

TECHONOMY 2017

THE CONVERGENCE OF MAN AND MACHINE *How Business and Society Are Being Transformed*

At Techonomy 2017, we will explore the impact and implications of technology-infused challenges for modern business and society as technologies like artificial intelligence, augmented reality, the Internet of Things, and global connectivity continue to transform our industries, organizations, society, and increasingly ourselves.

How can—and will—tech drive progress? Are there limits? What are the opportunities and the risks? How are such rapid shifts influencing and changing diverse industries? What will it all mean for health, education, politics, cities, social life, and the planet? Digital business is not a choice; it is an imperative.

In a world of ever-growing uncertainty and risk, the only way to thrive is by understanding the basic forces that are swiftly altering business and society. Join us at Techonomy and we will help you do that by methodically curating and convening the cross-industry private and public sector leaders, economists, scientists, entrepreneurs, researchers, and thinkers who through their companies, ideas, and policies drive the evolution of the modern economy.

Our programs employ a number of formats, including our three-minute “180° Shift” talks, carefully selected panels, one-on-one interviews, in-depth Techonomy Labs, and extensive Q&A to ensure interactive and challenging discourse.

AGENDA

Sunday, November 5

- 10:00 am** **Registration Opens**
- 11:00 am – 2:00 pm** **Social + Networking Activities**
- Coastal Bike Tour
 - Golf Clinic

2:45 pm – 5:50 pm **OPENING SESSIONS**

- 2:45 pm **Welcome to Techonomy 2017**
Josh Kampel, David Kirkpatrick, & Simone Ross
- 3:00 pm **Can We Handle the Coming Convergence of Man and Machine?**
It seems like computers are starting to merge with our minds, bodies, and maybe even our souls. What new society emerges? What strange, semi-automated netherworld are we hurtling towards?

Benjamin Bratton, Professor – Visual Arts, UCSD
Mary Lou Jepsen, Founder and CEO, Openwater

Tessa Lau, Chief Robot Whisperer and CTO, Savioke
Rohit Prasad, Vice President and Head Scientist – Alexa
Machine Learning, Amazon

Moderator: David Kirkpatrick, Chief Technologist, Techonomy

3:45 pm

Illuminating the Future of Brain-Machine Interfaces

Connecting computers with the human brain has become a buzzworthy topic, but you may not realize just how far existing technologies have already taken us toward that goal. New types of neural interface technology currently in development, including light-based communication with the brain, stand to vastly improve the scale and precision with which machines and neurons interact. What might become possible with this new communication channel to the mind? How do we maximize its value while minimizing risk?

Justin Sanchez, Director, Biological Technologies Office, DARPA

4:00 pm

A Conversation With Beth Comstock, Vice Chair, GE and Penny Pritzker, Founder, PSP Capital Partners

Moderator: David Kirkpatrick, Chief Technologist, Techonomy

4:25 pm

Reckoning With the New Hegemonists

Amazon, Facebook, and Google are a new breed of global giant, with extraordinary social, political, and economic weight, now coming under rapidly growing scrutiny. Silicon Valley has set itself a high bar claiming it improves the world, presuming trust from consumers and regulators. In this climate, can that last? Do tech giants face an existential crisis?

Mark Mahaney, Managing Director – Internet,
RBC Capital Markets
Dave Morgan, CEO, Simulmedia
Joyce Vance, Distinguished Visiting Lecturer in Law, The
University of Alabama

Moderator: David Kirkpatrick, Chief Technologist, Techonomy

5:05 pm

How Connectivity, Community, and Diet Transform Your Health

Dr. Dean Ornish, President & Founder, Preventive Medicine
Research Institute

5:15 pm

180° Shift Talks on the nexus of tech & food

Rethinking Food Tech

Climate change and population growth are ratcheting up pressure on food producers for smart-ag innovations to address problems that lie ahead and redress past mistakes.

Amanda Little, Professor - Journalism, Vanderbilt University

Metagenomics: Ensuring Food Safety & Supply

Environmental microbial genetic material, data and analytics—what can we learn from the microbiome of food to address food integrity and safety?

Jeff Welser, Vice President and Lab Director, IBM Research,
IBM

5:25 pm **Feed Me**
Data-driven diets, lab-grown meat, plant-based proteins, personalized nutrition, genetic modification—the intersection of tech and nutrition will play a crucial role to feed the world. Will high-tech food lead to healthier humans?

Denise Morrison, CEO, Campbell Soup Company
Interviewer: Amanda Little, Vanderbilt University

5:50 pm **Opening Sessions Wrap**

6:00 pm **RECEPTION** *hosted by Verizon*

7:00 pm **DINNER** *hosted by Accenture*

8:45 pm **EVENING SESSION** *a room-wide dialogue*

What is Your Biggest Hope or Fear for the World?

Dan'l Lewin
Xiaoning Qi, CEO, C-Sky Microsystems
Rangu Salgame, Chairman and CEO, Princeton Growth Ventures
Yvonne Cagle, Chief Scientist and Astronaut, NASA

Monday, November 6

7:00 am **Registration Opens**

Johnson & Johnson Well-Being Workout

A new holistic training experience for your mind, body and spirit. This 30-minute class will build physical fitness, mental resilience and a sense of calm and optimism.

7:15 am **Eat Well, Move More, Stress Less, Love More: The Healing Power of Lifestyle Medicine** *(breakfast session)*

Simple lifestyle changes can lead to significant health benefits. Join Dr. Dean Ornish, physician and best-selling author, in a transformational workshop that will help you personalize an optimal lifestyle program.

8:30 am – 10:45 am **MORNING SESSIONS**

8:30 am **Welcome**

8:45 am **Entrepreneurship, Competitiveness, and America's Challenge:**
A Conversation With John Chambers, Executive Chairman, Cisco

9:05 am **Retail's Rubicon**
The physical and digital are converging, and nowhere more so than in retail. Amazon's astonishing inroads are daunting. Yet retail will not be exclusively digital. From browsing, to purchase, to delivery—how do retailers balance the in-store and online experience?

Julie Bornstein, former Chief Operating Officer, Stitch Fix
Steve Carlin, Chief Strategy Officer, Softbank Robotics
Christian Madsbjerg, Co-Founder, ReD Associates

Moderator: Mark Bonchek, Chief Epiphany Officer, Shift Thinking

9:45 am

180° Shift Talks

The New Reality for the Future of Work

AI is changing the nature of work and business. Will this mean job displacement, or will AI become society's secret weapon for growth?

H. James Wilson, Managing Director of Information Technology and Business Research, Accenture

The Cybersecurity of Sports: How Technology Can Interfere With the Integrity of the Game, and Safety of Fans

From scoring systems, to food dispensers, to drones, to virtual reality, new technologies are challenging the security of sport and integrity of the game.

Betsy Cooper, Executive Director, UC Berkeley Center for Long-Term Cybersecurity

Want Truly Intelligent Machines? Better Study the Brain.

The networks that perform AI's exciting feats are pretty simple. The architectures may be inspired by brains, but are much less complex. New technologies will transform our understanding of how brains make decisions, and may help create truly intelligent artificial systems.

Anne Churchland, Associate Professor, Cold Spring Harbor Laboratory

10:00 am

3-D Technology is Advancing Personalized Treatment

Models based on CT scans assist surgical simulation and planning. We can 3-D print patient-specific implants and mass manufacture custom devices. It all enables health breakthroughs.

Vyomesh Joshi, CEO, 3D Systems

10:05 am

Advancing Global Health With Tech

Billions of people are getting healthier. But it isn't enough. Far too many people globally still die from preventable causes, and the UN's Sustainable Development Goals for 2030 aim to radically reduce that. What role is tech playing in health progress? How can we continue to advance toward the SDG health goals?

Dr. Agnes Binagwaho, Vice Chancellor, University of Global Health Equity
Oliver Hsiang, Global Head of Health Technology Partnerships & Corporate Development, Johnson & Johnson
Vyomesh Joshi, CEO, 3D Systems
Dr. Roy Smythe, Chief Medical Officer – Healthcare Informatics, Philips

Moderator: David Kirkpatrick, Chief Technologist, Techonomy

10:45 am **BREAK**

11:15 am **SESSIONS IN PARALLEL**

The Path to Autonomous Mobility

Unmanned aircraft of all sizes, self-driving cars, ships, and robots—all are moving quickly towards autonomous mobility capability. But it's not just about smart systems and sensors. What policies, changes in social attitude, and other advances are needed so autonomous machines can seamlessly navigate the same landscape as we do?

Mark Bartolomeo, Vice President - Internet of Things, Verizon
Melissa Cefkin, Principal Scientist & Design Anthropologist -
Nissan Research Center, Nissan
Douglas Davis, Senior Vice President and General Manager,
Automated Driving Group, Intel Corporation
Dyan Gibbens, CEO & Founder, Trumbull Unmanned
Chris Urmson, CEO, Aurora

Moderator: Steven Levy, Editor-in-Chief, Backchannel

Should Data Ownership be a Civil Right?

Every time we engage with a connected device, we're generating data and value. More often than not that value does not accrue to ourselves. As data becomes the most valuable asset we have, why don't we have ownership or control? Could we make it happen?

Sabrina Ross, Legal Director -- Privacy and Consumer Protection,
Uber
Marta Tellado, CEO, Consumer Reports
Dr. Eric Topol, Director, Scripps Translational Science Institute
Christiane zu Salm, Entrepreneur and Publisher, Nicolai
Publishing and Intelligence

Moderator: Katie Benner, Reporter, *The New York Times*

12:15 pm – 1:15 pm **LUNCH** *hosted by Cognizant*

1:30 pm **SESSIONS IN PARALLEL**

The Uncertain, Unstable, Changing Nature of Work

Relentless automation and the shift to platforms is changing how we organize and categorize work. As the economy evolves from "jobs" to "tasks," policies, safety nets, and systems struggle to keep up. How do we ensure everyone benefits from the new landscape of work?

Byron Auguste, President and Co-Founder, Opportunity@Work
Diana Farrell, President and CEO, JPMorgan Chase Institute
Sasan Goodarzi, Executive Vice President and General Manager
Small Business Group, Intuit
Sheila Lirio Marcelo, Founder, Chairwoman and CEO, Care.com
Paul Roehrig, Chief Strategy Officer - Cognizant Digital
Business, Cognizant

Moderator: Peter Petre, Author

The Blockchain Economy

If you believe the hype, the blockchain will change, well, everything, ushering in a decentralized economy. Transparency will be ensured, transactions will be secure and our identities and assets will flow seamlessly. Excitement is growing in trade and finance, healthcare, government, and smart cities. Can blockchain live up to the hype?

Kathleen Breitman, CEO, Tezos and Dynamic Ledger Solutions
Andrea Tinianow, Director, Global Delaware
Brian Forde, Candidate for U.S. Congress, Forde.com
Dominic Williams, President and Chief Scientist, DFINITY

Moderator: Nathaniel Popper, Reporter, The New York Times

2:30 pm Switch Break

2:45 pm – 5:45 pm AFTERNOON SESSIONS

2:45 pm **Good Afternoon!**

3:00 pm **The Water Will Come**

Despite mankind's engineering skills, our ability to hold back the rising water is limited when it comes to sea levels. Cities will become more vulnerable, island nations will disappear, and coastal regions remain constantly at peril. Can we survive our waterlogged future?

Jeff Goodell, Contributing Editor, *Rolling Stone*

Interviewer: Simone Ross, Chief Program Officer, Techonomy

3:15 pm **How AI Can Save Democracy**

The disinformation war is on and it is effective and cutthroat. Tech has enabled authoritarian messaging and tactics, dark posts, and micro-targeting. Can tech also help us fight authoritarianism? How do we wage the information wars when democracy is at stake?

J. Galen Buckwalter, Chief Science Officer, PsyML

3:25 pm **5G, Digital Inclusion and the Future of Communication:**
A Conversation With Lowell McAdam, CEO, Verizon

3:45 pm **Confronting Manipulation Head-On**

Facebook, Google, and Twitter are in the hot seat over how their systems may have been manipulated by foreign actors during the US election. The tech sector needs to recognize how this has become the new security battle and build organizational antibodies in response.

danah boyd, Founder and President, Data & Society

3:55 pm **What is Authority in a Networked, Artificially Intelligent World?**

As algorithms and AI are seamlessly integrated into everything, who (or what) is making the decisions? Are Amazon, Facebook, and Google becoming the de facto authority? What does authority mean anymore? What will replace the old systems that signified authority?

danah boyd, Founder and President, Data & Society
Roger McNamee, Managing Director, Elevation Partners
Marc Rotenberg, President, Electronic Privacy Information
Center

Moderator: Stratford Sherman, Partner, Accompli

4:30 pm

180° Shift Talks

Understanding Government in the 21st Century

We are at a level of global political uncertainty not seen since the early 20th century, when two opposing trends—globalization and nationalism—led to two devastating world wars. Now the same opposing trends, fueled by interconnectedness and technology, again threaten global stability. Can tech help lead us toward peaceful and prosperous co-existence?

Tim Hwang, Founder and CEO, FiscalNote

Disrupting Cities: What We Can Learn From Past Attempts at Urban Innovation

Throughout history, we've thought that recent tech advances could solve the perennial problems of cities. Many have tried to transfer new technologies into the urban realm—with varying success.

Molly Turner, Lecturer, UC Berkeley, Haas School of Business

4:40 pm

How Tech is Remaking the Construction Industry

The \$10 trillion global construction industry has been slow to digitize. Now it is finally embracing tech—from off-site and modular/prefab construction, to robotic bricklayers, and IoT-enabled job sites. What will the construction landscape look like in a few years?

Michael Marks, Chairman and Founder, Katerra
Lincoln Wood, Regional Director of Technology and Innovation,
Turner Construction Company
Tracy Young, CEO, PlanGrid

Moderator: Simone Ross, Chief Program Officer, Techonomy

5:10 pm

What Can Be Done About the Rising Cost of Care?

The U.S. spends twice as much on health care as other rich countries, and gets less care for the money. What will it take to make positive change? How can insurers and doctors use predictive data to help patients and reduce costs? Is consumer-friendly, affordable health insurance possible?

Dan Munro, Author
Mario Schlosser, CEO, Oscar

Moderator: David Kirkpatrick, Chief Technomist, Techonomy

5:30 pm

AI, Robotics and the Obligation of Business:

A Conversation With Andrew Anagnost, CEO, Autodesk

5:50 pm **Afternoon Sessions Conclude**
6:00 pm **RECEPTION** *hosted by IBM*

6:45 pm **DINNER** *hosted by Philips*

9:00 pm **Evening Performance and Interview with singer/songwriter MAX.**
Interviewer: Josh Kampel, President, Technomy

Tuesday, November 7

7:00 am **Registration Opens**

Johnson & Johnson Well-Being Workout

A new holistic training experience for your mind, body and spirit. This 30-minute class will build physical fitness, mental resilience, and a sense of calm and optimism.

7:45 am – 8:45 am **Breakfast Roundtables**

Leadership Breakfast Session

in partnership with Duke Corporate Education and Johnson & Johnson

Two-thirds of executives say the next 36 months will be more critical to their industries than the previous 50 years. In this volatile, uncertain, tech-infused world, old ways of developing leaders are irrelevant. What are enlightened companies and leaders doing now?

Lowinn Kibbey, Global Head - Johnson & Johnson Human Performance Institute, Johnson & Johnson
Tony O'Driscoll, Global Head - DukeCE Labs, Duke University
Blair Sheppard, Global Leader - Strategy and Leadership Development, PwC

Can Tech and Government Save Democracy?

With the spread of disinformation and sophisticated techno-manipulation, we've learned a lot in the past year about the negative impact of technology on democracy. Now what? Certainly the solution does not lie with either tech or government alone. Can the institutions of society come together to prevent the demise of democracy?

Tim Hwang, Founder and CEO, FiscalNote
Minnie Ingersoll, Chief Operating Officer, Code for America
Lawrence Norden, Deputy Director, Brennan Center for Justice, NYU School of Law
Molly Turner, Lecturer, UC Berkeley, Haas School of Business
Marc Rotenberg, President, Electronic Privacy Information Center

Moderator: Jon Fine, Executive Director of Editorial, Inc. Magazine

9:00 am – 12:30 pm **CLOSING SESSIONS**

9:00 am **Welcome**

- 9:10 am **Cognitive Computing, Security and Innovation's Promise:**
A Conversation With Dr. John Kelly, Senior Vice President,
Cognitive Solutions and IBM Research, IBM
- 9:35 am **Extending Reality**
As augmented, virtual, and mixed realities begin to push the boundaries of the physical, we are finally seeing practical applications of AR and VR across a spectrum of industries. What will these new "realities" mean for business, society, and our sense of where and even who we are?
- Marc Carrel-Billiard, Global Senior Managing Director –
Accenture Labs, Accenture
Tony Parisi, Global Head of VR/AR, Unity Technologies
- Moderator:* Ina Fried, Chief Technology Correspondent, Axios
- 10:05 am **180° Shift Talks**
- Voice is the New Touch**
We're on the brink of a major shift. How soon before voice becomes the way we interface with tech?
- Katie McMahon, VP & General Manager, SoundHound Inc.
- Ingenuity vs. Innovation: The Rise of the Human Element**
We are entering an era not of innovation, but of ingenuity. The distinctly human algorithms in our human brains will lead to the biggest gains in productivity, creating new solutions for social, economic, and environmental challenges.
- Josh Reynolds, Founder, Rob Roy Consulting
- Nowhere to Hide**
From Wikileaks to the Panama Papers, the methods that elites use to protect and hide their wealth are increasingly being revealed via a new whistleblowing model of large-scale data leaks. The effect on corruption and human rights abuses is profound and mostly positive, but is transforming the risk environment for companies.
- Alison Taylor, Director, BSR
- 10:15 am **The Topsy-Turvy World of Media**
Once upon a time, media and entertainment companies lived in harmony, with clearly delineated roles in the ecosystem. Now, audiences are scattered across platforms and devices, and tech has turned the industry on its head. Consumers want programming on-demand, online, and commercial-free and newcomers are barging in. Can old media keep up?
- Jeremy Legg, Chief Technology Officer, Turner
Steve Shannon, GM and SVP – Content & Services, Roku
- Moderator:* Josh Kampel, President, Technomy
- 10:45 am **A View from China**

C-Sky Microsystems CEO Xiaoning Qi on the embedded technologies that will power and enable the IoT world, from the cloud to the edge.

Interviewer: Selina Wang, Reporter, Bloomberg News

11:00 am

The Internet Under Attack

As countries seek extreme advantage in the newly-networked world, many are limiting speech, imposing restrictive rules, and taking control of digital infrastructure. Can the internet remain an engine of global economic growth and free information exchange? What happens to the internet in places like China?

Mark Anderson, CEO, Strategic News Service

Rebecca MacKinnon, Director, Ranking Digital Rights at New America

Peder Jungck, Chief Technology Officer – Intelligence and Security, BAE Systems

Moderator: David Kirkpatrick, Chief Technomist, Techonomy

11:45 am

Why Hyper-Local is the Future of Healthcare—and Capitalism:

A Conversation With Mark Bertolini, CEO, Aetna

12:20 pm

Closing Remarks

12:30 pm

CONFERENCE ENDS