

The WIKINOMICS Playbook

*Mass Collaboration
in Action*

Kartik Ariyur
Franciel Azpurua-Linares
Joost Bekel
Martin Cleaver
Jeff DeChambeau
Gabriel Draven
Todd Dunn
Peter Haine
Bob Iliff
Critt Jarvis
Michael Laine
Neal Locke
Brendan Long
Ron Long
Bert Murray
Michael Pilling
Kate Raynes-Goldie
Ryan Riley
Al Safrata
Steven Streight
Mark Temple-Raston
Alex Todd
Max Ugaz

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— Mass Collaboration in Action —

“Any open system has the capacity to respond to change and disorder by reorganizing itself at a higher level of organization. Disorder becomes a critical player, an ally that can provoke a system to self-organize into new forms of being... chaos is necessary to new creative ordering.”

– Margaret Wheatley; *Leadership and the New Science*

“Wikis are not about bottom-up management, they are about round table solving of solutions where titles are null and void, where intellects win and where ideas are valued, not ruthlessly critiqued... Wikis change the paradigm... the goal is a refined idea.... not an idea beaten into consensus!”

– Todd Dunn, Wikinomics Playbook contributor

Preface

At the end of 2006, the same week *Wikinomics* was first published, *Time Magazine* chose “YOU” the online collaborator as the “Person of the Year.” Time was right to highlight the explosion of social networking. MySpace was growing at 2 million new registrants per week and with over 200 million members is on its way to half a billion. Most college students in the US were on Facebook. A new blog was created every second of the day, 24 hours a day. It seemed that “You” really was changing the world.

At the time we were thrilled to launch our book at such an auspicious moment in history. But looking back on it, it was so 2006!

As we explained in *Wikinomics*, the Internet is no longer about hooking up online, creating a gardening community, or putting a video onto YouTube. “User generated media” and “social networking” are really just the tip of an iceberg. A new mode of production is in the making.

Thanks to the Web 2.0, companies are beginning to conceive, design, develop, and distribute products and services in profoundly new ways. The old notion that you have to attract, develop and retain the best and brightest inside your corporate boundaries is becoming null. With costs of collaboration falling precipitously, companies can increasingly source ideas, innovations, and uniquely qualified minds from a vast global pool of talent.

The evidence continues to mount in support of our assertion that the corporation may be going through the biggest change in its short history.

The work you are about to read is another example of how mass collaboration is transforming the economy and society. *Wikinomics* was published with 11 chapters, but only the first ten chapters had been written. Chapter 11—the Wikinomics Playbook—was a blank slate with an open invitation for the world to help us write a fitting conclusion on wikinomics.com. Over the course of 2007 something remarkable happened. A community of readers and experts formed and took on a life of its own. Thanks to a great deal of diligent “wiki gardening” the community crafted a compelling and insightful guide to embedding wikinomics concepts and principles in 21st century organizations and business enterprises.

Hundreds of individuals generously volunteered their valuable time and ideas to the Playbook and we are grateful to everyone who took this journey with us. A special thanks goes to Michael Pilling who worked tirelessly to help guide and inspire the wikinomics community. Another twenty two contributors deserve special mention for the hard work and creativity they put into writing this chapter. They are: Ron Long, Michael Laine, Max Ugaz, Kartik Ariyur, Al Safrata, Franciel Azpurua-Linares, Mark Temple-Raston, Gabriel Draven, Bob Iliff, Kate Raynes-Goldie, Joost Bekel, Jeff DeChambeau, Steven Streight, Alex Todd, Critt Jarvis, Neal Locke, Ryan Riley, Todd Dunn, Martin Cleaver, Bert Murray, Brendan Long, and Peter Haine.

May this be the first of many wiki-books.

All the best in 2008,

Sincerely,

Don Tapscott and Anthony Williams

January 2008

Table of Contents

Chapter 1: To Wiki or Not.....	6
1.1 Anyone Can Edit.....	6
1.1.1 List of reasons why companies should wiki.....	7
1.1.2 List of reasons why companies will not wiki.....	7
1.1.3 Is there such a thing as secret information anymore?.....	8
1.1.4 Does the answer lie in an “And”?.....	9
Chapter 2: The Wikified Organization.....	10
2.1 Idea, Commitment, Connection, Results, Repeat.....	10
2.1.2 Survival is not mandatory.....	11
2.1.3 Moving from ideas to causes.....	11
2.2 Wikis and the Evolution of the Serial Paradigm.....	12
2.2.1 Cockroach strategies: how outsourcing, information networks and industry collaboration are changing corporations as we know them.....	13
2.2.2 Corporations as a vehicle for wealth creation.....	13
2.2.3 Economies of scale matter less today.....	14
2.2.4 Living the consequences.....	14
Chapter 3: Leadership in Collaborative Communities.....	15
3.1 The Reverse Solution Lifecycle.....	15
3.1.1 The emotional and the rational.....	16
3.1.2 Best and brightest will NOT always rise to the top... ..	16
3.2 Wiki Gardening: The Role of Administrators and Leaders.....	17
3.2.1 The creative engine: the role for everyone else.....	18
Chapter 4: A Wiki Adoption Strategy.....	19
4.1 The Adoption Matrix.....	19
4.1.1 Three dimensions of individual adoption.....	20
4.1.2 Barriers to adoption.....	21
4.1.3 Removing barriers and facilitating adoption.....	21
4.2 The Collaboration Ethic.....	21
4.3 Open PR: Wiki Adoption in Action.....	23
4.3.1 To Engage or Not?.....	24

Chapter 5: Wikinomics Beyond Business.....	25
5.1 Introduction	25
5.1.1 What can this become?	25
5.2 Transparency as the Antidote to Mistrust.....	26
5.2.1 Geographic communities.....	26
5.2.2 Everyday life	27
5.2.3 Peacekeeping and conflict resolution.....	27
5.3 Mass Collaboration in Politics	28
5.3.1 Advanced democracy	28
5.3.2 Collaborative decision-making.....	29
5.3.3 Collaborative activism	29
5.3.4 Collaborative deliberation.....	29
5.4 Government in the age of Web 2.0	30
5.4.1 The emergency wiki.....	30
5.4.2 How can the power of collaboration improve health care delivery?	30
5.5 Peering in the Classroom of Tomorrow	32
5.5.1 Wikis for teachers	32
5.5.2 Teachers as facilitators rather than instructors.....	33
5.5.3 Collaborative tools for teaching.....	34
5.6 Collaboration for Culture.....	34
5.6.1 How might mass collaboration transform music?	35
5.6.2 Can there be a creative commons-based music industry?	36
5.6.3 Could the masses have written a better end for the Sopranos TV series?	37
5.7 Belief in the Age of Mass Collaboration	37
5.7.1 How do we discuss beliefs?.....	38
5.7.2 A way out of the problem	38
Chapter 6: Final Thoughts.....	40

AHA!

“The surprising change with the Wikinomics Playbook concept was the opening up from an author to contribute and be part of the book’s evolution and thought processes. Usually an author has a lot of ownership of their own property and guards it with copyrights. It becomes the intellectual property they grow from in the forms of more books, speaking engagements (and) consulting. One of my motivations to participate in the Wikinomics Playbook was releasing that fear of “losing” intellectual property or ideas.”

– Ron

“The main problem I have is that every time I go back to the Web site it’s changed, a bit like my girlfriend’s mind. And perhaps like that, it resists rational enquiry.”

– editor, A Million Penguins (wiki book project)

“Recognition from the group and others that your contributions were welcomed, appreciated, and had value. The motivation to participate less was seeing that the content and structure did not evolve quick enough to see the relative value. Hosting a collaborative interactive forum around topics would have been useful and the morphing of the topics as a result of such groups would show belief that what was being gathered had value.

The wikinomics construct should continue to evolve to add to and reinforce the domains and interests of the collaborative community. This may be around topics, industries, technologies, business acumens, philanthropy, philosophy, community groups, etc.”

– Ron

“I think we must be careful to keep this in proportion. Collaborative workspaces and tools give us a crucially important extra dimension to our business and social activities, but they don’t replace the need for and value of face to face communication... I think we all know that, and we should be careful not to give the impression in our discourse that all the old ways of working are done for!”

– Peter

“One line catches my attention: ...‘if someone says ‘I can’t or won’t,’ you should consider whether this person really belongs on your team.’ Could wikis be simply trading one tyranny—the tyranny of control—for another (the tyranny of the collective)?”

– Gabriel

Chapter 1: To Wiki or Not

“If it’s a good idea, go ahead and do it. It’s much easier to apologize than it is to get permission.”

– Grace Hopper

“Being Bold is so far outside the box for most people, that they don’t even have a guess where to begin.”

– Anonymous

“Listening to Rob Zombie cranked to 10 on headphones is generally incompatible with deciding things via conference calls.”

– Anonymous

1.1 Anyone Can Edit

The significance of wikis and *Wikinomics* is not due to some technical breakthrough. At its core wiki isn’t a technology at all. It is a permission setting:

Anyone can edit.

In the Unix world, such a file permission is labelled “666”—anyone may read and write—is generally considered to be highly dangerous, insecure. However even more dangerous is the “777” setting—in which people can not only all edit, but everyone is empowered to do something with the results.

The metaphor is not inappropriate for the business world—if you allow everyone to alter the information—but don’t allow them to do anything with it—this is a likely recipe for frustration, pure zaniness, or disaster. On the other hand—if you enhance that creative energy with the permission to “do”—you might hit the jackpot and be at the center of a thriving commercial ecosystem. Think of Amazon—the bookseller that invited everyone to be booksellers, or Facebook—the Web site that gave away its crown jewels and tripled its value.

The chapter “To Wiki or Not” is about fear. It is also about the rewards of facing fears, and the risks. Be warned, The Wikinomics Playbook is true to its wiki roots, so you won’t find that it’s all wrapped up in a neat package for you. The contributors and editors struggled to find the right balance between the temptation to rework the contributions into a tightly woven narrative and the desire to respect the diversity of thought and the scope of the contributions that were produced by the community. Hopefully the results justify the struggle.

1.1.1 List of reasons why companies should wiki

1. A wiki can pool the talents of experts, retired CEOs, tinkering genius amateurs, obsessive overachieving bloggers, crowd-sourced investigators, hardcore Web users, physically distant scholars, and articulate early adaptors to solve a problem or build a public access treasury of information.
2. Wikis can improve collaboration within and/or beyond corporate boundaries and firewalls and across time-zones.
3. Listening to Rob Zombie cranked to 10 on headphones is generally incompatible with deciding things via conference calls.
4. Wikis offer the opportunity for unanticipated players to contribute who have different perspectives to those normally regarded as the subject matter experts. They break down the essential relationship between insiders and outsiders and the rules that allow only certain so-called qualified people to participate in particular work tasks. Unanticipated players can bring in unexpected perspectives, ideas, and connect different knowledge points together.
5. A wiki workplace provides greater flexibility for the participant's time management which is an absolute necessity in the modern world.
6. By creating a transparent process through which people can contribute to problem-solving, solutions can be created through a process of co-creation. By co-creating a vision or a solution, the necessity of facilitating "buy-in" can be removed. There is no need for people to "buy-in" to something that they helped shape, form and create.

1.1.2 List of reasons why companies will not wiki

1. **The "9X Problem"**: Gourville's rule of thumb states that one will underestimate the advantages of a new technology by a factor 3 while simultaneously overestimating the disadvantages of giving up old technology by a factor 3. This means that unless a new technology is ten times better at doing something it is unlikely to get accepted.
2. **Security Issues**: A belief that collaboration with others is impossible, unnecessary, or risky for work entailing sensitive information.
3. **Political and Cultural Issues**: Traditional forms of organizational structure create inherent barriers to collaboration. Being bold RARELY has positive career outcomes for employees who try it.
4. **Fear, Uncertainty and Doubt**: Management has a tendency to seek enhanced control in a world that is increasingly uncertain. In doing so, they want to know what the future will look like and to direct and enact a specific business plan. But by unleashing their teams with a wiki, anything could happen, resulting in a perception of reduced control.

5. **Urgency:** Senior leaders in organizations tend to believe that teamwork, collaboration and joint decision-making are less efficient than top-down chain of command management practices though there is evidence that the opposite is actually the case.

1.1.3 Is there such a thing as secret information anymore?

The whole idea of “secret information” is pre-wiki; for this denotes the idea that the privately held “information” has reached its highest potential, and that to make it public would only make it *less*. The whole value behind the wiki concept is that “information” is never truly “finished,” it can always be analyzed and edited from a different point of view, most likely making it all the *more valuable*.

But, should everything be up for discussion and collaboration?

How is organizational continuity ensured? Should the janitor be able to contribute to the strategic planning process? What about the people in the call centre? They are tasked with delivery of the front-line customer experience. Should they be able to contribute to the creation of organizational strategy? After all, they clearly have something relevant to contribute? But do they have the holistic viewpoint of the organization that takes years to develop and which is required at the strategic apex of an organization?

At the strategic apex of an organization there is an implied accountability. Who’s accountable? All of us? None of us? Only those who contribute?

If an initiative fails, are those who “opted-out” responsible? After all, if the initiative succeeded, they couldn’t reasonably expect to share in the rewards and recognition.

At whose desk does the proverbial “buck” stop?

And as we democratize organizations and processes, we imply that all viewpoints are valid. But are they? A wiki is supposed to eradicate the “outliers,” the viewpoints that are just plain bad. But what if expertise doesn’t win out? What if the loudest and most persistent troll wins?

What is a Wiki?

Definition: A wiki is a medium which can be edited by anyone with access to it, and provides an easy method for linking from one page to another. Wikis are typically collaborative Web sites, though there are now also single-user offline implementations. Ward Cunningham, developer of the first wiki, WikiWikiWeb, originally described it as “the simplest online database that could possibly work.”

– wikipedia.org

Or, is a wiki:

- The cult of the amateur
- About sharing power, knowledge, responsibility and wealth
- A Web 2.0 gimmick
- A pool of tinkering genius amateurs
- The future of enterprise collaboration
- 1,000,000 monkeys with computers
- A cornerstone of Enterprise 2.0 processes
- A platform for employee empowerment for critical decision-making
- The diffusion of decision-making to the point where no one is accountable
- Cut’n’Paste research
- A facilitator of teams with purpose
- The liberator of talent
- The avatar of mediocrity

All of these things?

1.1.4 Does the answer lie in an “And”?

Maybe the answers lie in an “and.”

Maybe some information is sensitive “and” it can be made more valuable through collaboration.

Maybe the ideas of organizational continuity and strategic integrity are still important “and” we can enhance competitive advantage by facilitating the co-creation of organizational vision.

Maybe accountability is still a requisite “and” we can enhance accountability when we democratize processes and enable people to engage in shared decision-making.

Maybe we need to ensure that ground-rules are established and known by all “and” we can trust people to do the right thing when they know the ground-rules.

Maybe the question is not, “are we a wikified organization or are we not?” but rather “when do we wiki and how?”

Chapter 2: The Wikified Organization

“The wikified organization is a proposal for the ultimate in ‘flattening’ of an organization that was pushed, in most business schools, so heavily during the ‘90s.

A wikified approach is a suggestion box, amped up; it is empowerment to do something about ‘it’—whatever ‘it’ is. It is about sharing: power, knowledge, responsibility and wealth.”

– Michael Laine

At its heart, the wikified organization is about communications—wide-open, no-holds-barred, **inclusive** communications. It’s the kind of communications that will wake most managers from a restless nights sleep... the kind of openness in operational communications than has never been possible in an organization before.

2.1 Idea, Commitment, Connection, Results, Repeat

This is a new concept. The kernel of the idea is that a team—business, friends, organizations, governments and others—form around a single, unifying concept. They, as a collective unit, pool ALL of their (spare) capital—time, talent and treasure—around this topic. As a result, the team grows significantly faster than a similar team organized around the typical hierarchy found in most organizations. It has more assets to draw from—social contacts, capital, brain cells, enthusiasm, and equipment. It is simply better at self-organization than any organization that has existed prior.

Innate enthusiasm is the reason their projects succeed. When the team is emotionally committed, they evangelize the idea, the idea spreads, more people become emotionally invested and the cycle continues—more quickly during the next iteration.

The best definition, so far, is simply this: a team forms around an idea, pool their assets, give a damn about the result, and because of their success, they tell other people. Then they repeat the process for growth. They achieve their goal, and continually expand from the original core concept that was the founding idea. In essence the recipe is this simple: Idea, Commitment, Connection, Results, Repeat.

2.1.2 Survival is not mandatory

While it is hard to imagine what 'Web 3.0' will look like, there is a certainty that it will occur. And when it does, the wikified organization will have to adjust to that, too. In the mean time, getting revved up for 'Web 2.0' should be more than enough challenge for any team.

If the current manager of a team is not nervous about this wikified approach, then it is a safe bet that management doesn't fully:

1. understand;
2. appreciate; and/or
3. isn't fully committed to the complete organizational transformation that is about to occur.

With or without you, your organization will change. It will change because it will be stronger, faster, and smarter than any similar non-wikified, static, organization. There will be more commitment, buy-in and enthusiasm.

But you don't have to agree. As Seth Godin has said, survival is not mandatory.

2.1.3 Moving from ideas to causes

Collaboration. Big deal, right? You could simplify your life and post a suggestion box, and go back to business as usual.

The difference here is that these ideas generated through mass collaboration are fundamentally different—both in quality and the ability to execute with wisdom. The difference is that the people have the power, wherewithal and commitment to see the suggestion box bear fruit. These ideas come from people that are passionately concerned about the success of the idea, and they have the ability to tap into the network to fulfill it.

We all have ideas, every day. Maybe they are even “good ideas.” The problem isn't the number of concepts, but the ability of a community to parse out the good from the bad.

With a wikified approach, a team can transform a “good idea” into a “cause,” and a cause has a life of its own. Often a cause is unstoppable—if the idea that spawned it is “good” enough. Later, a cause, if it has enough energy, capital and direction (read as steerage and guidance), can become a movement. And a movement can change the world.

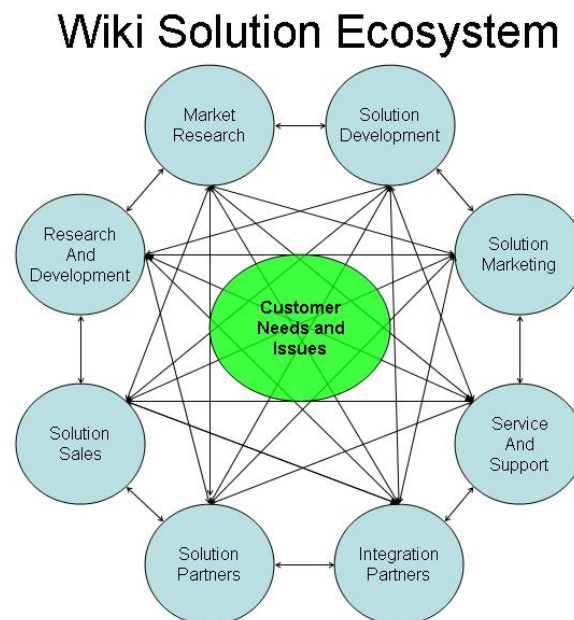
2.2 Wikis and the Evolution of the Serial Paradigm

In the serial paradigm era, each department and functionary had specific tasks to address. They built their deliverables to be reviewed by other departments and functionaries further along the chain. Typically, end-consumers were at the end of the chain, linked only into the sales, and support departments.

The other end of the chain was driven by market research and ideas related to trends or perceived needs. Customer feedback existed, but most processes were not connected with real customer needs and issues. The whole process took a long time. By the time the solution was developed and ready for market, needs had often changed or the perception of the market and opportunity had shifted.

The accelerated pace of business has further exacerbated the problems inherent in managing a long linear product development process. What is needed is a collaborative working environment and technology that will compress timelines while strengthening the value chain by facilitating short cycles of feedback and shared insights amongst the community.

The better the company becomes at responding in a timely way to customer needs, the more enthusiastic the customers will be about the product. Continuing to develop “after the sale” enables the team to anticipate new needs and opens the door to new markets. Tearing down the silos that comprise the serial process is the best way to speed up and maximize value creation.



“The ‘what’ supercedes the ‘how.’”

– Peter Drucker

By understanding “what” our organizations or enterprises do, we develop powerful insight into how strategic advantage can be created. If the “what” of modern organizations is the ability to gather information, think about it, process it and create knowledge that is then turned into products or services, wikinomics can be used to open up the organization, connect to customers and employees alike and innovate at breakneck speed.

2.2.1 Cockroach strategies: how outsourcing, information networks and industry collaboration are changing corporations as we know them

Mass collaboration can support cross-disciplinary activities but it can also facilitate inter-company collaboration thereby enabling an industry to become even more like an ecosystem.

This is not new. As companies identify peer partners they often spin off support functions from the core of their firm. It took IBM 40 years to modularize the computer and produce the PC. They did such a good job that once the modularized PC was established as an industry standard, the assembly of computers became de-commoditized; anyone could do it. Profit generation shifted from computer assembly to processor manufacturing and then to the function of operating system design. IBM had outsourced these components to Microsoft and Intel; in hindsight it wasn't the best move for IBM but the world reaped a tremendous benefit—affordable computing.

Business webs comprised of small, nimble firms that play collaboratively to spin out and create value networks can become highly competitive at the industry level. Operating as a swarm, they will learn, adapt and innovate faster without stifling corporate hierarchy. Behavioral rules and industry standards will be created in an emergent process.

These webs will change continuously through cycles of commoditization and de-commoditization. Traditionally siloed or vertically integrated firms will likely start becoming more like these networks or part of them. By their nature, swarms will be difficult to compete against and impossible to overcome by force. If cockroaches are genetically programmed to “scatter” as part of a defensive strategy that confounds potential enemies, perhaps wikinomics will give rise to the industrial version of “cockroach” strategies.

As competitive advantage shifts from traditional sources of advantage such as size, scale and the ability to marshal capital and toward more intangible capabilities such as the capacity for organizational learning, knowledge creation and the cockroach-like capability of innovating-on-the-fly, are we potentially heading toward a future of small businesses and cottage industries? Has the concept of scale been obsolesced?

2.2.2 Corporations as a vehicle for wealth creation

Corporations largely exist as risk mitigation structures—they are legally immune to the sorts of risks partnerships are liable to, and explicitly quantify the risks that investors in them take: nothing more than the cost of the shares. Risk mitigation is needed when individuals do not possess sufficient capital to produce efficiently on their own.

But the rise of individual wealth, and therefore the willingness to take greater risks, combined with greater knowledge and access to information for individuals, will continue to reduce the need for large enterprises and economies of scale.

2.2.3 Economies of scale matter less today

For starters, economies of scale matter more in the physical world (of manufacturing) than in the services world. It doesn't take an aircraft hangar to house a consulting unit. As technology advances, the process of finding better and better ways to produce physical products inevitably results in decentralization of production—most of the tools of 19th century factories, for example, can now be contained in a well stocked garage. Most things that used to be made out of steel can now be made out of plastics and composites. Production itself is becoming more organic.

Several examples can be given:

Airplane bodies are manufactured in very large facilities because of the enormous fixed costs of the moulds and basic metal-forming equipment. But if we can get the requisite properties through simply arranging different metal foils onto plastic or terracotta supports, and heat them at low temperatures, great economies of scale aren't necessary.

Silicon micro-electronics production currently requires \$10 billion fabrication plants. But if research efforts at nano self-assembly succeed as they apparently are, the \$10 billion capital requirement may shrink to \$100,000. Such advances would create opportunities for a micro-electronics cottage industry with competitors identifying and creating products for highly specialized niches.

As the capital requirements of industrial initiatives in a wide variety of sectors shrink, currently unfathomed opportunities for innovation and entrepreneurship emerge.

2.2.4 Living the consequences

If you wikify, you will experience unintended consequences. Don't spend a lot of time in strategy sessions or brainstorming meetings figuring out where this will go. Once you uncork the bottle and release the genie, your wikified planning process is alive now and the others are all dead. It will plan and grow however and wherever it wants.

Accept your lack of control and be a parent rather than a boss. Offer guidance and support. Define your limits. Post your concerns. Wikify them. Create some core documents and some basic rules of conduct—all editable and modifiable by the team—and some common courtesy and common sense. Then turn it loose.

Chapter 3: Leadership in Collaborative Communities

Leadership in a collaborative community is radically different from conventional forms of command-and-control management. Don't be surprised if leaders you never considered before bubble to the surface. But for this approach it takes a different form of leadership than you might be used to. It is a leadership by encouragement and inclusion. Dictators won't function in this environment.

In this world, executive sponsors will be faced with the responsibility of promoting participation and ensuring consistency to organizational mission, strategy, vision and values. Simply, your role will be to ensure that people work together.

This will require the reconciliation of differing goals and agendas. In the trans-national organization, national and cultural boundaries will require bridging. Your expanded role will include recruiting, fostering and developing relationships that are entirely outside your organization.

3.1 The Reverse Solution Lifecycle

Developing and selling solutions for a business is based on the recognition of an anticipated problem and the creation of a solution to satisfy an anticipated need. Since the receivers/benefactors of the solution are the customer, the problem and need perceived to solve the problem must be centered in the customer's domain.

Market, competitive and consumer insight research results in vast amounts of data that requires consolidation and interpretation by specific areas within a company to determine how a "solution" should be researched, developed, marketed, sold, delivered, serviced, and measured for success.

The collection, assimilation, and analysis of this information provide the direction for a business to market, sell, deliver, and operate in a solutions environment. This is typically approached in a serial process with each functional group within a company performing its unique function in the lifecycle that will hopefully come together in a solution that a customer will buy and derive value.

This serialized process had its merits in the past business world and functioned relatively well until the pace of change and information flow rapidly increased in the information age.

Each of the functional areas above had their place in the solution market. But now, greater collaboration and integrated efforts of cross functional teams is required by business, continually employing customer feedback loops in their processes. Now, instead of suppliers anticipating

customer needs, the customer dictates the need with suppliers working to satisfy the need with a solution. This change is a reverse solution life-cycle that is customer-driven. To succeed, it must be collaborative, agile, and adaptive.

3.1.1 The emotional and the rational

Encourage emotional responses to these changes. There will be many, and varied, emotions within the team. Some of these will be hostile. Reinforce the positive reactions. There will be people that test the waters to find out the level of commitment that management has in this effort. Connect with and endorse the ones that rise to the challenge. These will be your new crop of leaders.

Rational consideration will take root once your team sees that this new toy is in fact a very serious tool. That is when you know that the approach is working—because your best people will start insisting that collaborative work be accomplished mainly through this tool.

3.1.2 Best and brightest will NOT always rise to the top...

The network values collaborators, but what about the recluse? The genius/wizard/geek/hermit that never keeps notes or is sloppy in their organizational skills is practically a cliché in many fields. That means that some of the people with potentially the most to add to the body of knowledge that is the heart of a wikified organization, are potentially the least likely to impart that experience to the organization.

...Unless they can engage others with their ideas.

The person that simply sits, puzzles, doodles, runs simulations, and figures out solutions—in isolation—is going to be in trouble. There is not much use in avoiding this problem. Some people just don't fit in a wikied environment. Some people, no matter what you do, will not want to work with the rest of the team.

If someone says “I can't” or “I won't,” you should consider whether this person really belongs on your team.

...Unless they can upload their knowledge.

The wikified organization presents a solution.

Access their brainpower. Codify their knowledge and ideas. Upload their doodles. Post their spreadsheets. Let people “look over their shoulder” while they run their simulations.

And when they come to a conclusion, go over how they arrived at that conclusion?

Leave them alone in a glass house. Others can determine the process they went through—and document it, so that your future, up-and-coming geniuses can have the benefit of this knowledge and experience.

Get their ideas out of their head, into the wiki and into the heads of everyone else on the team. Enable the team to co-brainstorm along with your genius. You never know where the next lightning will strike. But if you can harness the collective power of your team, you may generate more lightning...

3.2 Wiki Gardening: The Role of Administrators and Leaders

Axiom: “He who writes the minutes of the meeting, controls the outcome of the meeting...”

With every tool, there is a way to misuse it. Skilled wiki gardeners have a tremendous influence over the organization, simply because they are the ones that impart their “knowledge” to the rest of the team. Biases and agendas are a natural state for thinking, opinionated people. They have the power to slant and control the “history” of the meeting.

A principle value in the wiki as a tool is its simplicity and ease of editing. You wield this power—equally—with the rest of your team. The “edit sword” swings both ways. In its worst incarnation, bad content can also be inserted—effortlessly. Bad information is worse than no information. The trick, however, is to catch the misinformation before it can corrupt the efforts of a team. Simple mistakes (far more common than intentional damage) can easily propagate among the team.

Care needs to be taken in vetting and approving contributions. It must be stressed that wiki gardeners are not gatekeepers. Do not give in to the temptation to be a bottleneck or throttle on the creative engine of wikified collaboration. Rather it is nothing less or more complicated than peer-review and evaluation and perhaps comments, prior to posting.

Is the Wisdom of Crowds the Enemy of Genius?

“One of the behaviors I have witnessed in groups is that very few decisions get made unless someone is designated as the leader.

If one of a group of peers tries to drive to a conclusion, the ‘Who died and made you boss’ comments start to come out. It is not uncommon to have more than one way to solve a problem. Getting the team to agree on which way to solve it can be a challenge. Eventually the natural leader will prevail through persuasion and logic, but this can sometimes take a lot of time and cause loads of frustration. Having a clearly designated leader can significantly shorten the process of building a working plan.

On the other hand, if the leader in the meeting tries to force his or her plan onto the team, a poor plan could result. It is true that the collective minds of those doing the work generally have a better handle on what the problems are and how to solve them. The leader needs to understand this and allow the team to define the problem and present the plans for solutions. The leader should only facilitate the team through the rough spots and guide them around any potential deadlocks. The perfect leader sets the stage so the team feels comfortable in acting like a democracy but understands that there is a leader in the room.

Ultimately the group has the ability to come up with the better plans—it is the mechanics of getting there that bog things down.”

– Tom

3.2.1 The creative engine: the role for everyone else

In the book Wikinomics, the concept of the “Net Generation,” with all of its unique characteristics, demographics and psychographics, was established. This is the group that will empower the transformation your team is embarking on. Wikinomics truncated that term to “N-Generation.” The wikified approach truncates this further, and modifies its meaning a little to “N-Gen.”

Or engine.

This engine is what will drive your effort forward. These people, the ones that initially embrace the concept of a wikified organization, will be the ones that help you reach your goals. This engine will take cross-training and cross-pollination to a wholly different place in a wikified organization than is possible in a typical, hierarchy-driven, organization.

The engine will:

- create ideas
- brainstorm
- consider, evaluate, test, vet, approve/deny
- marshal the resources and complete the project

The engine will accomplish this.

If you let it.

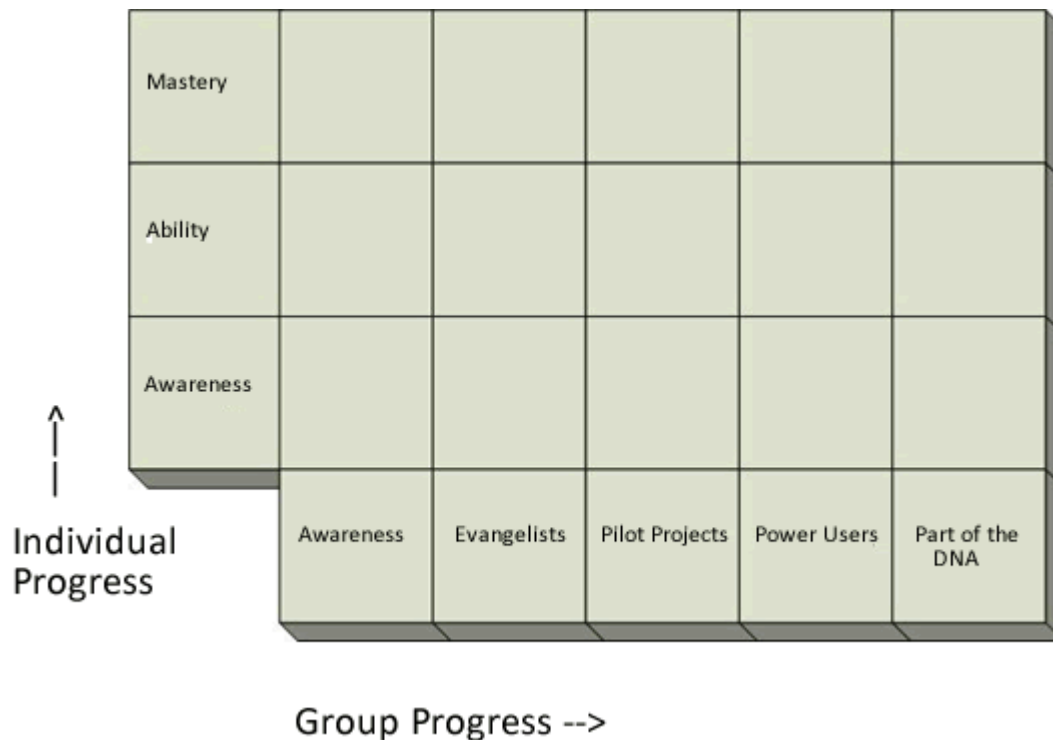
Chapter 4: A Wiki Adoption Strategy

Introducing any new technology or software across an organization is no piece of cake. Introducing collaborative technology is worse. It contradicts with the hierarchical traditions of most organizations. It denies the implicit or explicit territorial and self-interested behaviors that are a regular feature of company politics. It's hard to implement from the top. Lessons learned so far show bottom up and/or team focused introductions tend to give the best results.

The collected wisdom of the wkinomics community has this advice for organizations adopting collaborative systems.

4.1 The Adoption Matrix

According to Joost Bekel, adoption of a new technology can be mapped in a two dimensional matrix which shows both how the technology is absorbed by individuals and by the company as an organic whole.



4.1.1 Three dimensions of individual adoption

Three dimensions of individual adoption are as follows:

- **Mastery:** Realizing the benefit—it becomes “one of my tools”
- **Ability:** Being able to work with the tools, understanding technical aspects of the package
- **Awareness:** Knowledge of the solution as a concept, and what problems it will solve

If you polled your user community about their personal adoption of a collaboration package, there are only four possible responses. I could have picked any tool but for demonstration, I'll choose Microsoft's SharePoint as the example:

A. “I have never heard of SharePoint. What is it?”

This person hasn't achieved Awareness. You need to form an internal unit that can get the word out with internal marketing, branding, and other promotional programs. Generally speaking, you stop having an Awareness issue when 80% of the user community knows who you are.

B. “I have heard of SharePoint but I'm not sure how to use it.”

Issue 2 is the Ability issue. You need to develop a training program for the user community. The program should include marketing of the benefits and end-goals of adoption, training, well documented recipes for how to do stuff, and an overview of the business processes before and after adoption. It is a good idea to build a sandbox version for people to play in, and establish a game or competition to get people emotionally involved. The need for training may run smack up against workers individual capacity—is time set aside to learn the new system or is it just added to the already long list of duties? Unless there is scheduled downtime for learning, expect some aggressive pushback since the users will not believe it is actually a priority.

C. “I have heard of SharePoint and I know what it can be used for, but I don't use it.”

Mastery tends to be the most difficult step. It involves social, cultural, and political issues. Starting with social issues: older generations are less willing to invest in changing their habits, and the collaboration ethic tends to not be their dominant operating mode. Undertaking a change initiative can be challenging. Cultural issues require asking, is the organization designed for collaboration? Are compensation practices, managerial targets and incentives or leadership styles undermining the implementation? Fear is the biggest cultural issue; fear of losing control is much bigger than any of us can imagine. Moreover, political issues abound. NIH—“Not invented here.” “That's an IT thing not a business tool.” You get the idea, politics matter. So, how do you get beyond this? The answer is one customer at a time. If the solution delivers the results promised, enough enlightened users will be demanding it and peer pressure will eventually work on the rest of us.

D. “I use it all the time.”

Once you have half the users saying they use it all the time, the implementation team can pack up and go home.

4.1.2 Barriers to adoption

Another way to look at 2.0 adoption is to review the reasons people are not using the 2.0 services. Understanding these barriers can help you plan for your roll out of 2.0 services. Common barriers to adoption and participation include:

- time available to contribute
- learning new tools
- knowing what to contribute
- other tools already in use

Most organizations like to survey their current customers to understand why they are using 2.0 services. However, this seems to be self defeating but also depends on the level of maturity. It may be more helpful to find out where customers collaborate now and what their perceived needs are. Also, if adoption is foundering, you should quickly find out what the barriers are so that the services do not get a bad reputation.

4.1.3 Removing barriers and facilitating adoption

Strategies for removing barriers and facilitating adoption include:

1. Identify key user groups
2. Identify and understand key users
3. Convert key users into evangelists
4. Turn evangelists into trainers
5. Support bottom-up adoption and emergent behaviors

4.2 The Collaboration Ethic

“There is no longer any room for leaders to be heroes.”

– Margaret Wheatley, *Leadership and the New Science*

Collaborative systems need a process framework as basic condition for success. Is the social operating system in your company ready to upgrade? The key requirement for collaborative systems is that self-interested behavior (win-lose results) need to be kept at a minimum, or virtuous cycles can never emerge. If mutual respect and trust are absent, the company needs therapy—not a collaboration tool. Given a baseline level of cooperation exists, instilling a “collaboration ethic” can lift the company to the next level and enable the coordination and cooperation of a large number of people. Could these principles or others like them provide the guidelines for success in this new market economy driven by collaborative ecosystems?

7 Habits of Highly Successful Wikis

“The call and need of a new era is for greatness. It’s for fulfillment, passionate execution and significant contribution.”

When it was published in 1990, Steven Covey’s *The Seven Habits of Highly Effective People* became a blueprint in the personal development field. Almost 20 years later, Covey’s guidelines closely mirror the collaboration ethic required for adopting wikinomics.

You be the judge. Can you match these principles with wiki behaviours?

- Habit #1 – Be Proactive
- Habit #2 – Begin with the End in Mind
- Habit #3– Put First Things First
- Habit #4 – Think Win-Win
- Habit #5 – Seek First to Understand, Then to be Understood
- Habit #6 – Synergize
- Habit #7 – Sharpen the Saw—Continue to Evolve and Learn

1. Practice “deep respect.”

Really this is just a variation of the golden rule applied to opinions. What we assume of ourselves is that:

- our opinion matters
- we speak with the best intentions
- there is truth in what we say

While these three are self-evident from an individual perspective—most of us can’t carry it off in a group setting. Repeat this: there is no criticize in collaborate, instead you have deliberation and analysis. Another way of practicing deep respect: if you can, try walking around every day assuming that everything you think and believe is roughly 50% wrong. If you can pull that off, respecting others follows naturally.

2. Participation rules:

This rule requires the **opt-in principle**. If you do not choose to “opt-in” and then participate in the process, you do not have the right to complain about the result. We must respect the collaborative process and respect people who have shown up for the process. Latecomers should not expect to have their opinions fully considered. At the end of the process we must collectively stand by the results. Those who chose not to participate must respect the results. The opt-in requires trust in the group and transparency of process.

3. Nobody “owns” an idea.

In response to being called a “towering genius,” Isaac Newton responded, “It is only because I am standing on the shoulders of giants.” There is no such thing as an original idea: the best we can do is absorb and reassemble old ideas in some new way. Some individuals do have a special ability for refactoring old ideas, but the ideas themselves are mostly like the trees of a forest—they grow and thrive largely of their own accord.

4.3 Open PR: Wiki Adoption in Action

Corporations are under increasing pressure to explain themselves to a range of audiences—journalists, consumers, employees, investors, regulators, pressure groups and voters. With increased scrutiny comes the imperative for companies to act with integrity and transparency. In the networked world, one-way conversations risk ringing hollow. Can the principles of wikinomics change public relations for the better?

“If the environment is quickly transforming, fixated control spells disaster... holding onto what you got doesn’t work... just ask Dell Computers which today announces jumping to into bright colors to hopefully boost their lagging sales. Didn’t Apple do bright colors years ago?”

– daaberg on June 27 6:31am

“The current generation of C-suite executives wield decades of experience, and not a little success along the way, equipping them to be excellent command and control leaders. They won’t ditch that experience (their personal crown jewels) without overwhelming evidence that they must—and they may not have the right attributes to adapt, even once convinced.”

– Ron on June 28 at 1:40 PM PDT

“The risks of being open may be higher for early adopters than they are for fast followers. This was the case for the Green Party of Canada in their use of a wiki to develop their election platform. While they were trying to change politics, everyone else was still engaged in politics as usual. This left the Green Party vulnerable and exposed... the other parties could see what the Greens were planning and the public could see the internal conflict going on within the party. Even though the same things were going on in the other parties, the conflict was kept hidden and thus the Green Party’s image was compromised. There is the potential for the same situation for open corporations.”

– Kate

The premise of open PR is that information will leak out eventually so it’s better to join the conversation early than to put out fires after the fact. A company that regularly discloses pertinent information to its stakeholders establishes the kind of reciprocity required to build trust.

However, openness may not always be the right solution. For example, companies that lack confidence in their intrinsic values and/or have a vested interest in preserving their market and industry position would be unwise to facilitate a process that accelerates the erosion of stakeholder trust. This short-sighted, defensive risk management approach to managing the company should be a temporary tactic at best.

To stay competitive, companies must adopt an active, trust-enabling posture where companies use a combination of communication tools with the stakeholders that contribute to long-run business performance. Even in the short run, companies can open up parts of their company to scrutiny by certain stakeholders, and gradually expose the poorer parts as the company's performance improves. It is dangerous to default to denial and deception, a strategy that routinely backfires in a transparent world. As we say, "If you're going to be naked, you better be buff."

4.3.1 To Engage or Not?

A wiki that is available to participants who must log-in to participate can provide a valuable dialogue mechanism for customer dialogue. Permission controls ensure that those who choose to participate are willing to provide an identity and are interested in constructive dialogue. Structuring the wiki with specific topics and domain areas provide a many-to-many way to converse around topics the company has interest in obtaining feedback around. Giving users the ability to create discussion forums related to the company opens up the customer view that many companies try very hard to gather from exhaustive surveys and customer visits. This mechanism provides a real time capture of topics that customers are interested in.

A customer dialogue wiki also opens up the channel to customer-to-customer communication related to a company's products and solutions and also provides a "birds of a feather" community to customers who are sharing the same problems or adopting innovative ways to tackle a particular issue. Many company product solutions are customer driven. Opening up this contributed library of dialogue has a benefit to the company as well as to the customers that use the company's products and services to enhance and run their own businesses. This provides another channel of gathering useful information so that a company's products and services can rapidly adapt to the customer needs and provides client direction for product direction and strategy.

Perhaps the most important lesson is that when a company chooses to host their own sites for public dialogue, it is imperative that they enable a two-way conversation. Questions will be asked and challenges made publicly. The company will need to respond in an intelligent and measured way.

Increasingly, companies may be judged more by the quality of its discussions than the quality of its products and services!

Chapter 5: Wikinomics Beyond Business

“The beauty of wikis is collaboration. I thought it would be interesting to see if collaborative efforts could provide useful information concerning the 2008 Presidential Election”.

– Alan, Wikinomics Playbook contributor

5.1 Introduction

As we undertook this chapter, we asked our contributor network to consider opportunities for wikis beyond business and what implications wikinomics could mean in the world at large. The responses were considerable and suggested considerable implications.

What emerged was a sense that we are faced with a profound opportunity to engage (or maybe re-engage) citizens, to connect ourselves and each other to a larger whole.

In considering the implications to government bureaucracies, wikis present opportunities to shift the citizen-government relationship, perhaps even revitalizing the concept of democracy itself. Participatory democracy could evolve from a once-every-three-or-four-years exercise at the ballot box to a relationship of real civic engagement in which citizens impact decision-making and policy development on a day to day basis.

From government programs to education to culture and entertainment, wikinomics could spell a fundamental shift and empowerment of the common man, moving us from being passive recipients of programs, policies, entertainment and decisions to becoming active participants in the very things that define much of our daily interaction with the world.

5.1.1 What can this become?

Marshall McLuhan suggested that we should consider the message that a medium conveys. For instance, by examining the effect its machines had on its customers operations, IBM discovered that it was not in the office machine business but rather in the information processing business. We're told that wikis convey the idea of openness. What else do they convey? What can a wiki evolve to or help evolve, shift, change?

As the concept of openness spreads, does it obsolesce our ideas of privacy? As we enable participation, do our ideas of leadership become obsolete? Do they shift?

Collaboration platforms can reveal processes like nothing else we've ever seen. If we want, all the backrooms can become public venues. Can the transparency we gain help us achieve the understanding and trust we need to help us solve civic and global problems?

Do we have leaders that are ready to step into this new opportunity? Or will they fear it will Britney-fy their lives to an intolerable degree?

5.2 Transparency as the Antidote to Mistrust

If the opening years of the 21st century have shown us anything, it is that we are inter-connected, that our decisions have consequences we can't yet even imagine. Yet, if anything, civic engagement is at its nadir and there would appear to be a profound erosion of trust in our institutions.

The opaque, command and control instincts of our traditional organizations has resulted not only in a disengaged and cynical public but also in an erosion of their own adaptive capacity. It is to this end that the consequences may be even greater.

The challenges we face in the opening years of the 21st century—climate change, hydrocarbon depletion, political extremism and the decline of almost every living system on the planet—transcend boundaries and cultures, are intergenerational in scope and massively more complex than anything we have heretofore faced. As Thomas Homer Dixon has suggested, these problems are literally outstripping our capacity to generate the ingenuity we need in order to solve them or mitigate their impact.

If the status quo is broken, what do we replace it with?

Perhaps replacing opaque, command and control processes is one place to start. Maybe harnessing new and emerging communication technologies can re-engage citizens, thereby reviving what legitimacy and effectiveness remains of our large institutions before trust erodes completely.

Perhaps, just perhaps, engaging minds all across the planet from every culture—on wikis and blogs and podcasts and mashups and self-produced videos—can harness and channel the multiplicity of perspectives we will need to understand and begin solving these planetary, intergenerational, seemingly intractable problems before they become truly unsolvable.

5.2.1 Geographic communities

- The social fabric of a town or neighbourhood can be woven tighter with weapons of mass collaboration. Community media/citizen journalism Web sites feature citizen-created content (text, photos, video, audio) and citizen-initiated/moderated online discussions. Placeblogger tracks these sites.
- Ongoing community charettes could be facilitated with transparent and widespread community engagement in the civic planning process. Individual citizens would be empowered to co-create a vision for, say, a new waterfront plan, in a way currently only available to corporate interests.

- For example, in Northfield, Minnesota, citizens have created Northfield.org and Locally Grown, as well as a local civic blogosphere comprised of citizen, organization, business, and leadership blogs.

5.2.2 Everyday life

- A wiki could be used by a family and relatives to document genealogical data and memories of various members of the family, a family treasury of reveries.
- Wiki (Google type) Social Calendars can be used to share and update family/friends calendar information with weekly activities, appointments, events, etc., updated by family/friends Calendar members.
- Collaborative planning tools for social events, family gatherings, can easily be shared and updated with a wiki document/spreadsheet.
- Cooking recipes can be shared with variations of recipes updated on a wiki document.

5.2.3 Peacekeeping and conflict resolution

If a principal root of conflict lies in a sense of “separateness” in the sense that we do not see others as being the same as us or as profoundly different than us, perhaps one source of conflict resolution can be found in the principles of wikinomics.

If the transparency and openness of wikinomics can facilitate inter-company, intra-company and public collaboration, could it be used to resolve conflict? If we can use collaborative processes to co-create a strategic vision for an organization, can we use it to co-create a vision of mutual prosperity?

If wikinomics enables engineering and marketing to communicate product requirements, can it also be used to help Palestinian children and Israeli children document their daily lives and share their “art,” resulting in greater understanding, empathy and connectedness? Could conflict resolution—perhaps decades from now—be found in the shared stories of children?

The Open Source Israel-Palestine Peace Plan

“Since the ‘professionals’ in Israel/Palestine are having a continuing lack of success at creating a workable peace plan that both will follow,” Curt Hopkins suggests “why not give it to the people themselves, on both sides of the divide, and create ‘The Open Source Israel-Palestine Peace Plan.’”

- Set up a wiki and invite people (emphasizing Israelis and Palestinians) to create their own collaborative peace plan.
- Different people could work on various issues like borders, trade, right of return, etc.
- Invite some scholars and academics with specialties to augment the citizen involvement.

5.3 Mass Collaboration in Politics

Whether we realize it or not the form and function of any political system is driven by its technologies. Politics is ripe for mass collaboration—perhaps in no other area of life is there such a broad gap between current practice (using tools circa 1800) and what is now technologically feasible. Our current systems of government were designed to require only the horse, the printing press, the abacus and the candle. The technical and practical constraints on democracy, at that time, meant that the best way to determine the will of the people was to print platforms, hold meetings, count votes and send one person on a horse to the capital. With mass collaboration—it now quite possible to distill the will of the people without the use of intermediaries, representatives or traditional mass media acting as a filter. Of course, we must ask ourselves seriously if we really would prefer to be ruled by our neighbors, and if not—by whom?

5.3.1 Advanced democracy

What forms could future democratic institutions take? It is difficult to predict, because most people have never seriously considered alternatives to existing political systems. Politics by nature is resistant to change—because the rules are set only by the winners, and those who win under the current system clearly have no motivation to change the rules. Current small scale experiments underway on the Web, however, include the three most important functions that would have to exist in some mass collaborative democracy:

- **Deliberation:** Knowledge gathering and discussion that enable the “due diligence” required to make policy. The ability to define and frame issues that need to be decided.
- **Decision-making:** Given that priorities have been established and choices exist—how do we decide?
- **Activism:** Rallying supporters around a candidate or an issue—is a very much live component of the current and any future systems, but even so collaborative tools for activism are still being used in only very limited ways.

Wikis are one example of a technology that can combine the deliberation and decision in one simple process (via collaborative editing) but to date no project has been successful at attracting large numbers of participants to what is so far just a theoretical exercise. Collaboration is also an important tool to re-engineer the way we decide and govern. While many social projects fail because of the “law of unintended consequences,” mass collaboration would be far better at drawing out those unintended consequences at the planning stage. Electoral reform is a good example of a complex topic—every possible voting system has unintended consequences.

A More Collaborative Union

Instead of electing representatives from each region by a set of winner take all contests every four years or so, the legislative branches of government could be made up of representatives who have the support of some threshold number of voters from any region. There would be no single election day, a much wider range of candidates to choose from, and any citizen’s support for a representative could be withdrawn if they failed to represent their constituents. The drama of election night (and the pomp and vacuity of election campaigns) would disappear.

5.3.2 Collaborative decision-making

There are several projects started already to enable, at least in an experimental sense, citizens to become legislators by creating or redrafting laws using the Internet and collaborative Web sites.

MorePerfect.org encourages people to rewrite the constitution of the United States, and propose legislation to any of the legislative bodies in the U.S.

The World Parliament Experiment encourages voting and consensus building on global issues, where anyone can propose a vote.

5.3.3 Collaborative activism

Collaboration allows for new ways to interact with the current political process. Whether it is collaborating to frame a spin-free voters guide, or tracking the performance of elected politicians, these collaborative sites indicate how the Internet can and is changing the political process.

Wikia Politics Portal, contains a list of wiki-based political communities.

E-Democracy.Org's Wiki, this non-profit, non-partisan, non-advocacy site includes the use of a wiki to collect contact and link information from candidates such as Minnesota Gubernatorial candidates and their President 2008 directory effort.

Poliwiki A site where people can share information about the upcoming presidential election.

The Ideal Government Project: A U.K. based effort to enable citizens to "say what we want from e-enabled government."

5.3.4 Collaborative deliberation

- **dKosopedia: a left oriented political encyclopedia**, the dKosopedia is written from a left/progressive/liberal/Democratic point of view.
- **Issuepedia:** Describes itself as "the encyclopedia of issues, analysis, thought, and opinion. As with Wikipedia, anyone can edit; unlike Wikipedia, we encourage opinions and rants as well as carefully considered analysis and purely factual writing." Their main page includes a list of related projects.
- **Openpolitics.ca:** A project of mlpilling and friends, which devised a new standard in 2004 for political deliberation via a wiki.
- **Electowiki:** Talking about voting methods.

5.4 Government in the age of Web 2.0

Collaboration can impact the business of government no less than business itself. Governments struggle as much as anyone with deeply entrenched bureaucracy, complex institutional structures, unwieldy decision-making processes, rigid models of management, and information silos. While many citizens and private sector organizations confront these same challenges, the rewards for successful cross-departmental collaboration could be a more responsive and less costly government.

- Explore opportunities for mass collaboration and self-organization among internal departmental and ministry user communities. One example is efforts in the U.S. Department of Defense with its evolving concepts of network centric operations.
- Engaging more citizens in the policy process and improve transparency of decision-making while reducing cynicism toward government.
- Hold more local collaborative events such as neighborhood level charettes rather than designing and managing from afar. Solutions?
- Make public data publicly available in real time in a raw form that organizations can mashup.

5.4.1 The emergency wiki

Incident Command is a specific protocol for handling emergency situations such as chemical spills, fires, and natural disasters. It was born out of the critique of the Oakland Hills fire where different fire and police agencies had difficulties working together because of differing terminology, dynamic chain-of-command subordination, and undocumented radio channel assignments. Wiki-based EMS systems present potential benefits including:

- Continued up-to-date information about chemical inventories, ongoing processing activities, as well as simple upkeep of the personnel roster, reference materials, and the written ICS instructions.
- Capture of the current state of refineries and other chemical processing facilities together with a daily log of any specific, potential hazards.
- Reduced exposure to potential server disruption of services caused by the incident given the Web-based nature of the medium.
- Reduced chance of “cross talk” (compared to radio) as multiple functions continually provide updates.

5.4.2 How can the power of collaboration improve health care delivery?

By its nature, good health is a collaborative effort—between doctors, patients, nurses, workplaces, schools, governments and community organizations. Despite this, the health care industry is just now contemplating the use of collaborative technologies in the treatment and prevention of disease.

Creating hope

Could e-versions of Alcoholics Anonymous, suicide prevention, bereavement support, and communities better help people help each other? Can Web-based systems improve service for people in crisis, where timeliness and availability are so important? Mental health has a core component that seems to revolve around getting patients to emerge from isolation and re-engage with society. Participation, cooperation, social contact, interacting with others is key to many therapies. A wiki could be an ideal venue for mental health clients to rally around for group projects. Those who like to read and research, or who have natural talents or expertise, could work with others in creating treasuries of wisdom on various topics, like art, gardening, music, etc.

Building knowledge

Wikis could also be used to pool talent of mental health care professionals, to collaborate on cost saving ideas and innovative programs, like pet therapy. Wikis could assemble a treasury of herbology, natural remedies, like Jethro Kloss' *Back to Eden* book.

A more generic health care application would be using a wiki for professionals to create, update, and disseminate clinical practice guidelines. These are peer-reviewed documents intended to reduce provider-to-provider variability in the management of common problems, both chronic and acute. Examples include diabetes management, otitis media, allergic rhinitis, asthma, ADHD, to name just a few. The U.S. Agency for Healthcare Research and Quality (AHRQ) maintains the National Guidelines Clearinghouse (www.guideline.gov), which might provide a good foundation from which to build.

Success in using collaboration tools can enable faster creation and distribution of knowledge—but realizing the full benefits would require an adoption strategy which includes adapting the current professional culture of guideline development, while core elements of current system—the peer-review process—are and always will remain critical—the possibility of using the flexibility and transparency of collaborative tools to both speed up and intensify peer-review is intriguing.

Local health care intranets

Tangential to sharing best practices and guidelines through collaborative technology, these tools could be used by the multiple providers of “patient care” to work together more efficiently and cost-effectively thus allowing a less expensive and more holistic care delivery system. Up until now, providers have operated primarily in silos when co-delivering services to “clients/patients” in the field of mental health and behavioral disorders.

A considerable amount of work has been done (and is ongoing) to create an open source platform for electronic medical (health) records; see www.openehr.org for a great introduction. Similarly, many Regional Health Information Organizations (RHIOs) in the U.S. and Local Health Integration Networks (LHIN's) in Canada are making grassroots efforts to improve communication and data access among different health care organizations; ultimately, this will improve quality and reduce waste due to duplication of services. There are numerous problems to be resolved such as security across multiple information platforms, and the privacy issues related to managing patient information in a collaborative environment.

5.5 Peering in the Classroom of Tomorrow

The competitive advantage of societies may depend purely on how fast they are able to adapt their education systems to give individuals access to ever more information over shorter time scales, e.g., giving a high school graduate the same capabilities as a doctoral candidate. How do you compress the time it takes to learn?

Today's school classroom evolved in the 19th and 20th centuries. It consists of a group of subordinate students presided over by a teacher, who in turn reports to a principal, a superintendent, a school board, etc. Collaboration occurs, but is limited to small groups of students for "projects" or collaboration among teachers and administrators. This is in contrast to the "normal" world where people learn mostly from their peers and a variety of experts. Would education benefit from a more natural collaborative learning process?

Everyone has something to teach, something to offer that is unique to their experiences or the result of their own personal analysis. Though the teacher standing in front of your class may very well be highly *qualified* to teach the subject at hand, they are most certainly not the only ones capable of teaching. The notion of "one teacher, one class," should be banished. It could be a hundred! Schools should follow MIT's innovation and post full curriculums online (class syllabus, texts, homework assignments, etc.); but this time allow any who wish to participate in expanding or editing the syllabus.

One issue, for those who have noticed—is that the traditional methods of teaching tend to be boring! Michael Furdyk of TakingITGlobal, states that lack of engaging content is a significant issue facing American public education (Tapscott and Williams, 2006, p. 51). In a one teacher/many students situation, there is very little room for individual input and interaction—compare this against interactive online spaces, sites, and tools that are very attractive, energizing, and simply more engaging to students than humdrum drill/kill activities found in the typical classroom.

One other advantage is that knowledge is always under construction in these interactive spaces, sites, and tools. Berger and Luckman (1966) outlined a process in which knowledge is socially constructed over time by an ever growing group of like-minded individuals with similar interests. As their conception of knowledge gains traction, this new knowledge, created by a network of collaborating individuals, will in time become the new paradigm. Linus Torvalds, alludes to this in saying "People just self-select to do projects where they have expertise and interest" (Tapscott and Williams, 2006, p.69).

5.5.1 Wikis for teachers

In most jurisdictions and institutions, the curriculum is developed in a bubble—each teacher typically develops most of their material alone or in a department—an enormous amount of duplication when you think that all schools or colleges are teaching pretty much the same topics. Some schools and teachers have begun sharing material on the Web and on an intranet, but it is not at all widespread. To date, the most common repository for the curriculum is a file cabinet in the teacher's classroom. New teachers do not have access to any of this material (unless the school has a

good mentoring program), often bringing about a “sink or swim” process throughout the early years of a new teachers career. Many have speculated that this approach has led to the drastic shortage in new qualified teachers. The problem itself becomes compounded very frequently as most teachers handle multiple subjects and some at different grade levels. A wiki that can serve as a large database of freely available lesson plans, tests, quizzes, and best practices on covering the state standards could be enormously beneficial for new teachers.

The same problem is mirrored in textbook and workbook creation.

At the primary and secondary level, typically, teachers are using textbooks that are developed locally or regionally. Creating a textbook requires lengthy research, vetting, and continuous updating. Oftentimes teachers are forced to create their own material until the “latest version” is released. Even then it may not fit the teacher’s needs and is then sidelined. A wiki has the potential to bring the development process of these resources to them on a personal level. The textbook publishers can host their information in a wiki, allowing teachers to pick and choose what they need (rather than the other way around). Teachers can also become a part of the development process by continuously adding information, filling in gaps, building information about regional topics, and fixing the errors of the publishers. Not only could this greatly enhance the teacher’s ability to provide high quality lesson plans, but it could also help the schools to reduce their dependence on large distributions of new textbooks (teachers could print or project the page rather than use a textbook). Buying new textbooks is a costly process that prevents the schools from spending money on other programs.

- Of course, the teachers could just build this themselves and then sideline the publishers altogether. Bringing free knowledge to the world and immensely improving our public education system.
- California Open Source Textbook Project—a case study of how children’s textbooks can be written in a wiki.

5.5.2 Teachers as facilitators rather than instructors

Collaboration allows for student to student P2P education in a way that breaks out of the boundaries of the classroom. Mike Jones, a college professor, now uses wikis in all of his classes to allow students to teach each other. His research in using wikis for the classroom was sponsored by Sheridan College’s Professional Development Institute in Toronto. He is developing best practices on how to organize, develop materials, teach, and evaluate within a wiki. One of the important discoveries was how collaborative wiki-based learning built on practical abilities in ways that than traditionally passive instructing doesn’t. Whereas in textbook based learning the activity focus is to get students to remember, understand and apply knowledge, collaborative learning encourages them to analyze, evaluate, and create.

The Knowledge Dimension	The Cognitive Process Dimension					
	Remember	Understand	Apply	Analyze	Evaluate	Create
Factual Knowledge						
Conceptual Knowledge						
Procedural Knowledge						
Meta-cognitive Knowledge						

Table 1: The Revised Taxonomy Table

Wikis enable this part of learning in a way few traditional processes do

“(In our classroom wiki) 97% of edits (over 9,000 overall) were student-generated. Most students were able to ask and answer their own questions. It was very interesting to see how this emerged. When you have 120 students co-creating the course, there’s a fair amount of flux, but it does follow some sense of order. This is largely due to there being an explicit requirement to participate—without the reward of grades, I’m not entirely sure if there would be as much effort.”

5.5.3 Collaborative tools for teaching

One way to harness this nexus of cooperation, collaboration, and socially constructed knowledge in the classroom is through the **blog**—a tool which allows teachers to share ideas, strategies, and curriculum across geographical boundaries with inexpensive ease. Students’ blogs provide a larger authentic audience for the writing and exploration of ideas than the lone teacher grading class papers. It opens the door to peer-review and learning as well as learning from the entire online community.

Google Docs and other wiki-like word processing applications hold potential for collaboration between teacher and student. Papers become “living” documents, where revisions are easily observed and recorded, and comments can be attached in-text. Multiple users can be brought in simply to view and comment on a document, or actually contribute to it and revise it. A class, a school, or several schools can all collaborate to create expansive works ranging from science manuals, literary criticism, historical analysis, or anything else that would be far less likely a product of one or two students and teachers.

5.6 Collaboration for Culture

“Art doesn’t necessarily benefit from the free and open exchange of ideas and edits. Science does, and most specifically software development does, but when you take something like music and apply this same paradigm its no longer personal. Maybe the masses of generalists could construct an interesting collage of samples, but could they collectively write a good love song?”

– Brendan Long

It used to be that aspiring musicians had to get signed by a label to get the money and facilities to get major play on the radio, and the only way to obtain the music for oneself was to go to a record store. Things have changed. Today, someone with the right stuff could become a star using only a computer, an Internet connection, and a bright spark of creativity. Millions of songs are available to be downloaded for free (legally or otherwise) from the 'Net. Now that digital recording and sound production software packages are available to the masses, demand is increasing for music formats that allow collaboration. Established bands such as the Beastie Boys and Nine Inch Nails are seeing the benefits of loosening control over the music. Fans are no longer passive; they're becoming listener-artists who co-create music online, using tracks that artists have posted on the Internet in a form that their fans can easily remix.

The Beastie Boys came the closest to mass collaboration with their concert video “Cool, I F***ing Shot That!,” which passed out cameras to audience members who shot footage that was then later edited together to form a cohesive film by the band.

These are the types of innovations that are necessary to keep the music industry alive in this new era of technology. However, neither is a full revolution in the sense that they don't aim to replace the superstar economics under which the old industry is run. Rather, they aim to use technology to give fans a greater sense of involvement with the music that they purchase. This creates a sense of community and a vested interest in the product that can help to increase sales as a whole.

Culture, by its nature is a product of mass collaboration. Each member of a culture is able to influence and be influenced by others.

In this regard, mass collaboration, powered by the Internet, has two effects:

1. It changes the boundaries of community—the perimeter of people who can observe and be influenced can now be anyone in the world
2. It provides everyone with the ability to amplify ideas and behaviors

5.6.1 How might mass collaboration transform music?

With technology, the skill of creating music became separate, for the first time, from the physical skills required to play an instrument. In the past, a specialist who excelled at a given instrument was a leader in the industry, which revolved around superstars. Technology, however, gave a leg up to generalists. A thousand fair saxophonists could not add up to one Branford Marsalis, but one Branford Marsalis could add brilliance to a thousand hip-hop or acid-jazz compositions.

The skills of Branford Marsalis are not achievable by everyone. But the skills of the generalists can, to a large extent, be facilitated by software. Those who can sample content accessed from the Internet now have facilities that were once only available to commercial studios. Further, policy changes such as the BBC opening up their audio and video files for anyone in the U.K. to remix, put a huge amount of source material into the hands of the masses.

The primary barriers to musical collaboration now are

1. Legal issues of copyright and how to make fair use of samples and remixes
2. A mass music industry that can't seem to do anything but cling to an old profit model where stars are made and sold, and all rights are reserved

5.6.2 Can there be a creative commons-based music industry?

Neil Layton, who founded a music label called Fading Ways Music to embrace shared music and collaborative culture, has an insiders perspective on the prospect for collaboration in the music business. According to Neil, a CC-based music industry implies a complete re-working of how most music biz people (both on the artistic as well as business side) think of music. Most mainstream and aspiring artists seek the kind of fame and fortune that mass media hype and marketing can bring. The nature of superstar economics, however, is that “the very few hyper-successful artists (in the commercial sense at least), tend to leave little on the table for their less fortunate peers. Non-commercialized artists may have more freedoms and even produce more rich artistic offering, but economically speaking it is un-sustainable.”

The first step to a CC-based music business, artists and labels—a new system of rights and royalties administration is needed. While independent artists are technically able to collect royalties under the current Performance Rights Organization system, the metrics that are used to divide the revenues are biased to favor the cartels and biggest artists (being based on commercial radio play and record sales). Under these rules the mega-stars tend to scoop up royalties that under a more accurate system would belong to the “long-tail” of indie artists. The technology exists for a more sophisticated payments system that remunerates not only the original artist but those who contribute and remix the original works.

A CC-based system could allow an equitable distribution of revenues in a transparent pathway of micro-payments from one work to another, facilitated by user playlists such as lastfm.com, YouTube, MySpace, or other Web 2.0 applications. Users or fans could even participate in the revenue stream in an environment where the line between artist and audience becomes increasingly blurred; for the new version of neilleyton.com I am working on a system where user content could be monetized through a system of paid downloads (whether subscription based or pay-per-download) that remunerate both the artist and the fan who contributed the content. Even the most forward-thinking artist likes to retain some comfortable level of control over their creation. In this aspect the CC revolution in music will not exactly mirror the open source software GNU-type evolution. Artists are not programmers, nor do programmers fully understand art. There is an artistic ego that is a valid necessity to the creation of good art.

5.6.3 Could the masses have written a better end for the Sopranos TV series?

The ending of the Sopranos series surprised many viewers in that it foiled viewers attempts to achieve a denouement (closure) to the story. Everyone was debating who was going to get whacked, and as it turned out, the only person to “get whacked” was the audience—the tension builds through the episode, and then the camera turns off. That is pretty much it.

One commentator felt that the author was deliberately leaving his options open for a sequel of a future movie plot. What would the audience have done—probably, as in most gangster features, seen to it that Tony Soprano died by the sword he lived by.

There is one well known example of harnessing the power of a wiki to write fiction—the experiment called “A Million Penguins” in which the publisher of that name set up an installation of mediawiki and invited the Internet to write a novel. One of the problems in that experiment was that the participants enjoyed too many degrees of freedom. The prose all turned into zany chaos.

In a TV serial however, the freedom is much better constrained—a legion of fans would have to be true to the established characters (and would probably police each other for that). If character was fixed, plot was the variable. Since dialogue is mostly a derivative of plot, that could have been left out of the collaborative effort. What remains is the stage directions.

Would music created by a group, in a self-organized fashion using modern networking tools, fill those needs? Or different needs? What lessons can we learn from existing self-organization examples engaged in globalized activities like software development?

How to Wiki an Episode of the Sopranos

1. Create a page called Episode 86—a name free of connotations.
2. On Episode 86 all that exists is a list of episode summaries, and a short paragraph with a meta description/plot summary. You allow parallel versions of the story to develop, and pick the best one. Each version should have its own homepage, example Episode 86—The Fat Lady Sings.
3. Each alternate version page contains a list of scenes (and alternate scenes), each with their own meta descriptions.
4. At the scene level you finally have a written description of what actually happens, with links to the preferred previous scene and the one which most ought to follow.
5. Lead author roles should be freely taken and the lead authors for each scene should include lots of meta notes to other authors which indicate what scope of participation would be helpful.

The key to all of this is to design a properly iterative process, where meta information comes first, becomes fixed, and then serves as a boundary/framework to all child pages/objects.

5.7 Belief in the Age of Mass Collaboration

Beliefs matter, whether one is religious or not. They underpin everything we do and say, and can facilitate or be a barrier to collaboration projects large and small. Most religions, ideologies and other belief systems haven’t been designed to be collaborative, in fact it is nearly the opposite—many

doctrines seek to invalidate or defeat other doctrines, and many wars and terrible violence has too often been the result.

Can we collaborate on our beliefs?

Will collaboration on beliefs help to build mutual understanding?

Do underlying beliefs tend to disrupt attempts at collaboration in workplaces and social institutions?

Kartik Ariyur points out how in the age of mass collaboration it is necessary to discuss the implications of what we believe. Unless you do that, belief systems will just remain the invisible elephant in the room, which everyone has to navigate around while wondering why the collaboration isn't working.

Problem: How do you discuss something when you don't even have a common vocabulary?

5.7.1 How do we discuss beliefs?

One reason for the inherent clash of ideas is the lack of common vocabulary—most of the words in play have different meanings in different belief systems so communication, let alone collaboration is difficult. Science tries to get around this language problem by using common objective definitions. What is time for example? Scientists say that “one second” (in any language) is the duration of 9,192,631,770 periods of radiation corresponding to the atomic vibrations of the caesium-133 atom. Religions and ideologies usually don't seek objective references; in fact the core of many ideologies is creating new words or new meanings for existing words. Like most aspects of culture, it generally doesn't, because true objectivity is hard to come by. Defining faith is not easy.

Defined or not, beliefs have consequences; even if they happen to be un-testable, as history has shown repeatedly in crusades, jihads, pogroms, purges, and institutionalized persecution of different kinds.

5.7.2 A way out of the problem

Kartik recommends a simple to say but hard to do solution to this problem: separate metaphysics from the morality

There are two aspects to any belief system

- **Morality:** *How* to behave (including how to think)
- **Metaphysics:** The *why* we must behave so

Morality, and moral principles, can be thought of as outward or exoteric aspects of belief. They are the actionables that follow from our belief in a higher being or subscription to a world view.

The metaphysics or personal philosophy that defines the “WHY” is the part of our belief system that is generally very difficult to talk about, compare, or discuss. These personal first principles can be called esoteric or inward beliefs. You can’t really criticise someone for these beliefs, it is just a matter of subjectivity.

If we make this kind of separation, collaboration becomes possible. The esoteric or non-debatable aspects of religion can be left for personal exploration while the outward aspects can be subject to public discussion. Exoteric aspects of religions can be very similar—there does seem to be common elements of morality, though the differing metaphysics can result in entirely different moral choices by individuals following different religions.

Chapter 6: Final Thoughts

The ancient curse: may you live in interesting times.

We live in interesting times.

Our technology now has the power to create us and destroy us.

Biosciences stand to redefine the very concept of life itself. The machines are manufacturing entire landscapes heretofore foreign to us. Computing has made distance and time obsolete. Flows of pixelated dollars have created a globalized marketplace.

In the midst of all this, are we still the same animal we always were? Technology can transform us physically, but socially, psychologically, behaviorally? In mass collaboration, the potential for doing things differently runs smack up against some very hard wired self-interested behavior patterns that are hard to shake. In politics, for example, are we still just as vulnerable to falling under the spell of some new demagogue who exploits our insecurities to enhance his political power? In business, will aggressive, self-aggrandizing CEOs demand and receive outrageous pay packages while using their clout to dismantle any collective intelligence that disagrees? Will wikis overtake blogs in popularity or will everyone stay on their pedestals so they can live safely and unchallenged within the walls of their opinions? Fads break like tidal waves and flood the markets, but then the waters recede and everything is the same again. Social change is not so obvious and many years will be required before the tendrils and ripples of reactions to reactions organize into some coherent pattern, enabling us to gain perspective.

But there is a sense that the world has become a very distant place. A paradox is at play. We have shrunk boundaries—we have Facebook friends in Tokyo—but our organizations and systems are becoming larger, more connected, evermore complex.

It's a very human thing to want some order in all of that. It's a very human thing to want to know there is a plan. Climate change. Homelessness. Genocide. Energy shortages. Terrorism. Pedophiles stalking kids on the Internet. Crime syndicates from faraway countries stealing our entire identity. "Somebody must have a plan," we say. But as we look around for a plan, as we look around for leaders, increasingly we're finding there is no great plan; there are no great leaders who have the answers. There are great problems and there are great opportunities. There are conflicts to be resolved and there is potential just waiting to be unleashed.

Amongst this, there is "Us." A "We" with all our collective insights, perspectives, dreams and ideas. We may find, much to our dismay, that "We" are the ones in charge after all.