

TED^x Silicon Valley

x = independently organized TED event

Living by Numbers

May 14 2011

Stanford Graduate School of Business

Center for Social Innovation



TED^x Silicon Valley

x = independently organized TED event

On Living by Numbers

By Ron Gutman, *Curator*

Welcome to the second TEDx Silicon Valley, and thank you for joining us at what's become the most widely followed TEDx community in the world. Our first event gathered hundreds of decision makers and thought leaders at Stanford University, while around the globe over 100,000 people from 45 countries tuned into the live-stream.

TEDx Silicon Valley has always been about Innovation for Social Change, here and everywhere, and this year our focus is "Living By Numbers," an exciting topic picking up significant momentum in Silicon Valley. Numbers transformed into information, and then morphed into wisdom and eventually action, will be an important platform for the next era of innovation. As prior TEDx Silicon Valley speaker Reid Hoffman noted earlier this year, data "is where some massive innovation will happen that will transform our lives."

Living by numbers sounds like a modern concept – something from the post-computer age, or even the future. The phrase elicits the image of an endless stream of flowing numbers, in a world where people live more by logic than by emotion. But is this concept really so contemporary or futuristic? Is it so cold and cerebral?

As humans, we've always been fascinated by numbers, and have long known the benefits of using them to guide our daily lives. We've used numbers to bring us water and to cross it – through the mathematically precise calculations required to build the Roman Aqueduct system in the Ancient world, to the first sea clock that allowed us to circumnavigate the globe in the 1700s. We've continuously used numbers to help us keep intimate track of time and to improve our productivity – from adopting the Gregorian Calendar (which we still use) in the Age of Discovery, to precisely automating production on the modern assembly line in the Industrial Age. Today, data and numbers touch nearly every aspect of our daily lives, from the scientific method – the bedrock of innovation in academia and cutting edge businesses, to ubiquitous smart phones – that help us measure almost anything. Today each of us quite literally lives not only by numbers, but actually with our own one – a unique identifier that is both most effective means of reaching us at any time, and our primary means of connecting with others.

We're entering a new and exciting stage of discovering the power of numbers and data. Previously, the use of numbers to guide and govern our lives occurred at the levels of social and religious leadership, and these numbers were available mostly to scientists, academics, big businesses, or governments. Until recently, big numbers have never historically been in the domain of the general public.

TED^x Silicon Valley

x = independently organized TED event

This is changing. Today (and moreso in the near future), we can collect and track personal and communal numbers in exciting new ways. It's easier and cheaper to store this data, and there are ever more, and simpler, ways to analyze and utilize these numbers in our daily lives. Information created by them is also increasingly accessible using data visualization – powerful means for conveying numbers in a way that's easy to understand, and from which we can quickly make more informed decisions. Living by numbers leads to fascinating daily discoveries about us and our environment, creating enormous potential for positive personal and social change.

At this TEDx Silicon Valley we'll have a chance to explore how life can and does change with the tools to collect, store, analyze, and understand numbers in ways that have only recently become available to individuals. But while we listen to the exciting potential for what this new day of living by numbers can mean for each of us personally, we should also not forget to question where this leaves us at the end of the day as humans. We should diligently consider the potential implications of this trend both for our society and our humanity, in the short and long term:

- Is making decisions based on just numbers always the right choice?
- Does moving from knowing less to knowing more always leave us better off?
- Who owns the numbers we generate, individually and collectively, and how should we handle them?
- How do we retain our humanity, beliefs, and core values in the presence of these new numbers and insights?

And, of course:

- How can numbers be used to innovate for social change and improve our lives and the lives of others?

TED is all about Ideas Worth Sharing, and Living by Numbers is a very important one. I hope these thoughts and questions, as well as the talks and music you'll hear and the art that you'll experience today, will spark an important dialogue about how numbers and living by them can make our world a better place.



TED^x Silicon Valley

x = independently organized TED event

Presenters



Ron Gutman

Ron Gutman is the Founder and CEO of Interactive Health company HealthTap. He is also the founder and former CEO of Wellsphere. Additionally, Ron is an angel investor and advisor to health and technology companies and initiatives (including Rock Health, Doximity, Harvard Medical School “SMARt Initiative”, Massive Health, and others). He also regularly speaks and presents at health and technology conferences (including TED, Health2.0, and SxSW), and his articles on health, innovation, and smiling have appeared in *Forbes*, the *Huffington Post*, and other leading publications.



Chris Anderson

As editor-in-chief of *Wired* magazine, Chris Anderson is one of the most knowledgeable, insightful and articulate voices at the center of the new economy. In a series of groundbreaking articles and books, he has identified important new trends in the economy and described new business models for seizing the business opportunities they represent. With his *New York Times* bestseller *The Long Tail*, he revealed why the future of business is selling small quantities of more things to fewer people, how small communities make up a vast market potential, and how digital and web technology make it possible.



Chris Hogg

Chris Hogg is a Health 2.0 advocate, tech enthusiast, and researcher/analyst of all things healthcare. Outside of working as a commercial strategist for a major biotech company in the Bay Area he writes and blogs regularly about the changing healthcare landscape, the value and utility of health data, the changing relationship between physician and patient, and technology’s impact on behavioral change.



Patrick Meier

Patrick Philippe Meier is the co-founder of the International Network of Crisis Mappers and previously co-directed Harvard University’s (HHI) Program on Crisis Mapping and Early Warning. He has consulted for international organizations on crisis mapping and conflict early-warning projects in Africa, Asia, and Europe, and is a recognized expert and thought leader on the intersection between new technologies, early warning, civil resistance, human rights and humanitarian response. Patrick is also completing his PhD at The Fletcher School of Law and Diplomacy at Tufts University and is currently a Visiting Fellow at Stanford University’s Program on Liberation Technologies.

TED^x Silicon Valley

x = independently organized TED event

Presenters



Dr. Bernardo Huberman

Dr. Bernardo Huberman is the director of the Social Computing Lab at Hewlett-Packard Laboratories, a senior HP fellow, and a faculty member in the Symbolic Systems Program at Stanford University. He has created novel mechanisms for enhancing privacy and trust in e-commerce and negotiations, and currently works on designing novel mechanisms for discovering and aggregating information in distributed systems, and understanding information dynamics in large networks. He also serves as a Fellow of the American Physical Society and the American Association for the Advancement of Science.



Ruth Kaiser

Ruth Kaiser is a Bay Area artist, teacher, author and mom. Her art project about choosing to live a happy life, the Spontaneous Smiley Project, lives on the Internet and involves thousands of people across the world sharing photographs of smiley faces as they appear in everyday objects. The project has received international press attention, and the website (www.SpontaneousSmiley.com) has had millions of visits. Operation Smiley, a project to provide free dental surgeries, works with sponsors to make donations every time a picture is uploaded to the website, funding needed care one smiley at a time.



Kriss Deiglmeier

Kriss Deiglmeier is the founding executive director for the Center for Social Innovation (CSI) at the Stanford Graduate School of Business. Deiglmeier has more than 20 years of management experience spanning the business, social enterprise, nonprofit, and philanthropic sectors. She marshaled support for a new mission that has established the CSI as a global leader in the emerging social innovation field. A recognized social innovation pioneer, Deiglmeier has presented and lectured nationally and internationally on social innovation, social entrepreneurship and public-private partnerships.



Eoin Harrington

Born and raised in Dublin, Ireland, and surrounded by music since childhood, Eoin Harrington is a San Francisco-based songwriter and musician. A classically-trained pianist and chemical engineer, Eoin has recently performed with Counting Crows, the Pussy Cat Dolls, and other touring musicians. Harrington has released two albums, including *Story*.

TED^x Silicon Valley

x = independently organized TED event

Presenters



Damon Horowitz

Dr. Damon Horowitz is a Philosophy professor and serial entrepreneur. His work explores what is possible at the boundaries of technology and the humanities. Horowitz was co-founder and CTO of Aardvark, a popular social search engine acquired in 2010 by Google, where Horowitz is now in-house Philosopher/director of engineering. Prior to Aardvark, Horowitz helped build several companies around applications of intelligent language processing, including Perspecta (acquired by Excite), Novation Biosciences (acquired by Agilent), and NewsDB (now Daylife). Horowitz has taught philosophy and cognitive science at Stanford, NYU, University of Pennsylvania, and San Quentin State Prison.



Mitch Kapor

Mitch Kapor is the founder of numerous software companies and technology foundations, including Lotus Development Corp. (1982 with Jonathan Sachs), the Open Source Applications Foundation (2001, where he works on a modern personal information manager), and Foxmarks (2006). Kapor has been the Chair of the Mozilla Foundation since its inception, he co-founded Level Playing Field Institute (dedicated to fairness in education and workplaces), and established the Mitchell Kapor Foundation (to support his philanthropic interests in environmental health). Kapor is also Chair of the Board of Directors of Linden Lab, the creators of Second Life, and a member of the Advisory Board for the Wikimedia Foundation. Kapor also serves as an Adjunct Professor at the School of Information at UC Berkeley.



Lara Stein

As TED/ TEDx's director of licensing, Lara Stein is focused on next generation strategies for TEDx and the TEDx community. Stein spearheaded the charge to launch TEDx in 2009. She is currently focused on storytelling, collaboration and concepts that help bring TED talks to the developing world. Previously, Lara has held key roles at ComedyLab Productions, Nelvana Entertainment, Microsoft MSN and Marvel Comics, and was a classical ballet dancer in South Africa and the United States.



Jonathan Attwood

Jonathan Attwood is a successful entrepreneur and executive with experience in the development and launch of products for the youth market. Attwood is the CEO of Zamzee, an online rewards program for teens powered by physical activity. Before Zamzee, Jonathan was CEO and founder of the UK-based start-ups SwapitShop and Webswappers. Attwood was recognized as one of the top 10 UK business leaders in science and innovation on the Courvoisier The Future 500 list, published by *The Guardian*.

TED^x Silicon Valley

x = independently organized TED event

Presenters



Joe Lonsdale

In 2004, Joe Lonsdale co-founded Palantir Technologies — a software company that develops mission-critical analysis systems used by government and financial organizations around the world. Lonsdale currently serves as CEO of Addepar, an emerging leader in private wealth management technology, and is the President of Anduin, which specializes in early-stage venture investing. He is also the Chairman of ONEHope Wine, a national wine brand and leader in cause marketing technology, and is an advisor to several Silicon Valley technology companies.



Jennifer Pahlka

Jennifer Pahlka has spent the past 15 years in the company of the technology elite. She has run the Game Developers Conference, and spent eight years at CMP Media where she led the Game Group, overseeing GDC, *Game Developer* magazine, and Gamasutra.com. She also launched the Independent Games Festival and served as Executive Director of the International Game Developers Association. Recently, she ran the Web 2.0 and Gov 2.0 events for TechWeb, and co-chaired the Web 2.0 Expo.



Anna Kristina

Inspired by her artistic mother and bass playing father, Anna Kristina has been surrounded by music all her life. Anna was 11 when she performed in her first festival, and over the years has dabbled in instruments including saxophone, trumpet and piano. She's had classical voice training under Edward Sayegh and has recorded with jazz saxophonist Chico Freeman and other world class musicians.



Sinan Aral

Sinan Aral is a faculty member in the Information, Operations and Management Sciences department of the NYU Stern School of Business and affiliated faculty at MIT. His research has received numerous awards, including the 2010 Microsoft Faculty Fellowship. Aral has been a Fulbright Scholar and is currently on the Academic Advisory Board of the Institute for Innovation and Information Productivity.



George Legrady

George Legrady is Professor of Interactive Media, with joint appointment in the Media Arts & Technology program and the department of Art, UC Santa Barbara. He has previously held appointments at the Merz Akademie, Institute for Visual Communication, Stuttgart, the Conceptual Design/Information Arts program, San Francisco State University, University of Southern California, and the University of Western Ontario. Legrady has lectured on his work and related topics in digital media internationally at over 90 institutions during the past ten years.

TED^x Silicon Valley

x = independently organized TED event

Presenters



Daniel Kraft

Daniel Kraft is a physician-scientist with over 20 years of experience in biomedical research, innovation and clinical practice. He has served as faculty with the Stanford Institute for Stem Cell Biology and Regenerative Medicine, and is on clinical faculty for pediatric bone marrow transplantation at UCSF. He is the founder of RegenMed Systems, chairs the Medicine track for Singularity University based at NASA-Ames, and directs its new FutureMed Program, exploring exponential technologies in health and medicine. He is also a flight surgeon with an F-16 squadron in the California Air National Guard.



Tim O'Reilly

Tim O'Reilly is the founder and CEO of O'Reilly Media, Inc., thought by many to be the best computer book publisher in the world. O'Reilly Media also hosts conferences on technology topics, including the O'Reilly Open Source Convention, the Web 2.0 Summit, and the Gov 2.0 Summit. His blog, the O'Reilly Radar, "watches the alpha geeks" to determine emerging technology trends, and serves as a platform for advocacy about issues of importance to the technical community. He is on the boards of CollabNet, Safari Books Online and Code for America, and is a partner in O'Reilly AlphaTech Ventures.



Yasmin Lukatz

Yasmin Lukatz is the head of marketing for Evo, a consumer electronics start-up creating the first smartphone controlled remote parenting experience by letting parents know how their baby is doing by listening to his/her activity and applying smart notifications or streaming. She is also the Chairman of the Board of the *Israel Hayom* newspaper, Israel's leading national weekday journal. Prior to joining Evo, Lukatz was the Special Assistant to the Chairman and CEO of Las Vegas Sands.



Eric Rodenbeck

Eric Rodenbeck is Stamen's founder and creative director. He has been working in, on, and around interactive design since 1997, helping to extend the boundaries of online media and live information visualization. Eric led the interactive storytelling and data-driven narrative effort at Quokka Sports, has illustrated and designed at *Wired* magazine and *Wired Books*, and was a cofounder of the design collective Umwow. His work is in the permanent collection of the Museum of Modern Art in New York City, and he sits on the Board of Directors of the Kenneth Rainin Foundation.



Robert Strong

Robert Strong is a Bay Area-based "Comedy Musician." He has studied with touring stand-up comedians, Cirque du Soleil choreographers, Ringling Brothers circus clowns, Broadway directors, and world-class jugglers. Robert has starred in a number of national television commercials, has made appearances on every major network, and has performed for two U.S. Presidents.

TED^x Silicon Valley

x = independently organized TED event

Presenters



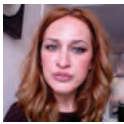
Brian Krejcarek

Brian Krejcarek has a passion for building stuff. A tech entrepreneur driven to bring unique ideas to market that bridge the real-world with the virtual one, Brian is the founder of GreenGoose, a real-life game platform that uses tiny motion-sensing stickers that attach to everyday objects and track activities such as exercise, drinking water, or flossing teeth.



Jeff Hammerbacher

Jeff Hammerbacher is the founder of Cloudera. Previously, he was an entrepreneur in residence at Accel Partners. He was also the head of the data team at Facebook, where he conceived, built, and led the group responsible for driving many of the applications of statistics and machine learning at the company, and built out the infrastructure to support these massive data sets. The team produced two open source projects: Hive (offline analysis built above Hadoop), and Cassandra (P2P network-based structured storage). Before joining Facebook, Hammerbacher was a quantitative analyst on Wall Street.



Belinda Galiano

In 1996, Belinda Galiano co-founded Campus Party, which has become Europe and Latin America's largest technology extravaganza focusing on innovation, science, education and digital entertainment. It's a 7-day, 24-hour festival where 8,000+ young hackers/developers/gamers and geeks, all equipped with laptops, camp out at the venue and immerse themselves in a truly unique environment. Co-chaired by Al Gore, Tim Berners-Lee and Vint Cerf, Campus Party is coming to the USA for the first time in 2012 and will be held in Silicon Valley.



Paul Kedrosky

Dr. Kedrosky is an investor, speaker, writer, media guru, and entrepreneur. In his spare time he is a dangerous Twitterer, analyst for CNBC television, and the editor of *Infectious Greed*, a popular financial blog. Kedrosky founded the first hosted blogging site, GrokSoup, and was one of the first technology equity analysts at a major brokerage firm. He is an active investor in public and private equities with more than fifty early-stage investments to his credit.



Thomas Goetz

Thomas Goetz is the executive editor of *Wired* magazine, where, he says, "My job is to help steer the ship and oversee all editorial efforts. Informally, you could say my job is to be a trend spotter or zeitgeist watcher." After a decade as a writer and journalist, he went back to school for a Master's of Public Health from UC Berkeley, informing his coverage of medicine, technology and public policy. In 2010 he published *The Decision Tree*, a critically-acclaimed look at modern medical decision-making and technology, which former FDA commissioner Dr. David Kessler called "a game changer."

TED^x Silicon Valley

x = independently organized TED event

Art, Design & Entertainment

Michael Capozzola: Artist

Michael Capozzola is a San Francisco-based comedian and cartoonist. His cartoon “Surveillance Caricatures” appears in the San Francisco Chronicle.

Kevin Carroll: Massive Play

Kevin Carroll is the acclaimed author of *Rules of the Red Rubber Ball*, *What's Your Red Rubber Ball?!* and *The Red Rubber Ball at Work*. He travels the globe speaking to businesses and young people about the importance of sport and play in life, and is an advocate in the Sport for Social Change movement.

Robert X. Fogarty: Artist

Robert Fogarty is the director of evacuteer.org, an emergency preparedness non-profit, and founder of Dear World, a for-profit photography venture for social good.

Allen Gittelson: Mind Reader

Allen's performances are a unique and seamless blend of hypnosis, psychology, and mind reading.

Inspire Productions: Event Flags & Decor

www.inspiremyevent.com

Sterling Johnson: Bubblesmith

The only performer to specialize in blowing bubbles using only his hands, Sterling Johnson, who was trained as an engineer and a lawyer, has appeared in the *Smithsonian* and *Omni* magazines.

Michael Stroud: Magician

Michael Stroud, who has appeared US and international television, is the producer of “The Magique Bazaar,” the longest-running theatrical magic show in California, and author of the Klutz Book of Magic.

Monika Steiner: Artist

Monika Steiner is a Bay Area artist represented by galleries in San Francisco, Seattle, Santa Fe, New York, and Berlin.



TED^x Silicon Valley

x = independently organized TED event

Sponsors



STANFORD
GRADUATE SCHOOL OF BUSINESS

CENTER FOR
SOCIAL INNOVATION



healthTap

Wine sponsors

 **bottlenotes**
good people. great wine.

Media sponsors

Stanford **SOCIAL**
INNOVATION REVIEW

CRAIGSLIST
FOUNDATION

CSRwire[®]
The Corporate Social Responsibility Newswire

 **SOCIAL INNOVATION**
CONVERSATIONS

