



# Book Macrowikinomics

## Rebooting Business and the World

Don Tapscott and Anthony D. Williams  
Portfolio, 2010

### Recommendation

Welcome to your new world, courtesy of the digital revolution. Sorry, but you won't be able to skate by as a passive, disinterested observer. Figuratively, the Internet is forcing you to get involved. Don Tapscott and Anthony D. Williams focus on how the online community's "mass collaboration" is changing political and civic institutions. In this follow-up to their bestseller *Wikinomics*, the authors explain why technology and social media may hold the answers to some of the world's most pressing problems. Written in a witty, sharp style, their book covers the Web 2.0 waterfront, describing how groups in industry, education, science, finance, medicine and government are creating value from "networked intelligence." *BooksInShort* recommends this cogent, all-encompassing guide to the digital future but warns readers of *Wikinomics* to brace themselves for some repetition. Start reading soon, because change is accelerating every second.

### Take-Aways

- "Macrowikinomics" is the application of "the art and science of mass collaboration in business" to societal sectors such as business, government, education and science.
- Macrowikinomics can help humanity solve some of its most grueling challenges.
- The Internet upends conventional rigid, hierarchical social and business institutions.
- "Collaboration, openness, sharing, integrity and interdependence" underlie Web 2.0.
- Online collectives and shared "open source" resources will reshape many areas of society.
- Scientists benefit from online collaborators who build on their work. For instance, sharing research creates "a green commons" among those who solve energy problems.
- Ride sharing, car sharing and electric car charging stations will change how people view car ownership. Banking changes will make borrowers and lenders connect in new ways.
- Universities will advance "collaborative knowledge" by putting curricula online.
- Your online "Personal Health Page" (PHP) will track and monitor your health care.
- To implement macrowikinomics in your company, involve the young, tech-savvy "Net Generation."

### Summary

#### Empowering the World

On January 12, 2010, a massive earthquake struck Haiti. Within an hour of learning about the quake, the people behind the "crisis-mapping" website, Ushahidi, were coordinating global relief efforts to "crowdsource assistance" for the devastated country. Ushahidi relied on hundreds of volunteers to translate Creole texts into English, to access maps in order to locate survivors and to coordinate food supplies. Aid workers on the ground in Haiti could access Ushahidi to relay translated cellphone messages from the wounded and trapped, allowing rescuers to find victims quickly. No government or international agency created or controls Ushahidi. Kenyan attorney Ory Okolloh founded it when he realized that an "Internet mapping solution" could rapidly marshal resources in crisis situations and could deliver unbiased information without waiting for or relying on formal entities to take the lead.

"Given an open platform and a complement of simple tools...ordinary people can create effective new information services that are speedier and more

resilient than traditional bureaucratic channels.”

The Internet’s ability to empower individuals by providing them with information and tools upends the conventional, top-down functions of most social and business institutions. “Open-source” information and cooperation allow people to take responsibility for their own needs and make them active participants rather than passive recipients. The growth of social media heralds a sea change in human history: Now, each individual can change the world – literally. Applying “wikinomics,” or “the art and science of mass collaboration in business” to macro, societal sectors such as “government, education, science...energy and even health care” crystallizes humanity’s potential to solve some of its most difficult problems.

## The Power of “Networked Intelligence”

Disruptive technologies change society, but their effects can take awhile to manifest. Gutenberg’s printing press distributed once-inaccessible information to the masses, unleashing knowledge that led to the flowering of science, trade and philosophy. This sharing of learning brought about social and economic upheavals that shifted power from the few to the many, and it created new ways of thinking and doing. Similarly, today’s “digital revolution” signals a shift that is only beginning to appear; its full ramifications remain unknown. Whatever awaits, institutions will need to adapt to meet these changes. Five precepts underlie networked intelligence, or the coming together of human thought and action. Organizations must begin to understand and welcome these forces:

1. **“Collaboration”** – No company or institution can survive, let alone prosper, relying solely on the talents and abilities of its employees or members. Increasingly, digital age success will rest on making organizational borders “porous to external ideas and human capital.” Tapping into the broader, more varied capabilities of networked intelligence will drive “collaborative innovation” within and among organizations.
2. **“Openness”** – Greater group efforts demand greater transparency and honesty. Traditionally, most companies’ “default position” leans toward keeping information under wraps, but the sheer amount of disclosure that Internet tools and social media generate is pushing organizations to practice greater candor and openness.
3. **“Sharing”** – Just as groups disclose information online, so, too, will they increasingly need to place assets such as intellectual property, curricula and software codes into “the commons.” Swiss pharmaceutical firm Novartis posts its proprietary research on diabetes online to encourage its use among outsiders who could help find new diabetes drugs.
4. **“Integrity”** – Good behavior is its own reward in a transparent online environment. Trying to obfuscate or sidestep demands for clarity will taint an organization’s reputation, often beyond repair. The more trust, “honesty, consideration and accountability” among a firm’s various stakeholders, the more likely its chances of success.
5. **“Interdependence”** – As ideas, cultures, information and knowledge circulate online, they create cross-border connections. Global problems like financial crises and climate change highlight the need for the “four pillars of society: business, government, the civic sector and...the individual citizen” to work together to address mutual issues.

“The world has reached a critical turning point: Reboot all the old models, approaches and structures or risk institutional paralysis or even collapse.”

Critics claim open source innovations detract from private sector gains; that is, they worry that giving expertise away in online communities reduces profit-making opportunities. But, according to Linus Torvalds, founder of user-created Linux, “That’s like saying that public road works take away from the private commercial sector.” Digital innovators enable many more remunerative discoveries than possible under traditional practices, particularly when they extend the digital revolution to finance, energy, transport, education, health care, media and sociopolitical causes.

## “Rebooting” Finance

Finance – an industry based on trust – is ripe for profound change. It can’t afford to operate as it has in the past, especially now that public trust has evaporated. Disclosure, transparency and sharing could root out potential problems and avert, or minimize, the next crisis. For example, the underlying data and assumptions in banks’ risk models should be available openly so that others can judge their validity. The Open Models Company (OMC) uses the skills of “quantitative analysts” called “quants” and other experts to craft opinions on methods and probabilities used in financial products. Like a “scientific peer review process,” OMC provides asset holders, buyers and sellers with an independent valuation by using its online community of unemployed and retired experts. Investors increasingly will come to favor securities evaluated by an impartial third party, though they may face resistance from skeptical, defensive bankers.

“Conventional wisdom says that ‘being open’ is rather like inviting your competitor into your home only to have them steal your lunch.”

Changing the financial paradigm will mean connecting borrowers and lenders in new ways. “Venture Capital 2.0” will use the power of mass collaboration to fund deserving new businesses. For instance, VenCorps’ online community members vote on start-up pitches, and the company invests its funds using that input. Winners of its “*American Idol* for entrepreneurs” competition receive cash and access to valuable networking. Peer-to-peer banking takes the middleman – in this case, the bank – out of the loan process. Borrowers and lenders meet online at websites such as Prosper, Zopa and Lending Club, where they strike deals to their mutual benefit. Lenders receive higher interest than they would get from a bank; borrowers pay less than they’d pay a bank.

## “A Green Commons”

Google Earth’s distinctive world images allow scientists to track global deforestation without leaving their research labs; it’s “a killer application for mass collaboration [for] saving the planet.” Sites such as Carbonrally, EarthLab and World Without Oil teach people about carbon footprints and energy use, giving individuals incentives through games and challenges to adopt conservation techniques. GoodGuide aims to rate every product (75,000 so far) according to its “social and environmental impact,” providing data that parallels nutritional labels. Sportswear manufacturer Nike is researching ways to recycle everything it makes. It uses the Green Xchange “online marketplace” to share its green discoveries with other environmentally aware companies.

“Many of the institutions that have served us well for decades – even centuries – seem frozen and unable to move forward.”

One day, “smart grids” will monitor household electricity use, and people will buy and sell energy credits based on their “personal carbon allowances.” Marshaling new

energy sources such as solar would make passive energy consumers into active “prosumers” who could sell their excess energy production back to utilities. But mass collaboration requires leadership. Denmark and Germany are leaders in the quest for renewable sources. Denmark is a net exporter of energy and, “since 1980, has managed to grow its economy by almost 80% while maintaining the same level of energy consumption.” Meanwhile, the US spent “a paltry \$5 billion in 2008” on energy research and development. Internationally, the climate crisis seems to be accelerating the search for and exploitation of fossil fuels instead of the further development of “creative alternatives.”

## Transportation 2.0

Automobiles pollute (10% of world carbon emissions), they are costly to operate (Americans spend 18% of their incomes on owning and maintaining cars) and are dangerous (globally ranking 10th among causes of death). Existing electric cars are expensive and problematic to charge on the road. Entrepreneur Shai Agassi’s company, Better Place, is working on a network of open-source charging stations in six countries. Israel Railways plans to install chargers at train stations, and Agassi thinks “50,000 to 70,000 charge spots” can serve the whole nation. Such wide access to chargers would provide the crucial link to sell more electric cars, bring down the price and help the environment.

“The 21st century university should be a network and an ecosystem – not a tower.”

Zipcar, the international car-sharing company, aims to overturn people’s concept of automobile ownership. Why own a car that is “idle 22 out of every 24 hours”? Commuters in Germany and Austria can register online to carpool. Other sites create social groups to share rides and use global positioning technology to track car availability.

## Wiki Living

Schools and colleges are responding to the shift in how people learn. Students no longer are content to sit in a classroom in front of a droning professor. Instead, they want more virtual teaching, distance learning and shared courseware. Major universities such as MIT and Yale are putting their curricula online. Students one day will enroll in one institution but partake of the teachings of many different universities in custom-designed courses of study.

“Your monolithic, self-contained, inwardly focused enterprise is dead or dying.”

Technology allows scientists to gather reams of raw data, but who can analyze all of it? Creative thinkers – like those behind GalaxyZoo, an “online citizen science project” where interested viewers can help decipher millions of images of outer space – are opening their research data to the Web so online collaborators can build on and refine their work. Scientific papers now boast hundreds of authors. “High-profile...contests to motivate creative solutions to grand challenges” spark innovation from multitudes of people. After all, Charles Lindbergh flew nonstop from New York to Paris in 1927 in pursuit of a \$25,000 prize. Now, entrepreneur Richard Branson is offering \$25 million for a “commercially feasible way to remove greenhouse gases.” The first private firm to put “image-transmitting rovers” on the moon will win Google’s Lunar X Prize.

“Those that resist, or fail to get on board, will find themselves ever more isolated – cut off from the networks that are sharing, adapting and updating knowledge to solve problems, big and small.”

Health care is undergoing a slow but inevitable transformation. In the future, patients who now are “passive recipients” of medical care will become active in assuring their own well-being. “Collaborative health care” already is a reality on websites where sufferers of chronic illnesses form online communities for support and information. Collaborative health care could transform lives by making sure each individual, from birth, has an online “Personal Health Page” (PHP). Such useful data also could spur medical research. Already, Google can advise health authorities when and where a flu outbreak is imminent by noting increases in the number of searches for flu information. Technology even could automate the leaden insurance bureaucracy.

“The process of transformation is proving...challenging, exhilarating and sometimes agonizing. But given the stakes we have no choice but to forge this new future.”

Similar movements bespeak pervasive transformation, from the proliferation of microlenders, like Kiva, which bring the global online community together to address world poverty, to paradigm shifts in various facets of the communications industry. Conventional models are in motion, from media – such as the development of shared sourcing for good or ill on *The Huffington Post* – to government. New regulatory philosophies call for more openness, participation and discourse, plus the protection of “the public interest” and “collective action in industry.” To reinvent your organization with “macrowikinomics,” follow six rules:

1. **“Don’t just create.” Also, “curate a context for people to self-organize”** – Build the “context or...platform” that encourages others to gather, collaborate and share.
2. **“Rethink the commons”** – Foster group efforts by putting your data, intellectual property and other useful assets online. But sort your “portfolio” wisely; some assets benefit from mass sharing and some require confidentiality.
3. **“Let go”** – Giving up control is hard, but you’ll benefit in return.
4. **“Find and strengthen the vanguard”** – Online entities must cultivate leaders.
5. **“Create a culture of collaboration”** – The BBC took cautiously to collaboration, starting with staff wikis and blogs to share data internally. While hierarchy still rules at the BBC, giving lower-level staffers access made their work easier and better.
6. **“Empower the Net generation”** – The youths that make up 25% of the global population are “the first generation in history to grow up digital.” Use their ease with wikinomics to move your organization forward into the promising new world.

## About the Authors

**Don Tapscott**, a prolific author, is the chairman of nGenera Insight, a business strategy think tank. **Anthony D. Williams** is a senior fellow with the Lisbon Council. They co-wrote the bestseller *Wikinomics*.

