How Mass Collaboration Changes Everything

WIKINOMICS

THE SUMMARY IN BRIEF

Based on a $9 million research project led by best-selling author Don Tapscott, Wikinomics shows how masses of people can take part in the economy like never before. Billions of connected individuals can now actively participate in innovation, wealth creation and social development in ways we once only dreamed.

For companies to succeed, leaders must think differently about how to compete and be profitable, and embrace a new art and science of collaboration the authors call “wikinomics.” This is more than open source, social networking, smart mobs, crowd wisdom or any other idea that touches upon the subject. Rather, it’s about deep changes in the structure and modus operandi of the corporate entity and our economy, based on new competitive principles such as openness, peering, sharing and acting globally.

The authors describe the rapid growth of new collaborative enterprises such as MySpace, InnoCentive, Flickr, Second Life, YouTube and others. They also offer examples of how mature firms such as Boeing, BMW, Procter & Gamble and others have seized on collaboration and self-organization as ways to cut costs, innovate faster and co-create with customers and partners.

In this summary, Don Tapscott and Anthony D. Williams challenge our most deeply rooted assumptions about business. They describe what happens when masses of people and firms partner openly to drive innovation and growth, and they offer compelling reasons why anyone in business over the long run should pay close attention to this fundamental evolution.

In addition, this summary will discuss the following:

✓ The weapons of mass collaboration and how to use them in your organization.
✓ How technology, demographics and global economics are converging for the first Category 6 business revolution.
✓ The “ideagoras” that are becoming marketplaces for ideas, innovations and uniquely qualified minds.
✓ Why consumers are becoming prosumers, and how customers are becoming co-innovators.
✓ How sharing and peer production will replace traditional ways of conducting business.
✓ How to live in the new “wiki workplace.”
Building the Community of the Future

While hierarchies are not vanishing, profound changes in the nature of technology, demographics and the global economy are giving rise to powerful new models of production based on community, collaboration and self-organization rather than on hierarchy and control.

Smart companies are encouraging, rather than fighting, the heaving growth of massive online communities. As a growing number of firms see the benefits of mass collaboration, this new way of organizing will displace the traditional corporate structures as the economy’s primary engine of wealth creation.

Wikinomics

Due to deep changes in technology, demographics, business, the economy and the world, we are entering a new age in which people take part in the economy like never before. The growing accessibility of information technologies puts the tools required to collaborate, create value and compete at everybody’s fingertips. This new mode of innovation and value creation is called peer production or peering.

New low-cost collaborative infrastructures — from free Internet telephony to open-source software to global outsourcing platforms — allow thousands of individuals and small producers to co-create products, access markets and delight customers in ways that only large corporations could manage in the past. People can contribute to the “digital commons” at very little cost to themselves, which makes collective action attractive. Indeed, peer production is a very social activity.

These changes are ushering us toward a world where knowledge, power and productive capability will be more dispersed than during any other time in our history. A power shift is under way and a tough new business rule is emerging: Harness the new collaboration or perish.

The New Promise of Collaboration

A new art and science of collaboration is emerging — called “wikinomics.” This isn’t just about developing online encyclopedias such as Wikipedia and other documents. A wiki (Hawaiian for “quick”) is more than just software for enabling multiple people to edit Web sites. A wiki is a metaphor for a new era of collaboration and participation.

The new promise of collaboration is that with peer production we will harness human skill, ingenuity and intelligence more efficiently and effectively than anything we have witnessed previously. The ability to integrate the talents of dispersed individuals and organizations is becoming the defining competency for managers and firms.

To innovate and succeed, the new mass collaboration must become part of every leader’s playbook and lexicon. Learning how to engage and co-create with a shifting set of self-organized partners is becoming an essential skill, as important as budgeting, R&D and planning.

The Principles of Wikinomics

Wikinomics is based on four powerful new ideas: openness, peering, sharing and acting globally.

Being Open. Today, companies that make their boundaries porous to external ideas and human capital outperform companies that rely solely on their internal resources and capabilities. People and institutions that interact with firms are gaining unprecedented access to

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important information about corporate behavior, operations and performance.

**Peering.** Peering succeeds because it leverages self-organization — a style of production that works more effectively than hierarchical management for certain tasks. Its greatest impact today is in the production of software, media, entertainment and culture.

**Sharing.** Smart firms are treating intellectual property (IP) like a mutual fund — they manage a balanced portfolio of IP assets, some protected and some shared. Of course companies need to protect critical IP. But companies can’t work together effectively if all of their IP is hidden.

**Acting Globally.** The new globalization is both causing and caused by changes in collaboration and the way firms orchestrate capability to pioneer and produce things. Winning companies will need to know the world, including its markets, technologies and people.

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**The Perfect Storm**

The new Web is the natural habit for a new cohort of collaborators called the “Net Generation.” For them the Web is the new glue that binds their social networks. Phenomena like MySpace, Facebook, Flickr, 43things, Technorati and del.icio.us aren’t just Web sites, they’re dynamic online communities where sprawling and vibrant clusters of interaction are forming.

As the new Web and the Net Gen collide with the forces of globalization, we are entering what might be considered a perfect storm, where converging waves of change and innovation are toppling the economic order.

**The New Web**

Today, the Internet is evolving from a network of Web sites that enable firms to present information into a computing platform in its own right. Whether people are developing, sharing or socializing, the new Web is principally about joining in rather than about passively receiving information.

Today’s most exciting and successful Web companies and communities are piecing together their own services from shared databanks and Lego-style pieces of Web software. They use Web services to design platforms for people to engage and co-create with their peers.

What does the programmable Web mean for users? Increasingly, we are all witless and unwitting co-conspirators in building one massively sophisticated computer. The Web is no longer about idly surfing and passively reading, listening or watching. It’s about peering: sharing, socializing, collaborating and, most of all, creating within loosely connected communities.

**Growing Up Collaborating**

A new generation of youngsters has grown up online, and they are bringing a new ethic of openness, participation and interactivity to workplaces, communities and markets.

The Net Gen spends time searching, reading, scrutinizing, authenticating, collaborating and organizing. The Internet makes life an ongoing, massive connection, and this generation loves it.

The Net Gen’s modus operandi is networking. It would be easy to dismiss online social networking as another fickle youth fad. But online social networking is uniquely attuned to the Net Gen’s cultural habits and will be part of the social fabric going forward.

The opportunity to bring Net-Geners (and other customers) into the enterprise as co-creators of value possibly presents the most exciting long-term engine of change and innovation that the business world has seen.

**The Collaboration Economy**

Traditional corporations are finding themselves thrust aside by an entirely new kind of business entity. That new entity is the business web, or the b-web. B-webs are clusters of businesses that come together over the Internet. While each company retains its identity, the companies function together, generating more wealth than they could ever hope to generate individually.

The future lives in collaboration across borders, cultures, companies and disciplines. Effectively, it’s globalize or die.

In the collaboration economy, the real advantage of global sourcing is not cost savings, but the endless possibilities for growth, innovation and diversity. The greatest growth engines of the 21st century will be business webs that fuse the resources and competencies of the developed and developing worlds into unbeatable combinations.

**The Peer Pioneers**

Peer production is emerging as an alternative model of production that can harness human skill, ingenuity and intelligence more efficiently and effectively than traditional firms. The way companies address peer production will shape the future of industry and affect their very chances for survival. In its purest form, peer production is a way of producing goods and services that relies entirely on self-organizing, egalitarian communities of individuals who come together voluntarily to produce a shared outcome.

Communities of producers typically use “general...”
public licenses” to guarantee users the right to share and modify creative works, provided that any modifications are shared. By opening up the right to modify and distribute, these open-source licenses allow larger numbers of contributors to interact freely with larger amounts of information in search of new projects and possibilities for collaboration.

Peering works best when at least three conditions are present: 1) The object of production is information or culture, which keeps the cost of participation low for contributors; 2) Tasks can be chunked out into bite-size pieces that individuals can contribute in small increments and independently of other producers; and 3) The costs of integrating those pieces into an end product, including the leadership and quality-control mechanisms, must be low.

**The Future of Open Source**

Open source, it seems, may at last be coming of age. Embracing open source means embracing new mental models and new ways of conceptualizing value creation. Profiting from peer production groups like Linux is a new skill that requires companies to recognize and seize chances to build new products and services on top of vibrant open ecosystems.

**Peer Production is Here to Stay**

Peer production will continue to grow in importance because key enabling conditions are present and growing. These include access to computing power and applications, transparency, globalization, the democratization of knowledge and skills and the increasing complexity of systems. Firms must invest in the technology and business architecture to become truly networked and open enterprises, and engage in collaborative networks that help build the culture and strategic capabilities to leverage peer production.

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**Ideagoras**

Ninety thousand scientists from 175 countries have registered with InnoCentive to provide solutions to companies such as Boeing, Dow, DuPont, Novartis and Procter & Gamble. Launched by U.S. pharmaceutical giant Eli Lilly as an e-business venture in 2001, InnoCentive now enables some 35 Fortune 500 companies to extend their problem-solving capacity. This visionary matchmaking system links experts to unsolved R&D problems, allowing these companies to tap the talents of a global, scientific community without having to employ everybody full time.

The authors call these marketplaces ideagoras, much like the bustling agoras that sprang up in the heart of ancient Athens to facilitate politics and commerce among the burgeoning Athenian citizenry. Modern-day ideagoras such as InnoCentive make ideas, inventions and scientific expertise around the planet accessible to innovation-hungry companies. As more companies embrace the principles of wikinomics — openness, peering, sharing and acting globally — these ideagoras will come to fruition, fueling an increasingly active trade in technology, intellectual capital and other key innovation ingredients.

**Questions and Solutions**

Ideagoras come in two principal flavors: solutions in search of questions and questions in need of solutions. Solutions in search of questions are those 70 percent to 90 percent of ideas and inventions that go unutilized. Questions in need of solutions are just that: unanswered problems, queries or uncertainties that have not been addressed internally.

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Ideagoras

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In the late 1990s, Procter & Gamble launched an internal survey and discovered it was spending $1.5 billion on R&D, generating lots of patents, but using less than 10 percent of them in its own products. CEO A.G. Lafley saw it as a wake-up call and led the charge to open up the patent portfolio. P&G now makes every patent in its portfolio available for license to any outsider, as long as it has existed for at least five years or has been in use in a P&G product for at least three years.

P&G is not alone in its affinity for IP licensing. In fact, virtually all companies with sizable patent holdings are now busy mining their portfolios, looking for licensing-out opportunities and taking technologies off the shelf that can bring in revenue. Using online marketplaces such as yet2.com allows them to cast wider nets across multiple, and often unrelated, industries.

Other mature, innovation-based companies face the same dilemma. The potential for growth is out there, but it’s distributed across thousands, perhaps millions, of individuals, organizations and firms. That’s where ideagoras come in — they help link all of these individuals, companies and organizations together by establishing connections and facilitating transactions between buyers and sellers of ideas and technology.

Not only can ideagoras enable companies like P&G to innovate well beyond what they could muster internally, they help them hone their true value-adding capabilities and avoid reinventing the wheel.

Harnessing Ideagoras

With the emergence of global ideagoras, companies can pursue a wider set of strategic possibilities. Learning how to create, find and reapply great ideas in a global ideagora means turning the R&D organization on its head. Some of the big changes include refining its approach to intellectual property, sharpening its external radar and creating an R&D culture that supports the acquisition of external ideas and technologies. Smart firms will harness a portfolio of approaches ranging from corporate ventures to customer co-creation to peer-producing value in open communities.

Ideagoras lower the costs of communicating, collaborating and transacting and could very well revolutionize the way firms conduct R&D. Companies that learn how to harness ideagoras will divest themselves of non-core activities and conserve their resources for cutting-edge challenges and opportunities.

Internal R&D will still be important in the new world of ideagoras. But in-house innovation alone will not be enough to survive in a quickly changing and intensely competitive economy. Increasingly, the corporate R&D process must look two ways: toward its internal projects and competencies, and toward the external marketplace to leverage new IP and capabilities. Ideagoras are the place where companies can tap a wealth of new ideas, innovations and uniquely qualified minds.

The Prosumers

Two forces are converging to position the customer as a co-innovator. One is that customers use the Web as a stage to generate prosumer communities, so what was once fringe activity is increasingly out in the open. Second, companies are discovering that “lead users” — people who stretch the limits of existing technology and often design their own product prototypes in the process — often develop modifications and extensions to products that will eventually appeal to mainstream markets. Companies that learn how to tap the insights of lead users can gain competitive advantage.

Customer innovation is going self-serve with the rise of prosumer communities. One of the earliest, and still most vibrant, prosumer communities has formed around Lego products. Lego’s fusion of mass customization and peer production remains rare enough in today’s consumer products market to make the idea particularly outstanding. Customers can make whatever they want, and Lego transforms its legion of youthful customers into a decentralized virtual design team that invents and swaps new Lego models.

Control Versus Customer Hacking

Here’s the prosumption dilemma: A company that gives its customers free rein to hack risks cannibalizing its business model and losing control of its platform. A company that fights its users soils its reputation and shuts out a potentially valuable source of innovation.

Customer hacking will live on. Smart companies will bring customers into their business webs and give them lead roles in developing next-generation products and services. This may mean adjusting business models and revamping internal processes to enable better collaboration with users.

That is a small price to pay to keep customers loyal to your business. In fact, the opportunity to generate vibrant customer ecosystems where users help advance, implement and even market new product features represents a largely untapped frontier for farsighted companies to exploit.

Nothing illustrates the opportunities and trade-offs of prosumption better than the growing propensity of young people to weave fluid and participatory tapestries of music content into their own unique and inviting creations. Call it “the remix culture.”

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The Prosumers
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The most popular form of Do-It-Yourself (DIY) creativity is what participants call “mashups,” “bootlegging,” “bastard pop” and a variety of other labels. The common theme is that aspiring artists fuse songs digitally from completely different genres to produce hybrid singles and, increasingly, full-length mashup albums. Unorthodox? Yes. Illegal piracy? Perhaps. Innovative and enjoyable? Most definitely.

Democratization is a scary word for those accustomed to ironclad control over the creation and distribution of music. But the music industry — and all industries for that matter — must resist the temptation to impose their will on consumers as a matter of convenience or, worse, as a result of a lack of ingenuity and agility. Rather, music labels should develop Internet business models and offerings with the right combination of “free” goods, consumer control, versioning and ancillary products and services. This includes new platforms for fan remixes and other forms of customer participation in music creation and distribution.

Harnessing Prosumer Communities

Prosumption is becoming one of the most powerful engines of change and innovation that the business world has ever seen. Co-creating with customers is like tapping the most uniquely qualified pool of intellectual capital ever assembled. But it comes with new rules of engagement and tough challenges to existing business models.

The old customer co-creation idea was simple: Collaborate with your customers to create or customize goods, services and experiences, all while generating a built-in market for your wares. This is the company-centric view of co-creation.

In the new prosumer-centric paradigm, customers want a genuine role in designing the products of the future. Products that don’t enable and invite customer participation will be anathema.

If you expect to be around in the next decade, your organization will find ways to join and lead prosumer communities.

How to Harness Prosumers

More than customization. Customization occurs when a customer gets a product adjusted to his or her specification. The problem is that mass customization entails mixing and matching prespecified components, significantly limiting flexibility and innovation for users. True presumption entails deeper and earlier engagement in design processes and products that facilitate customer hacking and remixing.

Losing control. Customers will treat your product as a platform for their own innovations, whether you grant them permission or not. If you do not stay current with customers, they invent around you, creating opportunities for competitors. It is preferable to sacrifice some control than it is to cede the game completely.

Customer tool kits and context orchestration. Make your products modular, reconfigurable and editable. Set the context for customer innovation and collaboration. Make it easy to remix and share.

Becoming a peer. Your real business is not creating finished products but innovation ecosystems.

Sharing the fruits. Customers will expect to share in the ownership and fruits of their creations. If you make it profitable for customers to get involved, you will always be able to count on a dynamic and fertile ecosystem for growth and innovation.

The New Alexandrians

The Alexandrian Greeks were inspired by a simple but powerful idea. Take the sum of mankind’s knowledge, store it in one building and share it for the betterment of science, the arts, wealth and the economy. At its crowning glory, estimates suggest that they had accumulated more than half a million volumes in their library.

We are fortunate to be living through the fastest and broadest accumulation of human knowledge and culture ever. Thanks to a new generation of Alexandrians, this fountain of knowledge, past and present, will soon be accessible in ways our ancestors could only dream of. Digital libraries are important, but the Alexandrian revolution extends far beyond the way we archive knowledge, to the way we develop and harness knowledge to drive economic and technological progress.

Collaboration, publication, peer review and exchange of precompetitive information are now becoming keys to success in the knowledge-based economy. In fact, we have entered the age of collaborative science.

Just as collaborative tools and applications are reshaping enterprises, the new Web will forever change the way scientists publish, manage data and collaborate across institutional boundaries. All the world’s scientific data and research will at last be available to every single researcher — gratis — without prejudice or burden.

The New Alexandrians understand that creating a shared foundation of knowledge on which large and
The New Alexandrians

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diverse groups of collaborators can build is a great way to enhance innovation and corporate success.

Some companies use cross-licensing and patent pools to lower transaction costs and remove friction in their business relationships. Some industries embrace open standards to enhance interoperability and encourage collaboration. Others invest in a precompetitive knowledge commons to boost the productivity of downstream product development. Regardless of which method — or combination of methods — firms choose, the result is usually the same: a more dynamic and prosperous ecosystem.

Platforms for Participation

Today, with open platforms for innovation inviting unprecedented participation in value creation, cumulative innovation is going into overdrive. The companies that figure out how to harness the power of open platforms while providing adequate incentives to all stakeholders are poised to reap great rewards. Retail sites such as Amazon, eBay and Apple demonstrate how platforms for participation can give rise to vibrant ecosystems around a simple activity like shopping.

Platform Incentive Systems

Should open-platform orchestrators compensate the people and organizations that add value to their platforms? And would monetary incentive systems spur more value creation, or possibly taint the dynamics that have made online communities successful?

Platforms for participation represent an exciting new kind of business that thrives on mass collaboration and embodies all of the wikinomics principles. Though the early examples are most evident on the Web, nearly all businesses can become open platforms, with enough imagination and ingenuity.

The Global Plant Floor

Peer production of physical things is coming of age, and smart companies are getting with the program. The old monolithic, multinational corporation that produces value in a closed hierarchical fashion is dead. Even the stodgy, capital-intensive manufacturing industries are no exception to this rule. Indeed, there is no part of the economy where this opening and blurring of corporate boundaries has more revolutionary potential.

The new reality in manufacturing, as in other spheres, is that boundaries are constantly blurring. In an age of modularity, open architectures, instant communication and globally dispersed capabilities, the answers to who will do what and where the value will be developed are constantly changing.

Harnessing the Global Plant Floor

The rise of peer and collaborative processes for designing and building things is not unique. These processes are emerging in industries where intellectual property is widely dispersed and production capacity is fragmented among hundreds of specialized firms.

By organizing into loosely coupled networks of firms that jointly design and develop products for customers, both the suppliers and global integrators win. But harnessing the global plant floor means learning from the examples being set. Companies must focus on the critical value drivers; add value through orchestration; instill rapid, iterative design processes; harness modular architectures; create a transparent and egalitarian ecosystem; share the costs and risks; and, finally, keep a keen futures watch.

The Wiki Workplace

The workplace is becoming a self-organizing entity where centralized and tightly controlled processes are increasingly giving way to more spontaneous and decentralized forms of mass collaboration. This impacts five typical workplace functions: teaming, time-allocation, decision-making, resource-allocation and communication.

Waking Up to the Wiki Workplace

Where might this new wiki workplace take us in the future?

● Workplaces will become smaller and teams will be more distributed, with participants drawn from all over.

● Employment relationships will necessarily become more fluid, definitely less long term and undoubtedly more horizontal.

● The creation of ad hoc self-organized teams that come together to accomplish specialized tasks will become the norm.

● Expect new guildlike formations with codes of conduct that set the formal and informal norms and rules that govern how a growing number of people carry out their trade.

● Look for new peer-to-peer reputation-rating services to play a greater role in identifying high-quality, reliable collaborators.

● Talent agencies, auctions and markets will play a larger role in managing the interface between employers and employees.

Don’t expect overnight change. But a truly self-organized and distributed way of working is not far off on the distant horizon. Mass collaboration is already

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The Wiki Workplace
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transforming the way goods and services are developed throughout the economy, and it is now becoming a growing force in today’s marketplace.

Collaborative Minds

Each model we have discussed represents a new and unique way to compete, but they all share one thing: These new forms of peer production enable firms to harvest external knowledge, resources and talent on a scale that was previously impossible. Companies that adopt these models can drive important changes in their industries and rewrite the rules of competition.

There has probably never been a more exciting time to be in business, nor a more dangerous one. We are in the midst of a paradigm shift. New paradigms cause disruption and uncertainty and are nearly always received with coolness, hostility or worse. Vested interests fight against the change, and leaders of the old are often the last to embrace the new. Consequently, a paradigm shift typically causes a crisis of leadership.

The lesson of history is that profound changes favor the newcomer and, in rare cases, the incumbent firms that learn to think differently. The choice facing firms is not whether to engage and work with peer-production communities, but determining when and how. The chance for customers and competitors to get the jump on new innovations in your area of business increases daily.

Thinking Differently

Smart firms will be able to harness external resources and talent to achieve unparalleled growth and success. The hard part will be rewiring your brain and turning off those old business reflexes so that you can capitalize on what the new world of wikinomics can offer.

Being Open. A growing number of smart companies are learning that openness is a force for growth and competitiveness. Amazon, eBay, Google and Flickr open up their applications and business infrastructures to increase the speed, scope and success of innovation.

Peering. IBM joins the Linux peer producers and gives away hundreds of millions of dollars of software and resources to support them. Has IBM lost its head? No, it’s stumbled onto a new mode of production called peering.

Sharing. Smart firms today understand that sharing is more than playground etiquette. Organizations like the Bill and Melinda Gates Foundation and the Tropical Disease Initiative are leveraging open-source drug discovery to launch an unprecedented attack on neglected diseases such as cholera and African sleeping sickness.

Acting Globally. Like others in the aerospace and defense industries, Boeing has found that the costs, risks and expertise required to engage in large-scale development projects such as designing and building new aircraft are simply too large for it to do alone. So Boeing reached beyond its walls to create its new 787 passenger jet with a network of partners that stretches over six countries.

Wikinomics Design Principles

So how should leaders go about applying the principles of wikinomics in their businesses?

Your planning must allow for a high degree of learning on your part and the flexibility to respond to new opportunities that arise out of the interplay among participants in your business web. Peering is a design and production innovation, and the firm must learn how to operate in this new environment. You must:

- Take cues from your lead users
- Build critical mass
- Supply an infrastructure for collaboration
- Take your time to get the structures and governance right
- Abide by community norms
- Let the process evolve
- Hone your collaborative mind.

For the business manager, the number-one lesson is that the self-contained inwardly focused corporation is dead. Regardless of the industry or whether your firm is large or small, internal capabilities and a handful of b-web partnerships are not sufficient to meet the market’s expectations for growth and innovation.

Managers should treat wikinomics as their playbook and harness its core principles to achieve success. Leaders must prepare their collaborative minds.

Is your mind wired for wikinomics?