar and a widely published author whom *The New Republic* has named one of the “three most important thinkers about innovation,” *Washingtonian Magazine* has called a “tech titan,” *Government Technology Magazine* has judged to be one of the 25 top “doers, dreamers and drivers of information technology,” and the Wharton Business School has awarded him the “Wharton Infosys Business Transformation Award.”

A sought-after speaker and valued adviser to policymakers around the world, Atkinson’s books include *Big is Beautiful: Debunking the Mythology of Small Business* (MIT Press, 2018); *Innovation Economics: The Race for Global Advantage* (Yale, 2012), and *The Past And Future Of America’s Economy: Long Waves Of Innovation That Power Cycles Of Growth* (Edward Elgar, 2005). He also has conducted groundbreaking research projects and authored hundreds of articles and reports on technology and innovation-related topics ranging from tax policy to advanced manufacturing, productivity, and global competitiveness.

President Clinton appointed Atkinson to the Commission on Workers, Communities, and Economic Change in the New Economy; the Bush administration appointed him chair of the congressionally created National Surface Transportation Infrastructure Financing Commission; and the Obama administration appointed him to the National Innovation and Competitiveness Strategy Advisory Board. He also has served as co-chair of the White House Office of Science and Technology Policy’s China-U.S. Innovation Policy Experts Group; as a member of the U.S. Department of Commerce’s National Advisory Council on Innovation and Entrepreneurship; and on the U.S. State Department’s Advisory Committee on International Communications and Information.

Atkinson is a member of the Markle Foundation Task Force on National Security in the Information Age and serves on the boards or advisory councils of the Internet Education Foundation, the NetChoice Coalition, the University of Oregon's Institute for Policy Research and Innovation, and the State Science and Technology Institute. Additionally, Atkinson is on the editorial boards of the *Journal of Electronic Government* and the *Journal of Internet Policy*; a member of the Global Innovation Forum Brain Trust; a nonresident senior fellow at the Brookings Institution; a fellow at the Columbia University Institute of Tele-Information; and a fellow of Glocom, a Tokyo-based research institute.

Atkinson was previously vice president of the Progressive Policy Institute, where he directed the Technology & New Economy Project. He wrote numerous research reports on technology and innovation policy, covering issues such as broadband telecommunications, e-commerce, e-government, privacy, copyright, R&D tax policy, offshoring, and innovation economics.

Previously, Atkinson served as the first executive director of the Rhode Island Economic Policy Council (RIEPC), a public-private partnership whose members included the state's governor, legislative leaders, and both corporate and labor leaders. As head of RIEPC, Atkinson was responsible for drafting a comprehensive economic development strategy for the state and working with the legislature and executive branch of government to successfully implement each element of a 10-point action agenda.

Prior to his service in Rhode Island, Atkinson was a project director at the Congressional Office of Technology Assessment, where, among other projects, he spearheaded *The Technological Reshaping of Metropolitan America*, a seminal report examining the impact of the information technology revolution on America's urban areas.

As a respected policy expert and commentator, Atkinson has testified numerous times before the U.S. Senate and House of Representatives, and he appears frequently on news and public affairs programs. Among others, these appearances have included interviews on BBC, CNBC, CNN, Fox News, MSNBC, NPR, and NBC Nightly News.

Atkinson holds a Ph.D. in city and regional planning from the University of North Carolina, Chapel Hill, where he was awarded the prestigious Joseph E. Pogue Fellowship. He earned his master's degree in urban and regional planning from the University of Oregon, which named him a distinguished alumnus in 2014.