Trends for the 21st Century

NCLGISA Spring Conference

Terry Bledsoe
Chief Information Officer
Catawba County, North Carolina

May 18, 2012

Wilmington, North Carolina

Mobile
Social
Video
Cloud

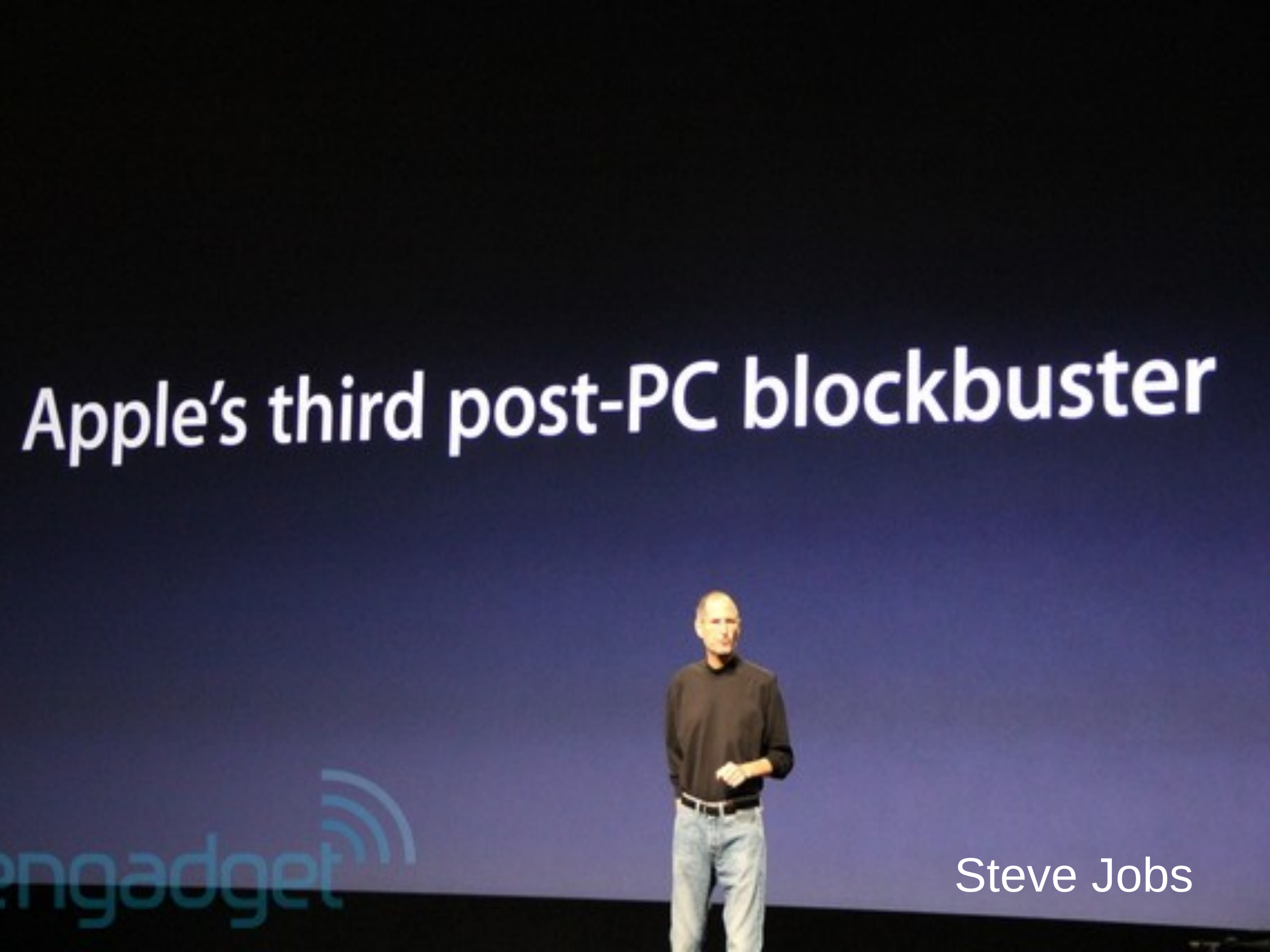
} Game Changers

Disruptive Technology

What companies have been the most influential or disruptive in the past decade?

amazon.com®

Google


Apple's third post-PC blockbuster
engadget
Steve Jobs

Connie Guglielmo

Apple May Be World's First Trillion Dollar Company

4/03/2012 @ 11:34AM

Let the countdown begin: Analysts are now saying saying that Apple shares could reach $1,000 within the next two years — up from about $630 today — as it continues to win over mobile buyers with the iPhone and iPad.

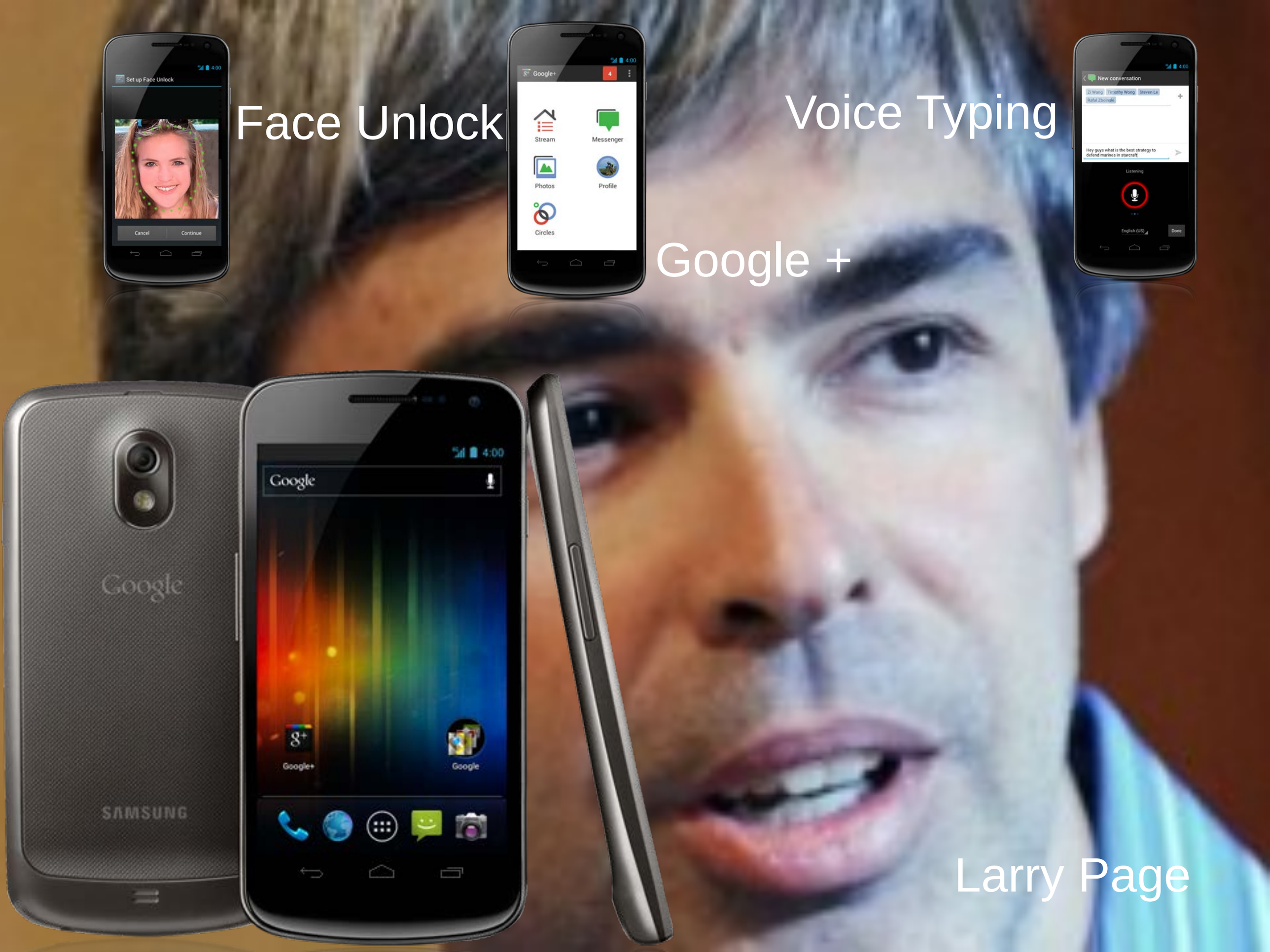
Yesterday, Brian White at Topeka Capital Markets, arguing that Apple's shares are undervalued relative to the company's earnings potential, put a $1,001 12-month price target on Apple's shares on continued demand for its mobile devices, expansion into China and the possible release of an interactive television. Katy Huberty, of Morgan Stanley, told me yesterday the $1,000 price target is "realistic," with her enthusiasm based in large part on Apple's opportunity to expand in China where sales went from almost nothing to $12 billion in two years.

Today, Gene Munster, of Piper Jaffray, said the discussion about a $1,000 share price (or more) is "nothing new to the Apple story" and said Apple is on track to become the first public company to have a trillion dollar market capitalization. That would top the current record for a publicly traded company — the $619 billion in value reached at one point by Microsoft.

Sound farfetched? Munster looks at the math and says that Apple's market cap as of yesterday was about $573 billion, and that the company added $400 billion of that value from the beginning

Image via CrunchBase

Forbes TECH
Forbes.com Tech News 2 hours ago 84 retweets
Apple May Be World's First Trillion Dollar Company http://t.co/kBP9zHYJ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Cancel
Continue
Google +
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Messenger
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Profile
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Voice Typing
New conversation
Listening
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SAMSUNG
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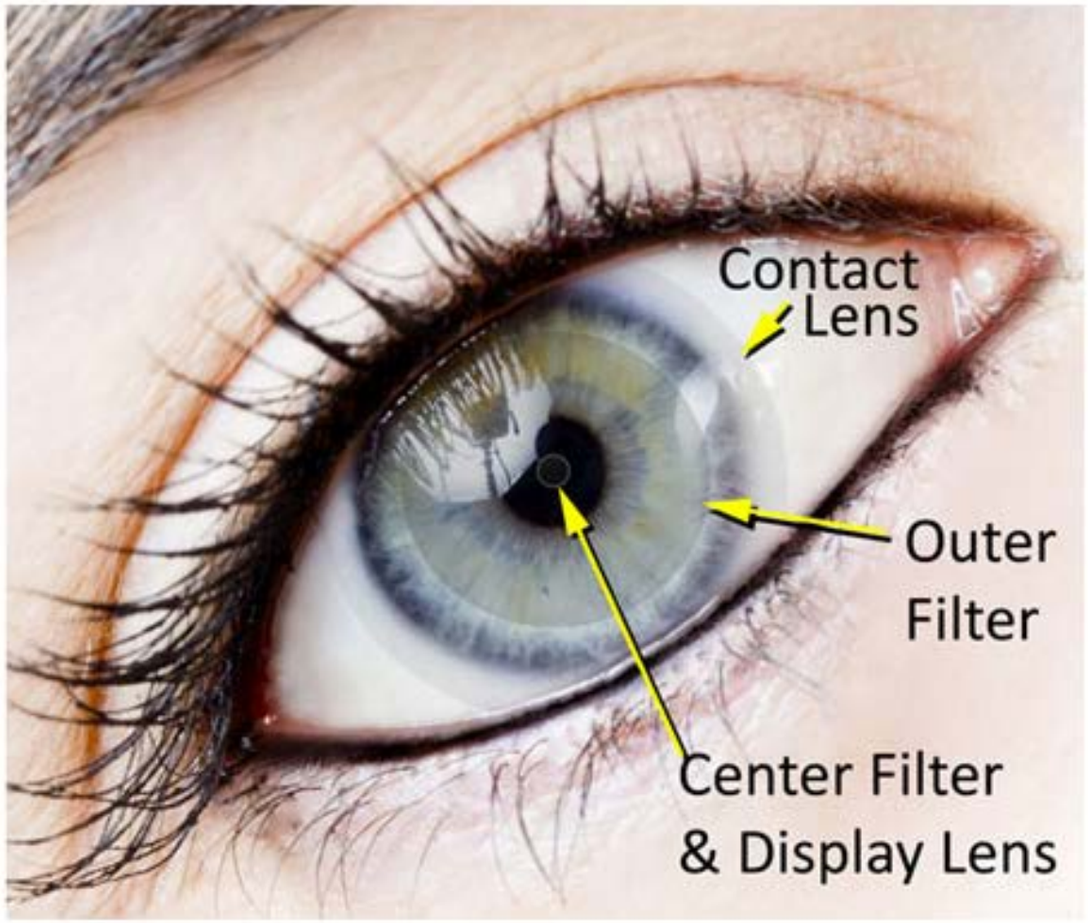
Larry Page

Project Glass

Google co-founder Sergey Brin sports augmented reality glasses.
(Credit: Thomas Hawk)

Pentagon places order for iOptik dual focus augmented reality contact lenses

By Sam Byford on April 13, 2012 04:41 am



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The Pentagon has placed an order for a prototype augmented reality display system that is based on dual focus contact lenses with an expanded field of vision. The system, called iOptik and developed by Innovega, allows the wearer to focus on a HUD at the same time as the surrounding environment by projecting an image onto different sections of the lens. HUD information goes through to the center of the pupil, and light from the wearer's peripheral vision is filtered out to avoid interference. The US military already uses HUDs on the battlefield, but they require bulky equipment and the wearer must actively focus on

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Jeff Bezos

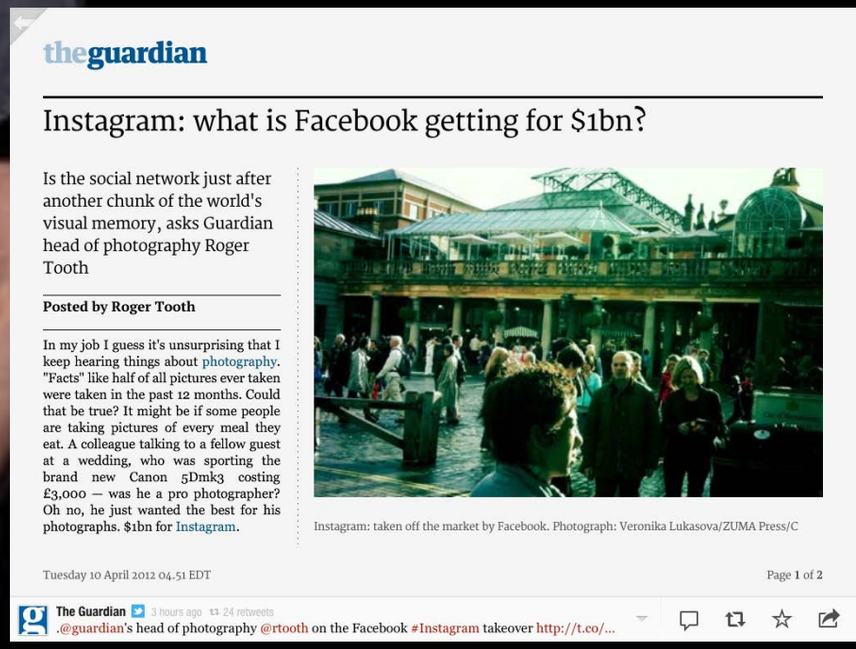
Amazon Leaps Into High End of the Fashion Pool

Matthew Ryan Williams for The New York Times

Jeff Bezos, Amazon's chief executive, says the company's new effort is not about selling clothes at deep discounts but at prices that ensure "the designer brands are happy."

Timeline

Mark Zuckerberg turns 28,
exactly half the age
of the average S&P 500 CEO
IPO could be $100B



theguardian

Instagram: what is Facebook getting for $1bn?

Is the social network just after another chunk of the world's visual memory, asks Guardian head of photography Roger Tooth

Posted by Roger Tooth

In my job I guess it's unsurprising that I keep hearing things about photography. "Facts" like half of all pictures ever taken were taken in the past 12 months. Could that be true? It might be if some people are taking pictures of every meal they eat. A colleague talking to a fellow guest at a wedding, who was sporting the brand new Canon 5Dmk3 costing £3,000 — was he a pro photographer? Oh no, he just wanted the best for his photographs. $1bn for Instagram.

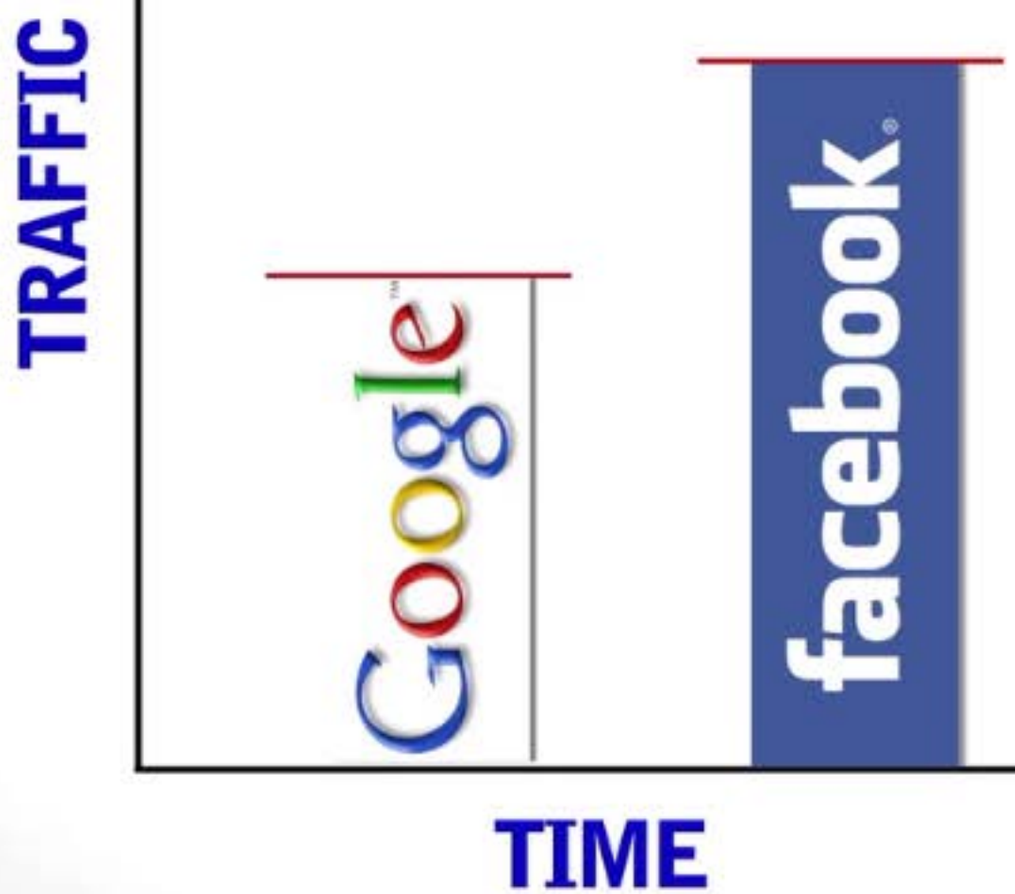
Instagram: taken off the market by Facebook. Photograph: Veronika Lukasova/ZUMA Press/C

Tuesday 10 April 2012 04.51 EDT

Page 1 of 2

The Guardian 3 hours ago 24 retweets
.@guardian's head of photography @rtooth on the Facebook #Instagram takeover http://t.co/...

Mark Zuckerberg



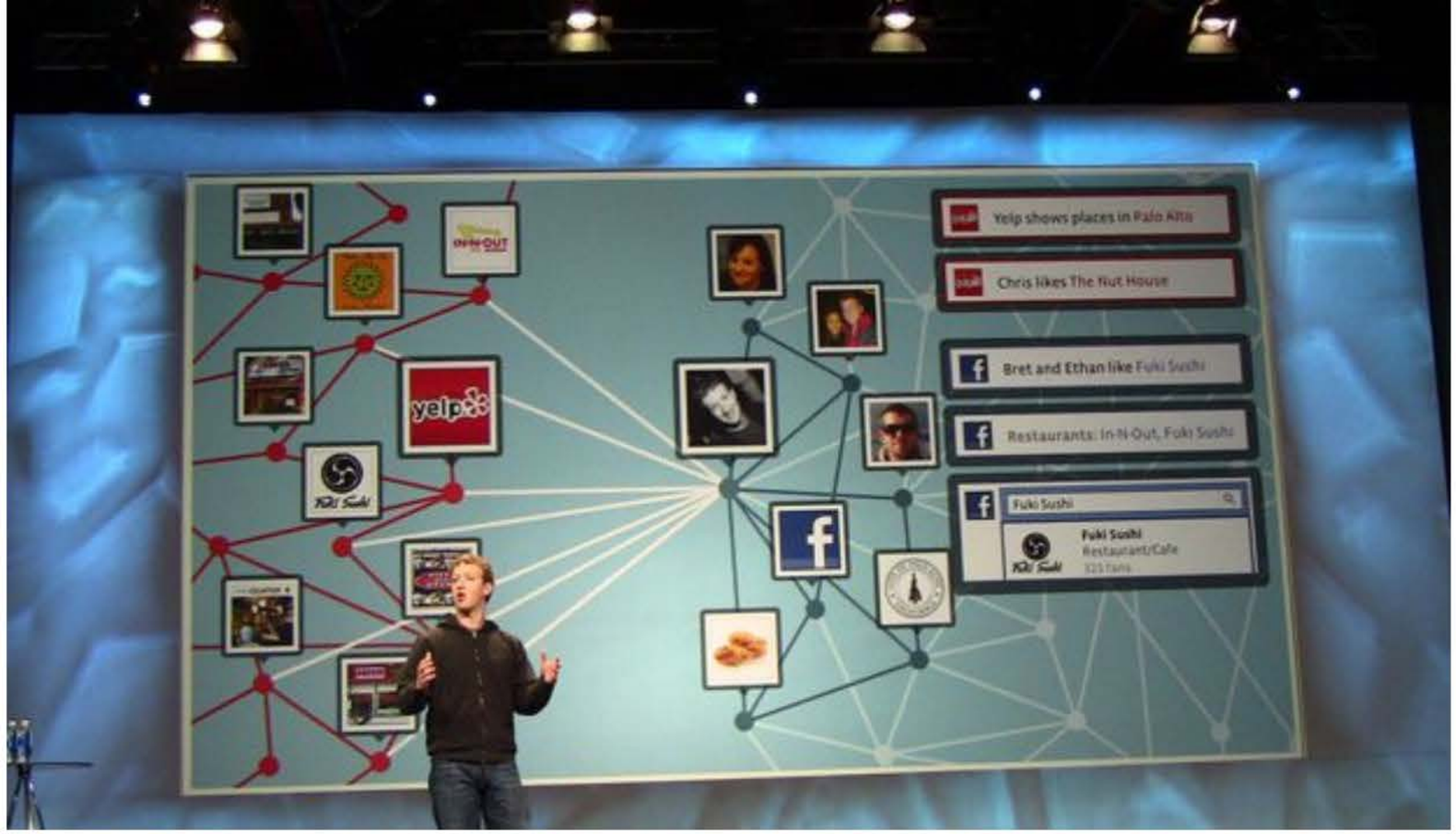
Facebook tops Google for weekly traffic in the U.S.

FAST COMPANY

MAY 17, 2012

In the storm that is Facebook's IPO, we pause to take note of the way the social network has transformed the way we live now.

IN 8 YEARS, FACEBOOK CHANGED ALL WE DO ONLINE



Is Facebook worth the $100 billion or so its pending IPO suggests it is? Who the good gracious knows. But one thing we can all be certain about is how the social network has radically changed people's behavior and expectations online in the eight short years since it was a nary more than a twinkle in the eye of its baby-faced founder(s). Those changes have had the monumental impact of facilitating the for- dramatically shifting the way brands market themselves online.

There are things we do online today, that we take so much for granted that we forget that some of them didn't exist even as recently as two years ago. And others were so radical they inspired outright rebellions when they were first introduced. And yet all of these things are not only commonplace today, they are the

Fast Company Yesterday 5:09 PM 26 retweets
Before tomorrow's NASDAQ frenzy, we pause to remember a few of Facebook's game-changing innovations: ht…

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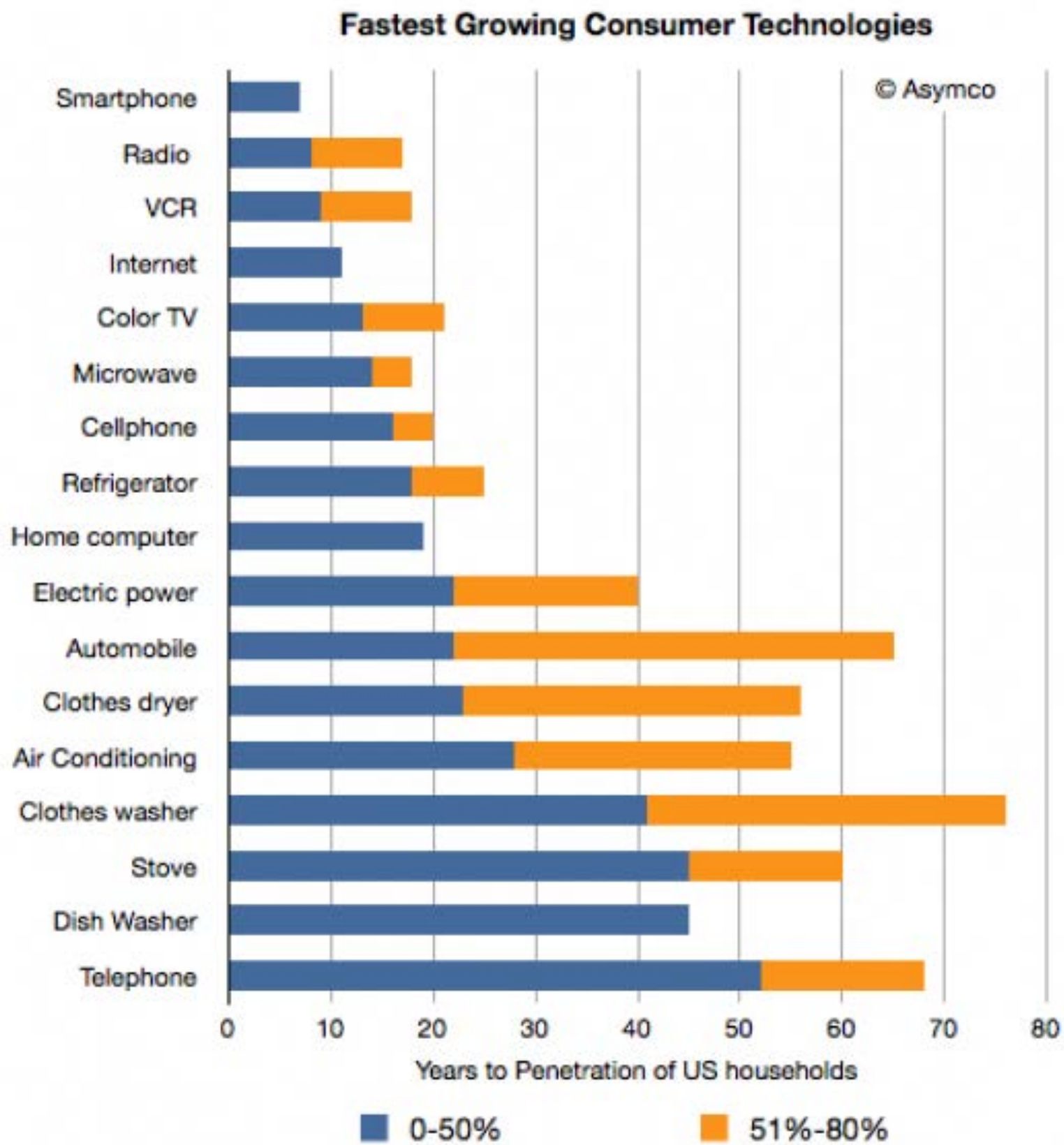
Google

Number of wireless devices in use exceeds the entire U.S. population

BY: **GEORGE TINARI**, INTOMOBILE
TUESDAY, OCTOBER 11TH, 2011 AT 12:58 PM

CATEGORIES: **CTIA-20**

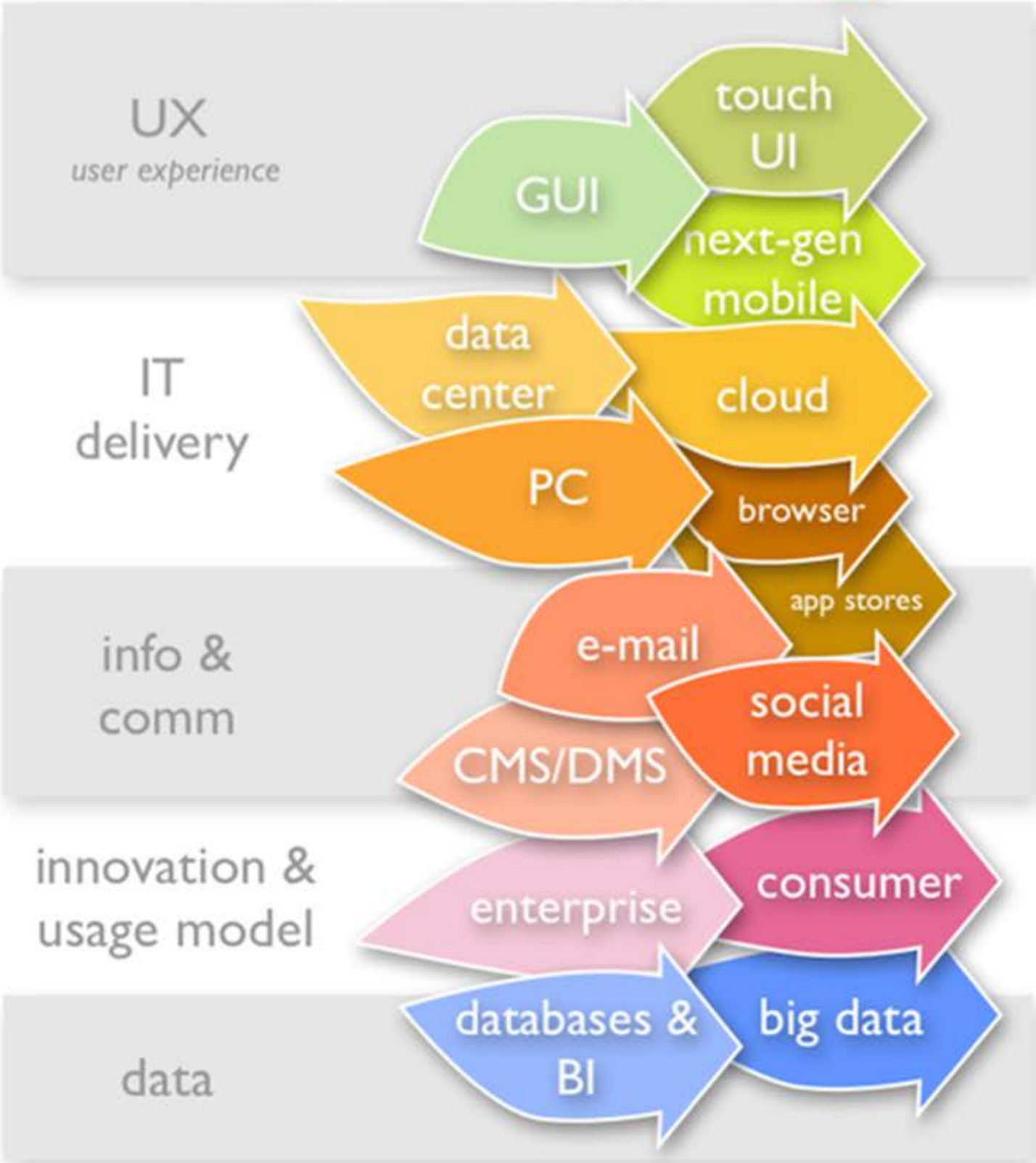
The Economist



http://www.economist.com/blogs/freeexchange/2012/04/general-purpose-technologies

Phillip Schiller

The Major Shifts in 21st Century Information Technology



From http://zdnet.com/blog/hinchcliffe on ZDNet

Corning Day of Glass

FAST COMPANY

Expert Perspective

Strive For Work-Life Integration, Not Balance

BY CRAIG CHAPPELOW | 03-16-2012 | 1:30 PM

This article is written by a member of our expert contributor community.

Stop trying to balance the mythical scales so that work and family demands and rewards are exactly even. Instead, take these steps to integrate the two for greater happiness and control.

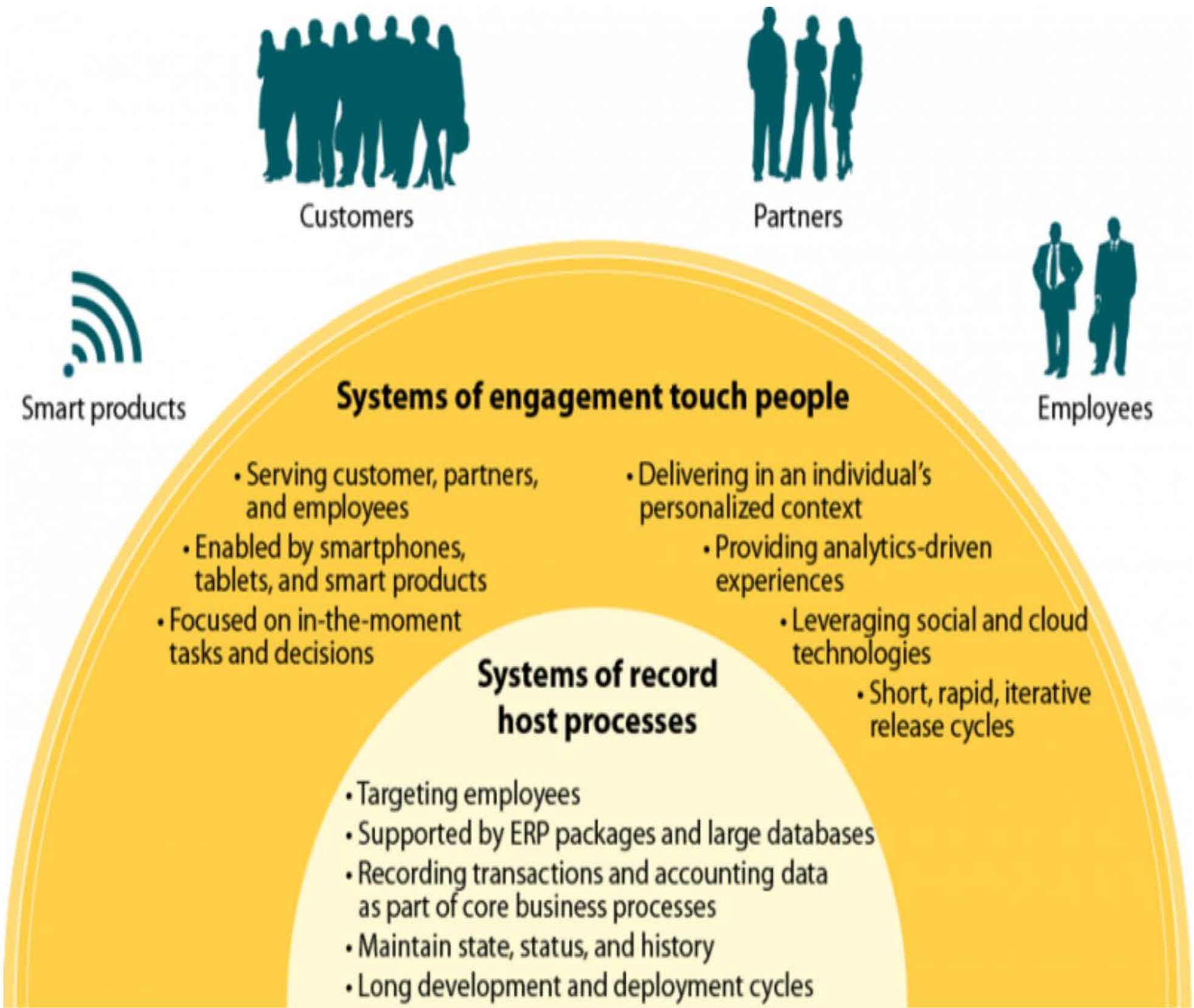
A Billion Smartphones Require New Systems Of Engagement

+ Comment now

By Ted Schadler

It's a technology big idea: that organizations can best serve their customers, partners, and employees with new "systems of engagement." (Thanks to Geoff Moore for permission to define and use his term.) Let us explain why.

First, the logistics. John McCarthy and I spent the last eight months sifting through the patterns that have


Customers
Partners
Smart products
Employees
Systems of engagement touch people
• Serving customer, partners, and employees
• Enabled by smartphones, tablets, and smart products
• Focused on in-the-moment tasks and decisions
• Delivering in an individual's personalized context
• Providing analytics-driven experiences
• Leveraging social and cloud technologies
• Short, rapid, iterative release cycles
Systems of record host processes
• Targeting employees
• Supported by ERP packages and large databases
• Recording transactions and accounting data as part of core business processes
• Maintain state, status, and history
• Long development and deployment cycles

Mobile is the new face of engagement

Beyond Tablets: The Next Five Computing Form Factors

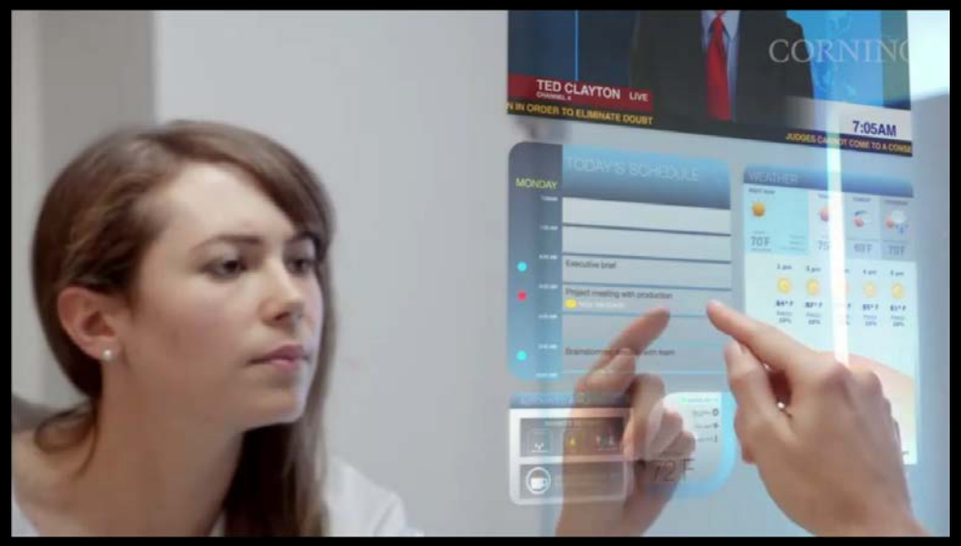
Nest Thermostat, Image from Nest.com

Embedded devices

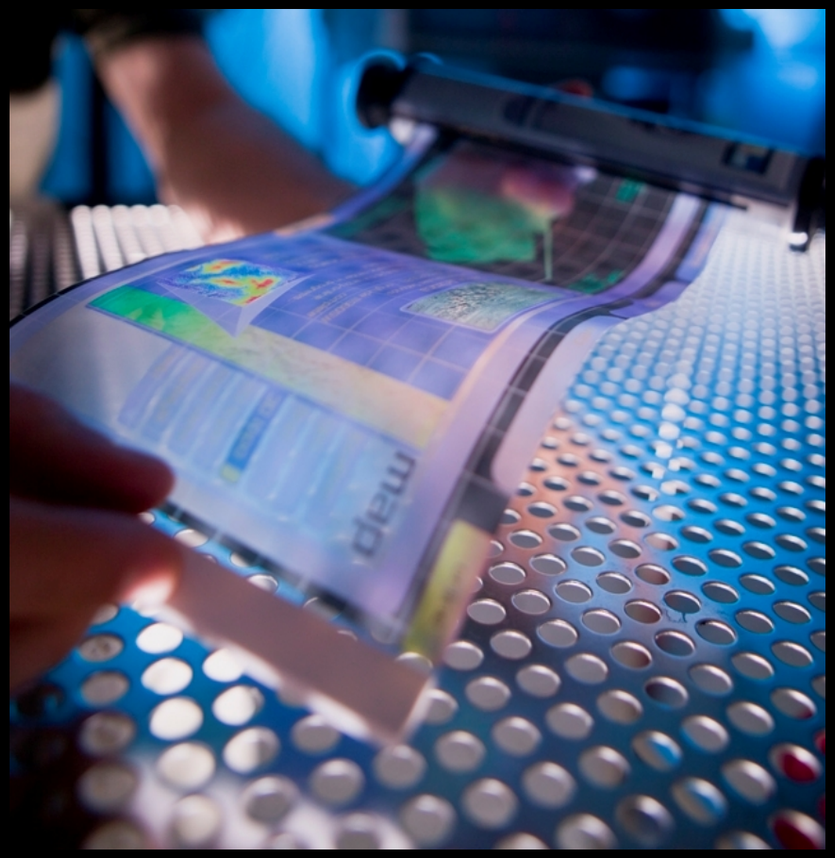
Wearables

Beyond Tablets: The Next Five Computing Form Factors

Surfaces



Mini Projectors



Flexible Displays

biometric-aware advertising

Scenario

A woman walks into a store, and a computer recognizes her, welcomes her by name, compliments her on the weight she's lost, and points out that the store has lots of good deals in her new size — which happens to be two sizes larger than she had been telling her friends, who are with her on this particular shopping trip.

GPS

IPS

Text to 911

Are you ready?

Remember the statement, "people want to take more ownership in their situation". Referring to calling and giving information to 911.

Email Must Die !

“So e-mail — I can’t imagine life without it — is probably going away.”
Sheryl Sandberg
COO Facebook

Tech Firm Implements Employee 'Zero Email' Policy

By Susanna Kim | ABC News - 21 hrs ago

(Hannelore Foerster/Bloomberg/Getty Images)

You've got mail–not. Employees of tech company Atos will be banned from sending emails under the company's new "zero email" policy.

CEO Thierry Breton (00 messages employees receive per day are useful and 18 percent is spam. That's why he e company's 74,000 employees to communicate with each other via instant messaging ar

Atos had revenue last year of of EUR 8.6 billion, or $11.5 billion, and has offices in 42 countries, 74,000 employees

Caroline Crouch, a s al emails rather than external emails with clients and partners. Atos has already reduced

When asked how employees have responded to the policy, Crouch told ABC News the overall response "has been positive with strong take up of alternative tools."

Breton, the French finance minister from 2005 to 2007, told the Wall Street Journal he has not sent an email in the three years since he became chairman and CEO of Atos in November 2008.

10 percent of the 200 messages employees receive per day are useful and 18 percent is spam.

"We are producing data on a massive scale that is fast polluting statement when first announcing the policy in Feburary. "At [Atos] we are taking onmental pollution after the industrial revolution."

Atos had revenue last year of of EUR 8.6 billion, or $11.5 billion, and has offices in 42 countries, according to the company website.

The company says by 2013, more than half of all new digital content will be the result of updates to, and editing of existing information. Middle managers spend more than 25 percent of their time searching for information, according to the company.

Crouch said Atos is evaluating a number of new tools to replace internal email including collaborative and social media tools. Those include the Atos Wiki, which allows all employees to communicate by contributing or modifying online content, and Office Communicator, the company's online chat system which allows video conferencing, and file and application sharing.

FAST COMPANY

MAR 23, 2012

This blog is written by a member of our expert blogging community and expresses that expert's views alone.

EMAIL IS CRUSHING US, CAN ACTIVITY STREAMS FREE US?

BY EXPERT BLOGGER DAVID LAVENDA

If you're struggling to keep your email box from overflowing, you are not alone--this morning, my inbox summary told me I had 616 new messages awaiting my attention. Now, that's a daunting way to start the day.

Email overload is a well-documented phenomenon that has been linked to reduced productivity, inability to focus on important tasks, and even physical and emotional stress. So it is no wonder that alternative forms of communication are being actively pursued to reduce overload, both at home and at the office. One method that is gaining popularity is the activity stream.

Activity streams provide a way to syndicate updates about a user or a group of users within a social network site or across a group of sites. Twitter is the most popular consumer activity stream, although LinkedIn and Facebook have

Fast Company 6 hours ago 24 retweets
Email Is Crushing Us All--Can Activity Streams Liberate Us? http://t.co/KmURSoHU via...

New Rules to Play By !

The Government Would Like You to Write a 'Social Media Will'

May 07, 2012 by **Rebecca J. Rosen** for **The Atlantic**

6

Dashboard Best Practices - IT Manager's Guide to Dashboards Download Your Free White Paper Now!
LogiXML.com/Dashboard-WP

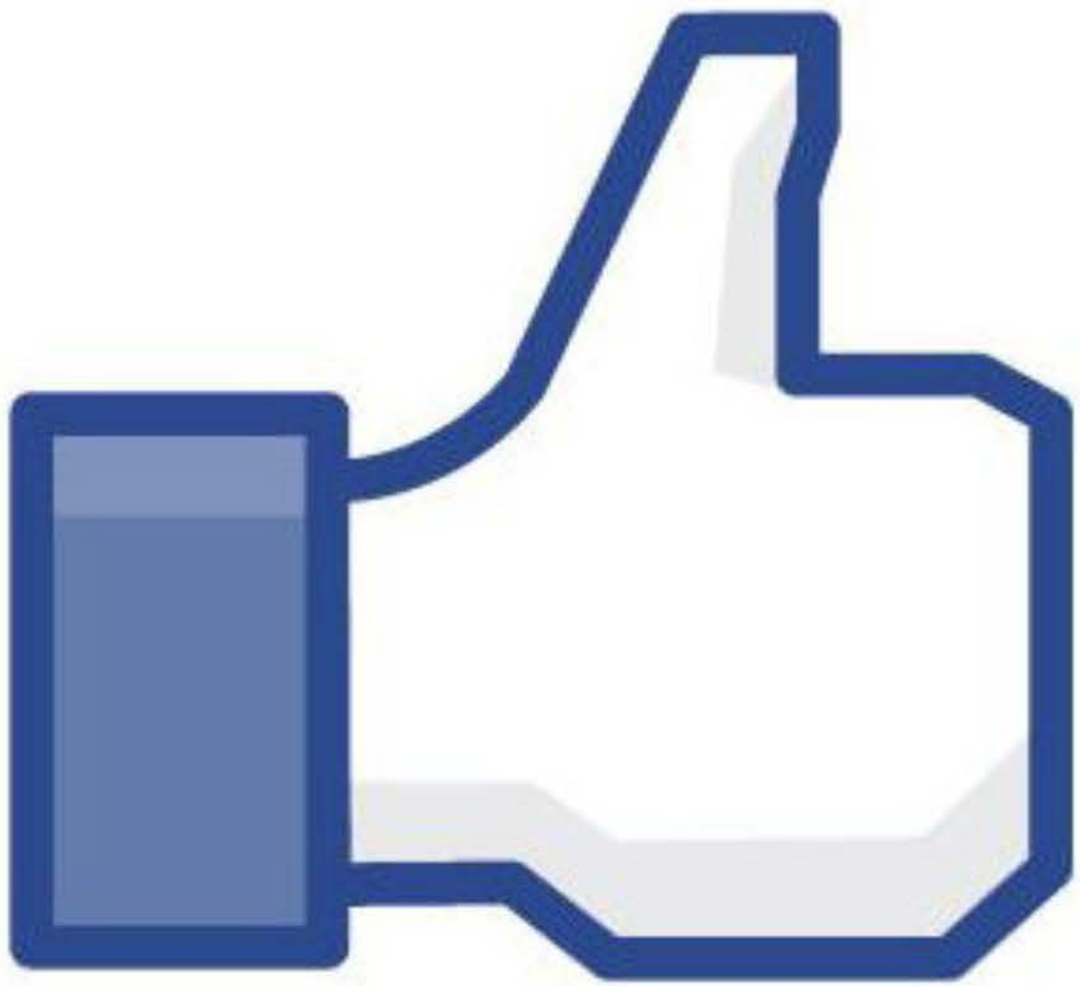
By some estimates, nearly a half a million people with Facebook accounts passed away last year, leaving family and friends to navigate what to do with those pages. Leave the account open? Shut it down entirely? Convert it to an official Facebook memorial page? What would you want for your own Facebook profile? And forget Facebook, what do you want to become of your email account?

If you want any say in such matters, you might want to consider creating a social-media will, as the US government is now recommending as part of its advice on estate planning. As per their blog:

> If you have social media profiles set up online, you should create a statement of how you would like your online identity to be handled. Just like a traditional will helps your survivors handle your physical belongings, a social media will spells out how you want your online identity to be handled.

A Facebook 'Like' is not constitutionally protected speech, says judge

By Aaron Souppouris on May 7, 2012 07:40 am



Open-sourcing your genomic data

By Barb Darrow | Apr. 29, 2012, 5:13am PT | 5 Comments

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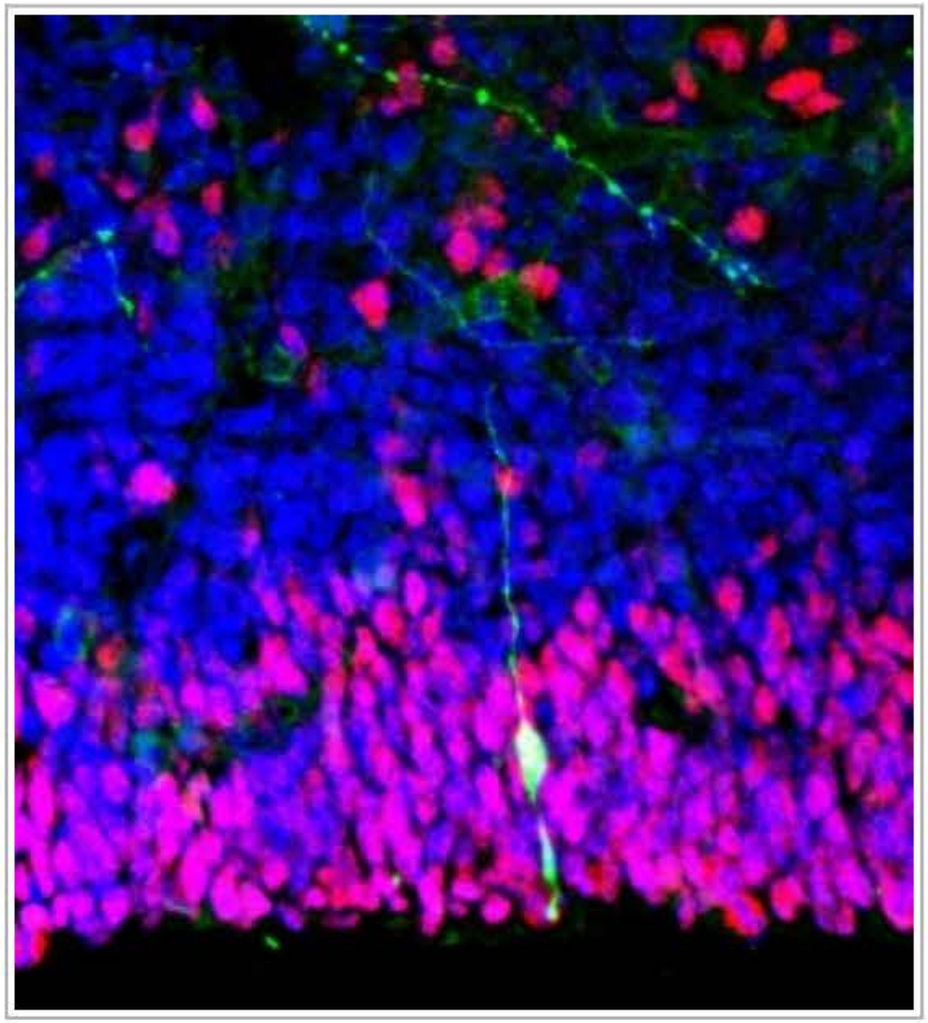

People interested in donating their own genomic data to science should check out a new standard informed consent form that will let them route some or all of their genetic information to researchers. The goal of the Portable Legal Consent is to create a shared, open-source repository of that data.

The ability to give such gene data to science at large has been a subject of debate lately. Often a person's medical data is used for one specific research purpose but is off limits for anything else. In this big data era where there are more tools to sort and analyse huge amounts of information, the accessibility of a big genomic data pool for many projects could be a boon to researchers looking to cure diseases or just better understand human biology.

New Jersey town imposes fines for texting while walking

Recommend 406 people recommend this.

By Muriel Kane
Sunday, May 13, 2012 18:53 EDT

+1 30

Topics: **Fort Lee** ♦ **Fort Lee Police Chief Thomas Ripoli** ♦ **new jersey** ♦ **pedestrian accidents**

The Raw Story 3 hours ago 46 retweets
New Jersey town imposes fines for texting while walking. http://t.co/bq5vVcT4

Speaking of Rules and Texting!

Fresh from celebrating its sixth birthday yesterday, Twitter has been praised as a prominent social network that is bringing a cosmic shift to the world, according to Alec Ross, the US government's Senior Advisor for Innovation.

The microblogging service, Facebook and other Web-based services were praised by Ross who, speaking exclusively to The Next Web, looked back at how social media has blossomed from niche services into crucial platforms of communication.

No longer niche, it's business

'Ross, who advises Secretary of State Hillary Clinton on all things technology, first came to his job in 2009, when Twitter was a just niche technology. Back then, few could have foreseen it developing into a service which sees 140 million active users send 340 million tweets per day, and is crucial for the US State Department

'Text Haiti'

"We set up the program overnight, with no meeting no clearances and no budget," he explains. "We thought it was a good idea that might raise a few hundred thousand dollars but, after using the 'dark arts' of social media, we raised $35 million in just two weeks."

I got an App for that!

SX SCHEDULE

Interactive: March 9–13
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Music: March 13–18

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Why Mobile Apps Must Die

#sxsw #BeyondApps

Mobile apps are on a clear trajectory for failure. It's just not possible to have an app for every device in my house, every product I own and every store I enter. Much like Yahoos original hierarchy gave way to Google's search. Applications have to give away to a 'just in time' approach to applications.

This talk will explain how applications must give way to a more universal approach to application distribution, one based on the mobile web and cloud services. The problem of course, is that the mobile web has both hands tied behind its back. Any mobile app today is locked away behind a browser ghetto: in effect, a sub OS inside a larger mobile OS.

This isn't just an arbitrary technology debate, a just-in-time approach to application functionality can unleash entirely new sets of application, ones which are impossible with native apps.

This talk will layout how this problem can be fixed, and what changes need to take place, outside of just HTML5, for it to happen.

Presenters

Scott Jenson

Creative Dir
frog design

As frog's Creative Director, Scott Jenson was the first member of the User Interface group at Apple in the late 80s,

Sunday, March 11

5:45PM - 6:00PM

Hyatt Regency Austin

Texas Ballroom 4-7

+ Add to my schedule

VENUE INFO

208 Barton Springs Rd

TYPE

Great App-pectations: When Innovation Leapfrogs Phone Capabilities

Liz Gannes
March 17, 2012 at 8:00 am PT

As comic Louis C.K. would say about technology: Everything is amazing and nobody is happy.

Nowhere is that more true as app developers push the possibilities of how to use our smartphones' location awareness and reach well beyond what our mobile data plans and battery lives seem to be able to support, especially in densely populated spaces.

It's kind of sad, because for a while the release of new devices have set off rushes of creativity, with developers using touchscreens and accelerometers and other sensors in ways that seemed to make science fiction real.

We see great stuff like phone cameras being used for everything from a detecting heart rates to translating paper menus from one language to another. We watch serendipitous location-sharing tools go from typing in an address five years ago (Dodgeball), to linking with a crowdsourced database three years ago (Foursquare), to ambient awareness this year (Highlight).

The disconnect between app dreams and phone reality was particularly evident at the South By Southwest Interactive conference in Austin this past week, where official attendance grew to nearly 25,000, up 27 percent from last year. Combined with everyone else in the hip Texas town, including many SXSW partiers without passes, that made for phone network overload.

And when our phones are constantly searching for a signal or tracking our locations, their battery life tends to suck. Literally.

As most did, I had a hard time getting mobile data during all five days I was in Austin, with ongoing weak 3G service on my iPhone 4 on the AT&T network. AT&T wouldn't give me a comment on its SXSW performance beyond a map of its event service plan, including 220 Wi-Fi

All Things D 5 hours ago 6 retweets
Great App-pectations: When Innovation Leapfrogs Phone Capabilities -by @LizGannes http://...

New Study Shows that Free Apps Are Killing Your Battery

By KEITH WAGSTAFF | @kwagstaff | March 19, 2012 | 18

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Techland Video

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Bring Your Own Device

Followed by

Bring your own apps(applications)
Bring your own cloud

Daniel Pink
The Surprising Science of Motivation

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Google
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Social Media Means More Than Salary to Some College Students

By Ryan Lytle | US News – 20 hrs ago

Gabbi Baker, a student at George Washington University in Washington, D.C., is like many college students today: She is an avid user of social media. For Baker, it's a habit more than a hobby; she says she constantly checks her networks for updates, sometimes going less than 10 minutes between visits to her Twitter feed.

"I've really found [social media] to be an instrumental tool in building my network and learning what I want to do careerwise," the senior business and marketing major says. "I think social media will continue to remain important to me as I move on to my first job."

[Imagine college life without social media.]

If faced with a job offer from a company that restricted access to social media websites in the workplace, Baker says she would be hesitant to accept it.

"I don't know if I'd necessarily value a company that doesn't see the value of social media," she notes. "I couldn't imagine not being able to check Twitter when I'm at work on my work computer."

According to a recent study by Cisco, which surveyed 1,400 college students and 1,400 young professionals between the ages of 21 and 29 in 14 countries, some students would be willing to sacrifice salary and employment opportunities in favor of social media and technology freedoms.

Fifty-six percent of college students who responded to the survey said they would either not accept a

- Foreigners in China squeezed on pensions, taxes
- Australian given 500 lashes for blasphemy in Saudi Arabia
- Wiping Out Millions of Jobs is the Whole Darn Point
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- Screen Legend's Grandson Found With Bag Over His Head
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The Beginning of the End of the 9-to-5 Workday?

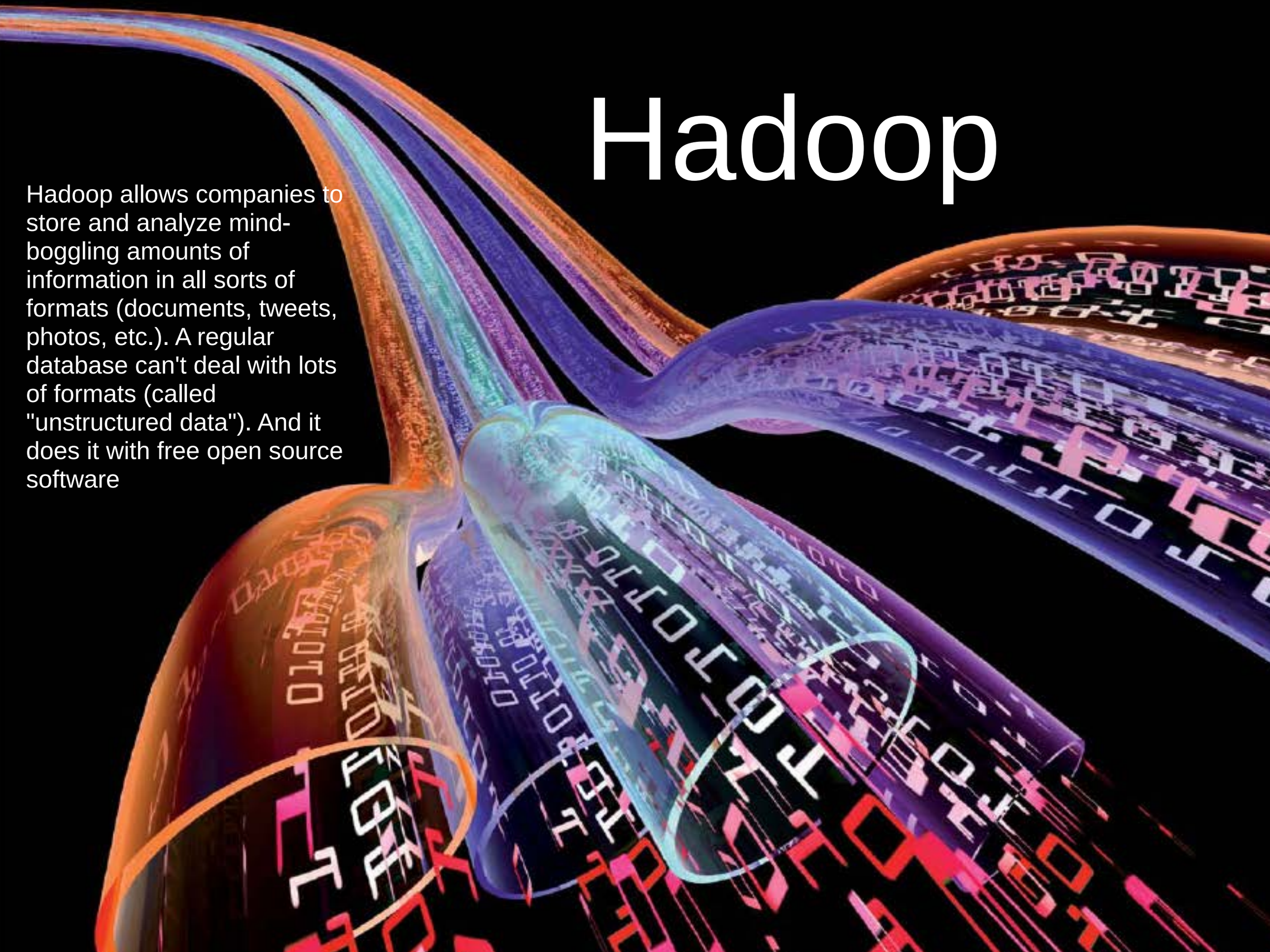
- Gen Y workers won’t accept jobs where they can’t access Facebook
- Gen Y-ers value workplace flexibility over more money.
- Gen Y workers are always connected to jobs through technology.

"Employer of Choice"

For all Generations

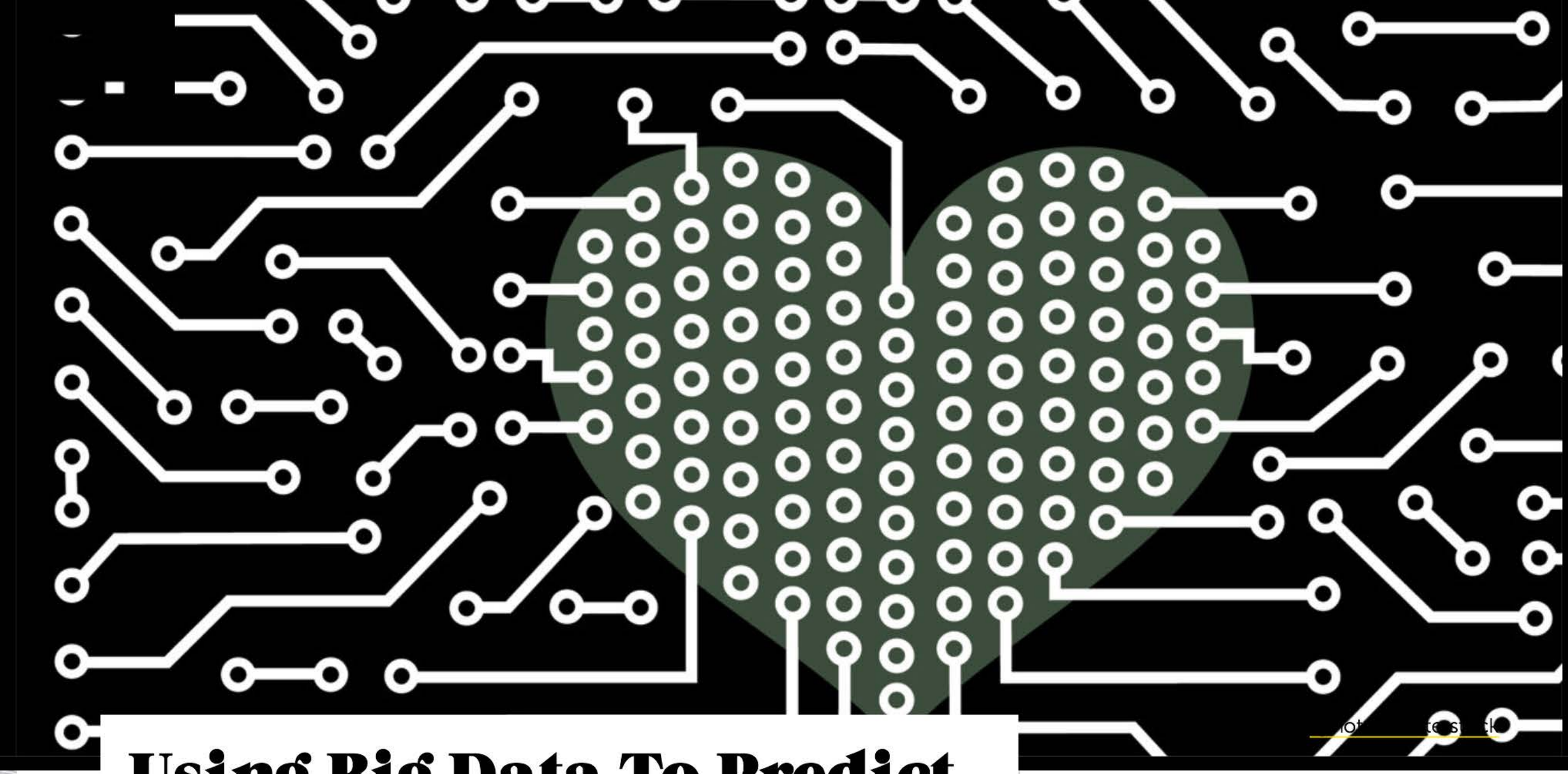
Hadoop

Hadoop allows companies to store and analyze mind-boggling amounts of information in all sorts of formats (documents, tweets, photos, etc.). A regular database can't deal with lots of formats (called "unstructured data"). And it does it with free open source software



Microsoft's New NYC Lab To Boost Data-Driven Social Science

BY NIDHI SUBBARAMAN | 05-04-2012 | 7:20 AM



Using Big Data To Predict Your Potential Heart Problems

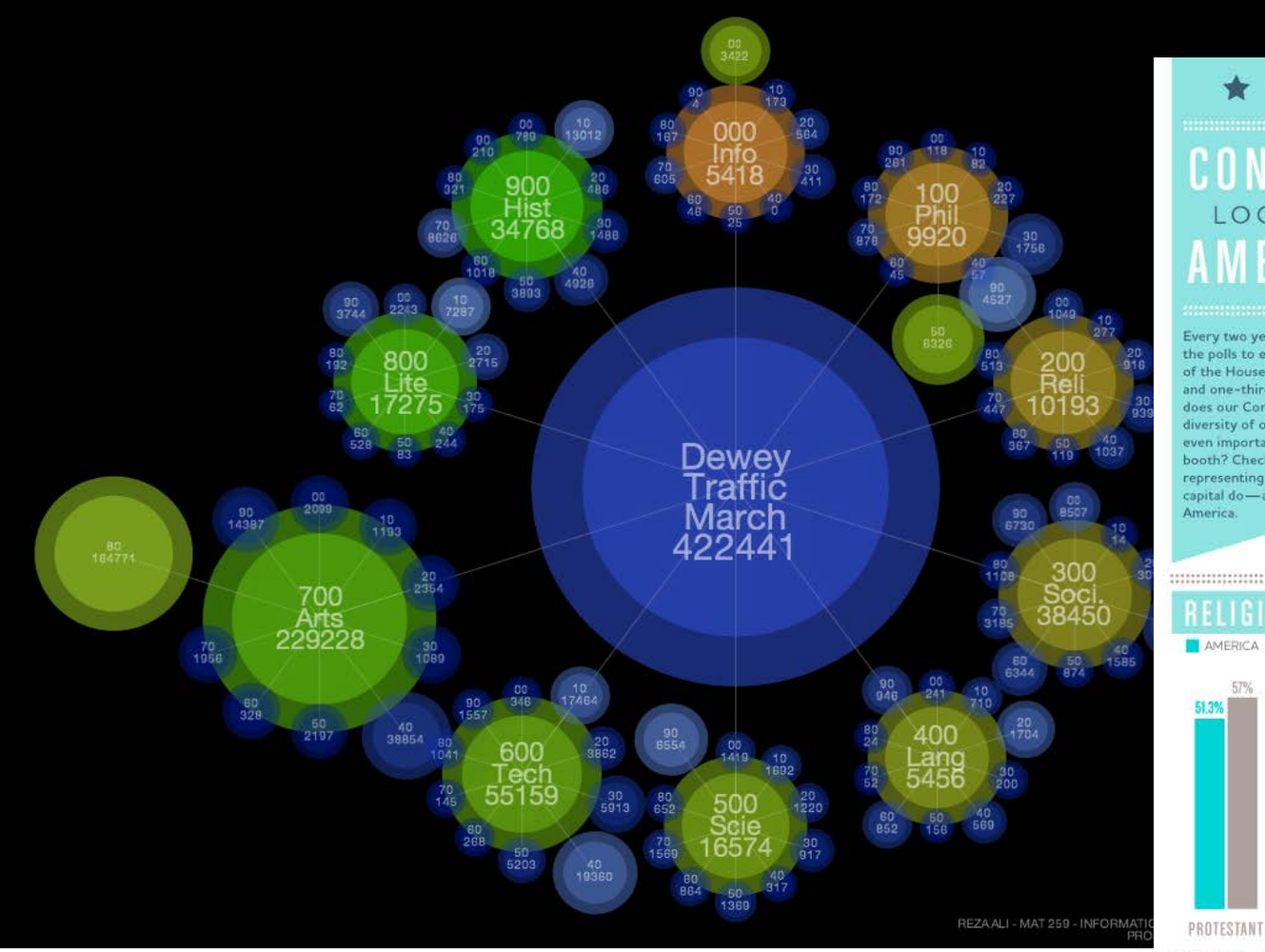
The doctor only measures your heart rate when you're sick, but a new website aims to create a database of every normal beating heart in the

Calvin, the researchers claim, can match Oracle's 500,000 transaction-per-second performance running on

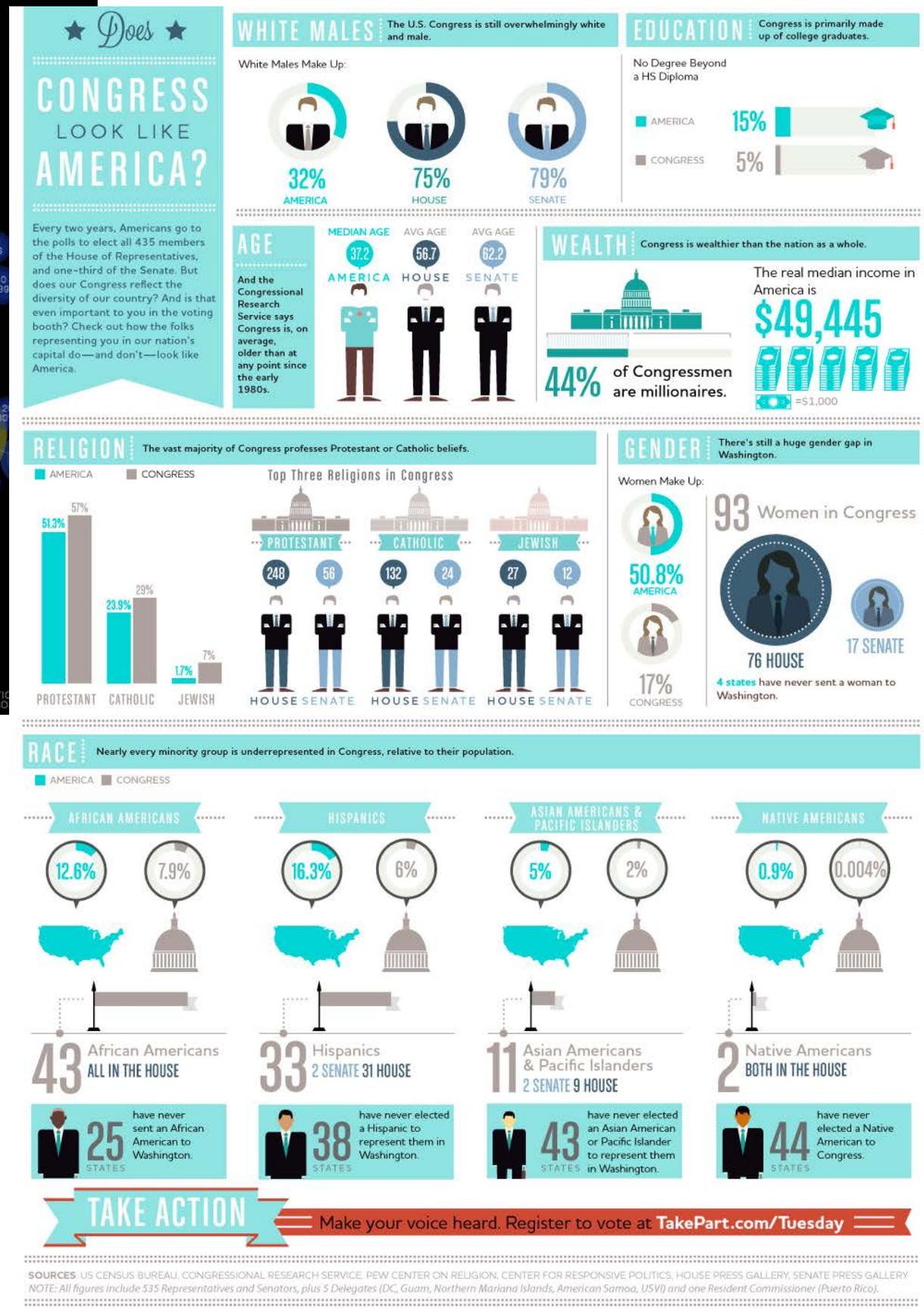
commodity servers on Amazon EC2.

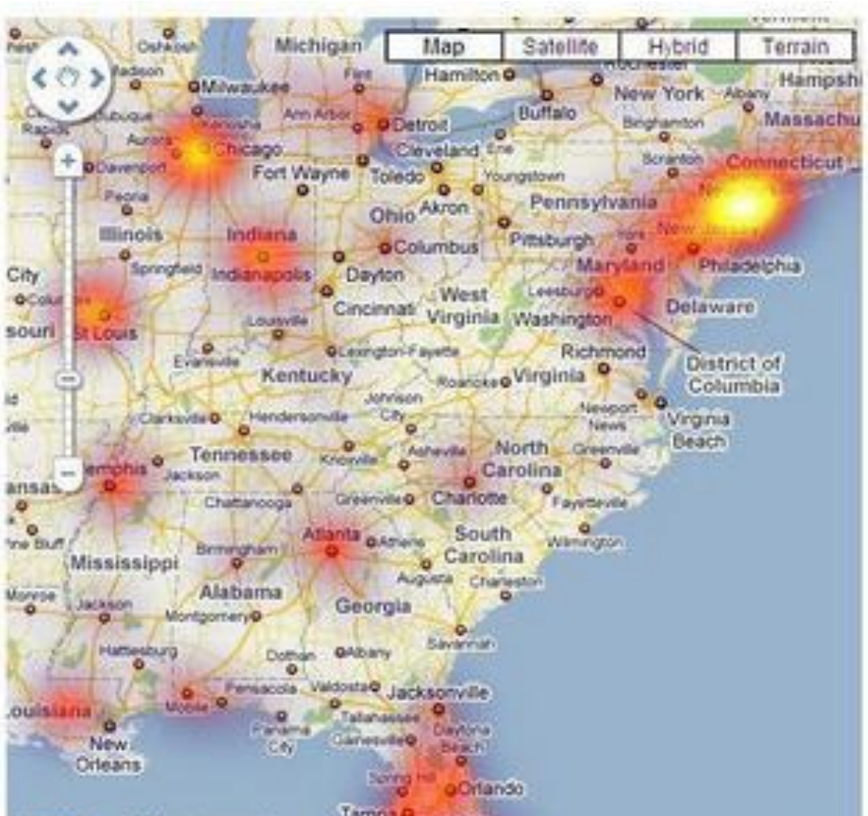
Calvin: A fast, cheap database that isn't a database at all

By Derrick Harris | May. 16, 2012, 11:12am PT | No Comments



Data Visualization



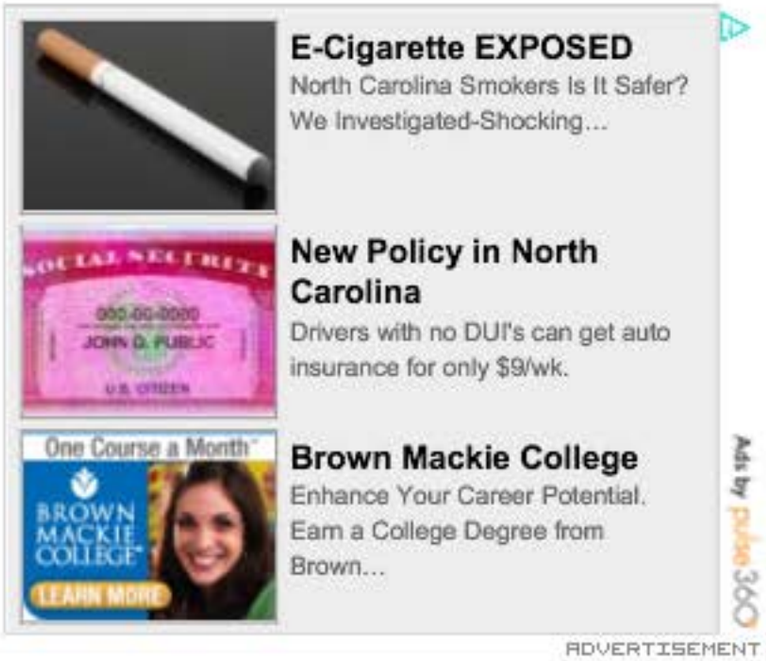


Infographics

Apple plans software to rid 650,000 Macs of Flashback virus

Published April 11, 2012 / FoxNews.com

IMAGE COMPOSITE BY SECURITYNEWSDAILY



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Think your Apple computer is immune? Think different.

A nasty bit of malware called Flashback has infected approximately 600,000 Macintosh computers worldwide through a Java security flaw, according to a Russian security firm -- and Apple itself is hard at work on a fix, the company said Tuesday.

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FAST COMPANY

MAR 14, 2012

Unless, that is, you are very close with your mom. Welcome to the data-driven, score-keeping, real-world, competitive game that is a gadget-packed modern life.

YOUR CAR KEY KNOWS MORE ABOUT YOU THAN YOUR MOM DOES

BY MARTIN LINDSTROM

The other day I was going through the necessary rigmarole of getting my car serviced when I learned about yet another surprising way the details of your life can be revealed. That's because mechanics working on the most recent car models know a whole lot more about your car than you've told them. They can tell the number of accidents its been involved in, how hard the car's been driven, and even how often the car's exceeded the speed limit. This information is neither held on a central database, nor is it a part of any police record. No, the details are all contained in the car key.

Every time you turn the key to start your brand spanking new car, it activates a database that quietly gathers all kinds of information, including behavioral data. This information is extremely useful

Fast Company 15 hours ago 34 retweets
Your Car Key Knows More About You Than Your Mom Does http://t.co/LzJ9MgJh

Smartphone apps are sending your data to China

by Lachlan Urquhart on March 9, 2012 | Comments (11)

FILED UNDER: Law & order, Privacy, Social networks

Smartphone apps can access some pretty personal and intimate information. This ranges from phone numbers and email addresses to GPS coordinates, to name a few.

It would be reasonable to assume that data collected is limited to assisting an app with its functionality. However, this doesn't always seem to be the case.

A report in the UK's The Sunday Times, "In a flash your details are on a server in Israel", sheds some light on data transfer practices in 70 basic smartphone apps. These run-of-the mill applications were chosen because the Sunday Times felt they sought more information than was functionally necessary.

Using "MiddleMan" software, they were able to monitor app data transfers and made some rather disconcerting discoveries.

Talent Scout
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Exciting Times /Challenging Times with Great Technology

We need to reframe from waiting until technology is mature and safe to actively participating in the creation and design of the technology.

Trends for the 21st Century

NCLGISA Spring Conference

Terry Bledsoe
Chief Information Officer
Catawba County, North Carolina

May 18, 2012

Wilmington, North Carolina