

[UPDATE]

## Links in [Digital Evolution] Chain

By Samuel Tettner



Watson is an artificial intelligence program developed by IBM designed to answer questions posed in natural language.

Named after IBM's founder, Thomas J. Watson, Watson is being developed as part of the DeepQA research project. The program is in the final stages of completion and will run on a POWER7 processor-based system.

It is scheduled to compete on the television quiz show Jeopardy! as a test of its abilities; the competition will be aired in three Jeopardy! episodes running from February 14–16, 2011.

Details:  
<http://goo.gl/2X8W6>

This week a computer which took IBM roughly 3 years to build competed in the popular American TV quiz show "Jeopardy!" Without revealing if it won or not, the mere fact that a computer could not only participate but hold its ground with Ken Jennings\* is amazing. When I first heard about it, I immediately thought of Deep Blue, another IBM invention that created similar commotion in 1996 when it beat then chess champion Gary Kasparov. Chess however, can be easily reduced into mathematical expressions of discrete kind. The questions on "Jeopardy!" which have a natural language component and thus a certain degree of interpretation will have invariably more complex expressions.

Even if you think that "Watson", as the IBM machine was called, failed the Turing test\* (which I can see being true, Watson failed to do some pretty lame things like change its answer once another player said it and it was deemed incorrect), you must agree that a not-so-distant-future where a machine passes the Turing test is easily conceivable. Now we have a defined date when this event will take place: Ray Kurzweil in the latest TIME Magazine says that in the year 2045, computers will have reached enough computational power to out-human humans. This moment has been referred to by technology evangelists as "the singularity". After this point, technology will have reached such a level of sheer computing power and our technological artifacts such a level of complexity that not only will it be impossible to tell the difference between a human and a machine, but telling the difference would be practically unnecessary.

But, until we reach this utopian state (or dystopian if you have seen The Terminator) we humans and machines are locked in an intense challenge. We are primed to think of our relationship between technologies as one of competition, which forces us to take sides. People in the I.T and technology field say it's about the technology: in their view, technological advances will bring new jobs, cures to diseases, better scientific artifacts and cleaner energy sources. People on the humanities, human rights and the development sector tend to be more skeptical of the role of technology and try to focus on the social or cultural aspects. But we, Digital Natives community members, are in a privileged position in this debate.

We are versed with digital technologies yet we used them for social causes. In all three of our workshops the questions of digital activism have come up, and in all three cases we have come up with a similar finding: it's not about the technology, it's about the people, and technology is but the tool to achieve our particular projects. And yet – it is not so simple, because the uses of technology in turn affects us, they empowers us, they transforms us. And maybe we, the people whose identity as social beings has a technological component, can shed light into this on-going debate.

Maybe we hold a piece of the puzzle. Understanding our relation with technologies in our particular projects, understanding the role of digital technologies play in shaping our social position, expectations and actions, understanding how we can step out of the people vs. technology dichotomy that so often gets perpetuated might turn out to partly be our contribution to society.

Dear Reader,

This month, we witnessed the power of connections in Egypt, as people of all age-groups, professions and walks of life stood up to be counted for what they considered the right direction their country was going.

Some people are already referring it as the Twitter/Facebook revolution of Egypt. But whereas arguably, the commitment from the people played a bigger part in the revolution, it is clear that social networks - at the bear minimum - helped speed up the protests.

We have discussed the power of connections in this edition of the *Links in the Chain* newsletter, and how far we need to go to be able to say we're connected. We were not able to reach our fellow Digital Natives in Egypt for an interview, but that will come in the subsequent issues.

What we do have in this issue however, is an unofficial report from the Santiago Workshop, from the point of view of Diego Casaes, and a lot more interesting pieces from Nilofar and Albert.

Hope you enjoy this newsletter.



## DID YOU KNOW?



### SOCIAL MEDIA STATS (2010)

- **152 million** – The number of blogs on the Internet (as tracked by BlogPulse).
- **25 billion** – Number of sent tweets on Twitter in 2010
- **100 million** – New accounts added on Twitter in 2010
- **175 million** – People on Twitter as of September 2010
- **7.7 million** – People following @ladygaga (Lady Gaga, Twitter's most followed user).
- **600 million** – People on Facebook at the end of 2010.
- **250 million** – New people on Facebook in 2010.
- **30 billion** – Pieces of content (links, notes, photos, etc.) shared on Facebook per month.
- **70%** – Share of Facebook's user base located outside the United States.
- **20 million** – The number of Facebook apps installed each day.

### EMAIL STATISTICS

- **107 trillion** – The number of emails sent on the Internet in 2010.
- **294 billion** – Average number of email messages per day.
- **1.88 billion** – The number of email users worldwide.
- **480 million** – New email users since the year before.
- **89.1%** – The share of emails that were spam.
- **262 billion** – The number of spam emails per day (assuming 89% are spam).
- **2.9 billion** – The number of email accounts worldwide.
- **25%** – Share of email accounts that are corporate.

# Why the Social Network is feared: And why we must rejoice in that!



Social control refers generally to societal and political mechanisms or processes that regulate individual and group behavior, leading to conformity and compliance to the rules of a given society, state, or social group.

*Writes Nilofar Haja*

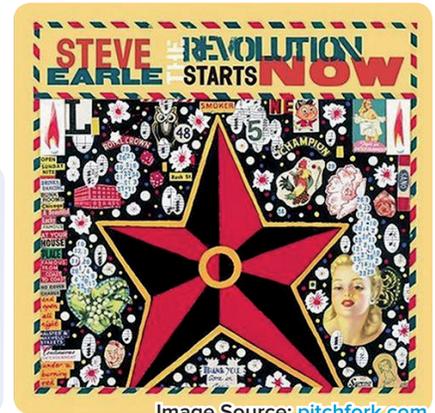


Image Source: [pitchfork.com](http://pitchfork.com)

// **L**etting a hundred flowers blossom and a hundred schools of thought contend..." The Hundred Flowers Campaign, The Communist Part of the China, 1956-57

Mark Zuckerberg has got us all figured, hasn't he? He understood market trends no doubt and piggy-backed on other similar networking spaces online to come up with Facebook. It is not surprising that so many of us subscribe and function exclusively through social networks. What is surprising is that critics of social media tools castigate the medium for its apparent ill-effects on youth and children.

I get the sense that the 'disconnected' youth are looked upon as innocent goats being lead to the slaughterhouse of disconnection and hyperactivity. In the grand scheme of naming and labelling, we are now info-junkies, who take recourse to clicktivism and the comfort of the cyber-hive to sidestep 'real issues, real interactions, real life'. We have no control over what sites we sign up for, how much time we spend there, the amount of distraction we give in to and the total inability to monitor, limit and sign off from social media.

Clichés can be such a force to contend with. They aren't easily discarded and have the tendency to regurgitate through every generation, often with irony. Remember how radio, then

TV, then music and fashion and all things younger, modern and Western were thought of as corrupters of the youth?

I think the traditionalists don't dislike social networks, so much as fear it. Social networks online have become the barometers of our times. Our collective likes, links and loves are voted, discussed, tested, withdrawn, updated and shoved on the notice boards of our extended cyber-groupies. Status updates are slicker than breaking news. There is order in the group and there is cohesion in the network. The network has become a force to contend with.

And I am not just referring to the recent country-wide revolutions overtaking the globe, credited largely to the blitzkrieg of social media users. That is just the peel off the scab. Businesses and financial transactions, social and private occasions, events, political machinations, cultural renaissance, technological innovations in the classroom and

health sector – social media fosters that kind of behaviour and inventiveness online.

In a way, we have hewn ourselves a new social order where statehood and governance don't form the tip of the pyramid (with law and order forming the second rung, economic institutions and businesses forming the third layer and religious and cultural affiliations forming the penultimate block, in the traditional world order). The new social order points to the power of interpersonal networks formed via social media, itself born from the need to communicate, connect and consume the fruits of the online world. (bytes for thought?)

Who are the leaders of this network? Despite what the widely cited definition of who a digital native is and might be, the reality is that no particular age group or denomination or race is the forerunner to this club. Most of us have felt empowered, liberated, influential, and at the cusp of change and an extraordinarily life-changing revolution when wielding social media. And why wouldn't any self-respecting power-monger in the real world fear that kind of power moving away from his sphere?

I find a happy thought in thinking of the digital native as reforming national alliances, shaping political futures of the global world, transforming the way ideas, interactions and innovations are informed and iterated. The critics of the cyber-social-network have plenty to lose with the rise of the digital native. I say, let a 100 ideas bloom and a 100 social networks engender for every digital native logging in!

Group cohesion is generally thought to contribute to social order. One explanation for this correlation suggests that it can be attributed to higher rates of sanctioning found in solidary communities - Christine Horne, Brigham University

Social control refers generally to societal and political mechanisms or processes that regulate individual and group behavior, leading to conformity and compliance to the rules of a given society, state, or social group.

Sociologist Edward A. Ross argued that belief systems exert a greater control on human behavior than laws imposed by government, no matter what form the beliefs take.

# Word Around Town

**Brendon O Brien** discusses Activism in his piece, "The Language of Digital Activists."

<http://digitalnatives.in/brendonobrien/blogs/language-digital-activists>

**Richard Okuti** discusses corruption in the face of leadership, the voter and civic education as well as the role of the citizen, ahead of the General Elections in Uganda

<http://digitalnatives.in/okuti/blogs/my-comments-campaign-trail-part-2>

The Gender and Inequality discussion carries forth on Facebook

**Julio** shares his views on decision making in relation to career objectives, in his piece, **Humanitarian Digital Natives**

<http://digitalnatives.in/juliocosta/blogs/humanitarian-digital-natives>



Karl Jean Jeune shares her personal experience with the less fortunate, dating back to Haiti in 2007, and her commitment to help the needy every time.

<http://digitalnatives.in/karljeanjeune/blogs/commitment-love-and-care>

## “Connection Established.”

The Digital Natives with a Cause? Project, viewed by many as a 3-day workshop in a foreign country has created a foundation for *real-life* collaboration, both in professional and social aspects.



By Albert Mucunguzi  
Uganda  
[albertmucunguzi.com/blog](http://albertmucunguzi.com/blog)

**F**innish Company, Nokia introduced the slogan, *Connecting People*, when they started manufacturing mobile phone handsets years ago. At that time, voice calls - and occasional text messages - seemed to be the closed people could get to being connected.

I remember in my secondary school in 1999, I used to seek permission to go to town to make a phone call to my parents back home. At that time, just a few families had phones in their homes, and actually, I also used to call my neighbors, and ask them to pass the message on to my family. Even at that time, we were considered lucky, as our elder brothers and sisters had completely no access to phones in the schools they had attended, so they would have to write letters and send them through the post office.

Mobile phones started being more common in the years that followed, and communication became a little bit easier, though very expensive.

But reading through Nishant's editorial of Issue 2 of this newsletter, I get the sense that whereas people were indeed connected through a wireless telephone network, their lives weren't as connected. By my estimates, owning an active mobile phone was more than 20 times as costly as it is today - 11 years later - in Uganda.

But with social networking, more than 600 million people around the world are now connected in an online network, Facebook, speaking the same language of *friending, poking, and status updates*. Interestingly, the cost using of Facebook can go down to as low as zero in some countries.

Social networks have made it possible and easy to share our lives with the rest of the world, in real time.

The experience of the Digital Natives with a Cause? workshop takes connections to a

different level altogether.

From the time we first got email notifications about having been selected to attend the workshop in Johannesburg over 3 months ago, to the numerous blog posts that were posted on digitalnatives.in, then DigitalNatives group on Facebook and now the Santiago workshop, we've witnessed an ever growing community of people, willing to share and learn from each other.

I met Evelyn at the airport in South Africa, but soon realized that she was my neighbor back home in Kampala, and as is the case with several Digital Natives including Richard, Nonku, and Rotimi, we've had opportunities to share and work together since the workshop.

I think such are the kind of connections we should be looking forward to as Digital Natives and members of this community.

Of course we were told [of the workshops] that "this is just the beginning": and in my case, it would never make more sense than it does today: to realize that as Alaa and Manal join their countrymen in what has come to be referred to as Egypt's digital revolution, fellow digital natives will lend a hand by - at the bare minimum - retweeting their tweets: after all it's all about information sharing.

"This is the revolution of the youth of the internet, and now the revolution of all Egyptians." -- Wael Ghonim, February 7

Yes, the world has changed technologically, but again, as Nishant puts it, there needs to be a commitment by the "forces on the ground" to be able to use the technology to effect change.

Today, too many media outlets have offered us a view from afar, where some shiny new tools of communication are made out to be more important than the people doing the communicating and the messages and tactics they have chosen to use.

"There needs to be a passion, a will, a drive and perhaps an anger that serves as a catalyst for people to connect, to reach out and to produce change," wrote Nishant Shah.

So what is your passion? What is your individual goal in this [DN] community? What are you setting out to achieve? I think it is by answering such questions that we shall develop more meaningful and fruitful connections.



Keeping all the links in the chain functional is our responsibility

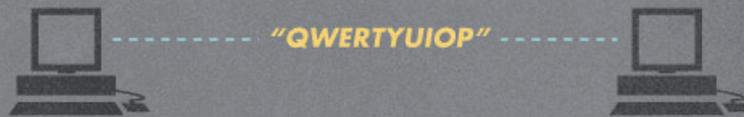
# The History of Social Networking



BEING CONNECTED TO THE WORLD AROUND US HAS NEVER BEEN MORE EASY AND ACCESSIBLE THAN IT IS TODAY. BUT IT DIDN'T START OUT THAT WAY. AFTER THE INTERNET MADE IT POSSIBLE TO REACH PEOPLE AROUND THE GLOBE WITH MERELY A CLICK OF A BUTTON, SOCIAL NETWORKING EXPLODED INTO ONE OF THE BIGGEST INDUSTRIES OF OUR TIME.

1971

THE FIRST **EMAIL** IS SENT. THE TWO COMPUTERS WERE SITTING **RIGHT NEXT TO EACH OTHER.**



1978

BBS (**BULLETIN BOARD SYSTEMS**) EXCHANGED DATA OVER **PHONE LINES** WITH OTHER USERS.

1978

THE FIRST COPIES OF EARLY WEB BROWSERS ARE DISTRIBUTED THROUGH **USENET**, AN EARLY ONLINE BULLETIN BOARD, BIRTHPLACE OF **FLAME WARS** AND **TROLLING.**



1994

ONE OF THE WEB'S FIRST SOCIAL NETWORKING SITES, **GEOCITIES**, IS FOUNDED. THE CONCEPT WAS FOR USERS TO CREATE THEIR OWN WEBSITES, CATEGORIZED BY ONE OF **SIX 'CITIES'** KNOWN FOR CERTAIN CHARACTERISTICS (**HOLLYWOOD, WALLSTREET, ETC**).

# The History of Social Networking - 2

1995

**THEGLOBE.COM** GAVE USERS THE FREEDOM TO PERSONALIZE THEIR ONLINE EXPERIENCES BY PUBLISHING THEIR OWN CONTENT AND INTERACTING WITH OTHERS WITH SIMILAR INTERESTS.

**THEGLOBE.COM** POSTED A RECORD IPO THAT FELL FROM **\$850 MILLION** TO BARELY **\$4 MILLION** IN LESS THAN THREE YEARS.

1997

**AOL INSTANT MESSENGER** IS LAUNCHED.

POPULARIZING INSTANT MESSAGING.

1997

**SIXDEGREES.COM LAUNCHES** ALLOWING **PROFILE CREATION** AND **LISTING FRIENDS**.

2000

FUELED FOR YEARS BY THE THE GROWING INTERNET, INCLUDING **EARLY SOCIAL NETWORKING SITES**, THE **.COM BUBBLE BURSTS**, SENDING THE **STOCK MARKETS CRASHING**, AND WEB ENTREPRENEURS BACK TO THE DRAWING BOARDS.

2002

**FRIENDSTER** IS LAUNCHED, PIONEERING THE ONLINE CONNECTION OF **REAL-WORLD FRIENDS**. IT'S USER-BASE GROWS TO **3 MILLION USERS** IN THE FIRST THREE MONTHS. ABOUT 1 IN EVERY 126 INTERNET USERS AT THE TIME.

# The History of Social Networking - 3

2003



**MYSPACE** IS LAUNCHED, FIRST CONCEIVED AS A **FRIENDSTER CLONE**. CREATED BY AN INTERNET MARKETING FIRM, THE FIRST VERSION WAS HASTILY **CODED IN 10 DAYS**.

IN THE FOLLOWING YEARS, MANY OTHER SOCIAL NETWORKING SITES LAUNCH. AMONG THEM, **TRIBE.NET**, **LINKEDIN**, **CLASSMATES.COM**, **JAIKU**, **NETLOG**, ETC.

2004

facebook.

**FACEBOOK** IS LAUNCHED, ORIGINALLY AS A WAY OF **CONNECTING U.S COLLEGE STUDENTS**. FIRST LAUNCHED AT HARVARD COLLEGE, **MORE THAN HALF OF THE 19,500 STUDENTS SIGNED UP WITHIN THE FIRST MONTH**.

2006

**Twitter** is launched.



AT THE CLOSE OF THE 2010 JAPAN VS DENMARK WORLD CUP SOCCER GAME, **TWITTER** USERS PUBLISHED **3,283 TWEETS PER SECOND**.

2008

facebook.

**FACEBOOK** OVERTAKES **MYSPACE** AS THE **LEADING SOCIAL NETWORKING** SITE, IN MONTHLY UNIQUE VISITORS. BOTH SITES ARE **VASTLY** MORE POPULAR THAN THE ORIGINAL, **FRIENDSTER**.

# The History of Social Networking - 4

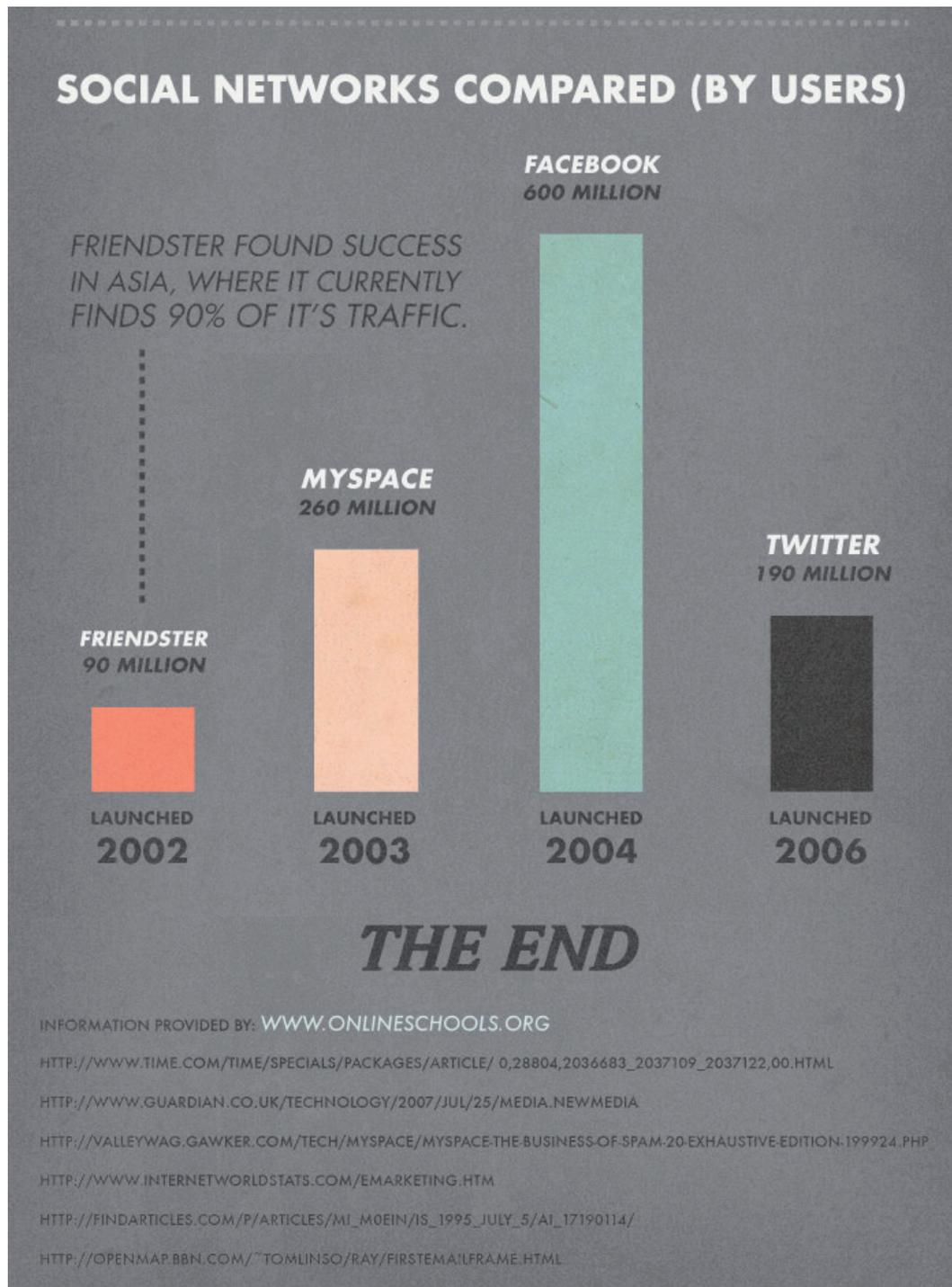


Image Source: [Onlineschools.org](http://Onlineschools.org)