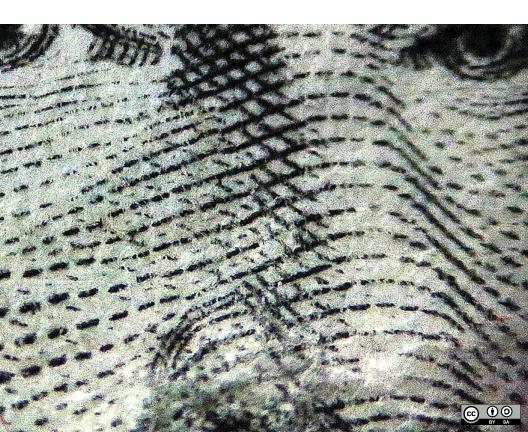
OPEN-MINDED CEOS

A collection of essays and interviews from opensource.com



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OPEN SOURCE CHANGES THE WORLE

And when the world changes, so do the ways we work together in it.

At opensource.com, we explore how embracing open source principles and practices — like transparency, meritocracy, community, participation, collaboration, rapid prototyping, and sharing — can lead not only to a powerful method of engineering software, but to a whole way of life. An open source way of life.

The essays and interviews collected here are the fruit of an ongoing conversation about living and working the open source way. Their authors are CEOs from some of today's most intriguing companies. We call these leaders 'open-minded' because of their intuitive sense that the open source way is the best way to do business. You'll see what we mean. These authors are tireless champions of open source values in their organizations and their communities.

Working the open source way isn't always easy, as any of our contributors will quickly note. Fostering an organizational culture that encourages employee autonomy, extensive collaboration, and rigorous meritocracy can disturb traditional management styles. Being transparent can open a company to new risks. A commitment to rapid prototyping will likely produce some embarrassing failures. And sharing forces everyone to rethink notions of ownership, property, and value.

But the leaders we feature here embrace these potential consequences, because they know that openness can produce positive results unlike anything we've ever seen. While some of their peers redouble their efforts at secrecy, hierarchy, and control. these open-minded CEOs have chosen a different tack

They're all working in different fields, but woven throughout their essays and interviews are some important — and difficult — unifying questions: How can we bring people together to do great things? What motivates them? How can we coordinate them when they unite? How does working the open source way allow us to anticipate the future and adapt to thrive in it? And what counts as success? Their answers are compelling.

The first part of this volume consists of essays that open-minded CEOs have penned for opensource.com, essays teeming with insights into what it means to organize people for achievement in the twenty-first century. In part II, we feature interviews with the heads of companies aiming to reinvent entire domains — education, for instance — the open source way.

Each piece is an example of how being open-minded can radically alter not only how we work, but also how we lead. Enjoy.

OPEN-MINDED CEOS

ARTICLES



OPEN SOURCE RENAISSANCE

Brian Gentile, Chairman and CEO of Jaspersoft (originally published March 2010)

It occurred to me recently that the open source movement is really nothing less than a renaissance. Perhaps that sounds grandiose, but stay with me.

If you think about it, for a few hundred years, some of the most significant advancements by mankind have come from, and are maintained in, proprietary (closed source) methodologies.

Take, for example, U.S. patent and copyright protection laws and policies. They reinforce proprietary, "closed source" rights and policies. As a result of this system, many substantial U.S. companies have formed around breakthrough ideas, but incentives are in place for those companies to quard and protect their intellectual property, even if others outside the company could extend or advance it more rapidly.

Now, to be clear, patent and copyright protection is necessary because it properly encourages the origination of ideas through the notion of ownership. But, too few people consider the upside of allowing

others to share in the use of their patents and copyrights, because they think such distribution will dilute their value — when, in fact, sharing can substantially enhance the value. Fundamentally, "open source" is about the sharing of ideas big and small and the modern renaissance represents newfound understanding that sharing creates new value.

In many areas of science, the sharing of ideas (even patents and copyrights) has long been commonplace. The world's best and brightest physicists, astronomers, geologists, and medical researchers share their discoveries every day. Without that sharing, the advancement of their ideas would be limited. to just what they themselves could conjure. By sharing their ideas through published papers, symposiums, and so on, they open up many possibilities for improvements and applications that the originator would have never considered. Of course, the Internet has provided an incredible communication platform for all those who wish to collaborate freely and avidly and is, arguably, the foundation for this renaissance.

That's why it's ironic that one of the laggard scientific disciplines to embrace open source is computer science. For the past 40 years, for example, incentives have been strong for a company to originate an idea for great software, immediately file a patent and/or register to copyright it, and then guard it religiously. No one would have thought that exposing the inner-workings of a complex and valuable software system so that others might both understand and extend it would be beneficial. Today, however, there are countless examples where openness pays off in many ways. So, why has computer science and software lagged in the open source renaissance?

That computer science is an open source laggard is ironic because the barriers to entry in the software industry are relatively low, compared to other sciences. One might think that low entry barriers would reduce the risk to and promote the sharing of ideas. But, instead, software developers (and companies) have spent most of the last 40 years erecting other barriers, based on intellectual capital and copyright ownership — which is perplexing because it so limits the advancement of the software product. But, such behavior does fit within the historical understanding of business building (i.e., protecting land, labor and capital).

Another relative laggard area — and an interesting comparison — is pharmaceuticals and drug discovery. When I talk with colleagues about this barrier-irony phenomenon, this is the most common other science cited (i.e., another science discipline that has preferred not to share). But, in drug discovery the incentives not to share are substantial because the need to recover the enormous research costs through the ownership of blockbuster drugs is extremely high. In fact, because the barriers to enter the pharmaceuticals industry are quite high, one might think that would promote openness and the sharing of

ideas, given that few others would genuinely be able to exploit them. But, once again, the drive to create a business using historically consistent methods has limited the pharmaceuticals industry to closed practices.

So, returning to computer science and software, maybe the reasons for not sharing are based on the complexity of collaboration? That is, it's hard to figure out someone else's software code, unless it's been written with sharing fundamentally in mind. Or maybe there's a sense that software is art, and I want to protect my creative work — more like poetry than DNA mapping.

Either way, the renaissance is coming for the software industry. Software will advance and solve new problems more quickly through openness and sharing. In this sense, computer science has much to learn from the other areas of science where open collaboration has been so successful for so long.

Fortunately, the world of software is agile and adept. According to research by Amit Deshpande and Dirk Riehle at SAP Research Labs, during the past five years the number of open source software projects and the number of lines of open source software code have increased exponentially. The principles that this new breed of open source software have forged are already leaving an indelible mark on the industry. Soon, its proponents believe, all software companies will embrace these fundamental open source principles: collaboration, transparency and participation. The course of this renaissance will be our guide.



TRANSPARENCY, PARTICIPATION, GUISHING PRINCIPLES

Brian Gentile, Chairman and CEO of Jaspersoft (originally published September 2010)

I believe that, over time, Jaspersoft's distinction will be less about it being an open source software company and more about its abilities as a great business intelligence software company¹. I expect declining distinction for our open source-ness will partly occur because the success of open source software and the benefit it brings the community and customers become better accepted and understood each year (and, therefore, less unique). I also believe that the most valuable aspect of the open source model will long endure, way after the sheen fades from the download, forum post, or roadmap voting. That is, the principles of open source software are its most distinquishing characteristic and will eventually

reach not just all technology companies, but all other industries as well.

As I've described in many settings, the principles of open source software are transparency, participation and collaboration. These principles stand, in many ways, in stark contrast to the aged, proprietary ways of doing business. I'll briefly define and explain each of these three principles.

Transparency

Doing the right thing when no one is watching may be the best definition of integrity. You combine that with frankness and honesty, and you have the first open source principle, transparency. With open source software, anyone can watch. Jaspersoft

software engineers and our community contributors know that every line of code they write will be made available for inspection and comment by a very large community. If they have any discomfort with transparency, they would choose a different vocation.

This transparency transcends software engineering, though, to all aspects of the business. In every way possible, an open source company should be transparent; that is, frank, honest and operating with integrity. If a mistake is made — admit it, describe how you'll make it right and move on. If an important milestone is reached that deserves celebration — announce it, enjoy the moment of pride and move on. This is the obligation an open source company maintains with its customers and community. And, those using the open source projects/products must be equally transparent through their actions and deeds. For example, the community must adhere to the terms of the particular open source license, using the software only as those terms allow, reflecting their transparency. In short, transparency is about doing what you know is right. In a community, the effects of transparency are amplified.

Participation

Actively giving back in a very tangible way is the heart of participation. Making the open source projects, of which each community member is part, more successful and more capable should be the common goal. Giving back can mean many things, including and especially either committing time through code contributions (for those community members with the skill and expertise) or purchasing/licensing the software if the project is in any way commercial open source. Code contributions can include not just feature advancements, but language translations, bug fixes, and quality assurance testing assistance, among others.

Open source community distinction emerges because its members participate by using either their time (i.e., skill) or their money. Either is valuable and helps to make the open source project thrive. The only sin in open source is not participating. In other words, if a community member is using open source software and deriving real benefit from its existence, then participating by providing time or money should be seen as basic and reasonable reciprocity.

Collaboration

Collaboration is about collective engagement for the common good and is the fastest route to open source project success. If an open source project is a neighborhood, then collaboration is the barn raising. Distinguishing this from "participation," collaboration is about helping others in the community because doing so advances the project and its usefulness for everyone.

My favorite example of collaboration is knowledge sharing through forums, blogs, and idea exchanges (in some circles, called ideagoras). On JasperForge, Jaspersoft's open source community web site, there are more than 160,000 registered members who have collectively offered nearly 80,000 forum entries across all the listed top-level projects. The variety of questions and issues being addressed by and for community members within the forums is staggering. And, the vibrancy that emerges through this exchange of skill is core to large-scale community success.

While forum activity remains brisk, I'm equally proud of our quided use of an idea exchange within JasperForge. Each top-level project includes a roadmap where community members can comment and vote on planned features. This not only allows many voices to be heard, but provides a valuable

calibration for Jaspersoft and its community, ultimately yielding the most important product features and advancements in approximately the best priority order.

There are many more examples of collaboration in action, across JasperForge² and other leading open source sites, but these are some of my favorites.

I talk about these three principles of open source regularly, and I'm fond of concluding that the real benefit of collaboration accrues to those who participate transparently. That's just my clever way of mentioning all three of the open source principles in one actionable sentence



HOW DOES OPEN SOURCE AFFECT COMPANY CULTURE?

Mårten Mickos, CEO of Eucalyptus Systems (originally published February 2011)

An open source company is naturally a company that produces open source code for others to consume. But how does the notion of producing software code in the open affect company culture?

I believe that an organization cannot produce open source code if it is not generally open itself. By this I mean having culture of transparency and of openly sharing information and ideas. The same basic environment that is often found in open source development — a sense of open community, where everyone is welcome to share their opinions and ideas — is often present in open source companies as well.

But a company is different from an open source community in a key way: In every commercial entity, there is information that cannot or should not be shared with everyone. How does an organization hold a balance between being culturally open and maintaining the level of professional discretion required by its customers, its board of directors and others? How do employees know when to act open and when to keep closed?

During my eight-year tenure as CEO of MySQL, we believed that openness, both in our product and our company culture, would lead to greatness. As a result, there was a daily vibration around the topics of open and closed. For example, it was vital to keep information we received from customers confidential, but it was also important to make every new piece of the server code open. Knowing what should remain undisclosed and what could be openly shared was a skill that we wanted every employee to master. This kind of deliberation is less of a factor in a traditional corporate environment, in which the default environment is generally closed. At MySQL, each employee had to be empowered and enlightened to know when to be open and when not to.

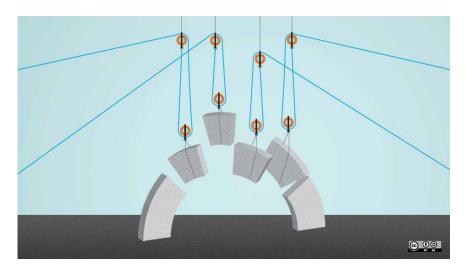
Within this balancing act of open and closed, we followed a principle of being open as much as we could. That's a good and beautiful principle, but knowing exactly how to apply it requires fine-tuned judgment. As noted, we kept customer information and minutes from board meetings confidential. We did not share personal information such as salaries and performance evaluations. But we really tried to make everything else open: bug database, work lists, design documents, and so on. We also tried to keep business information open. We were open about our business model, our partners, and our downloads. And we agreed that in our public communication, we should disclose as much information as possible.

Internally we tried to be open, too. We informed everyone of broad resolutions. We discussed difficult strategic choices on company-wide conference calls and in broad management meetings. We encouraged everyone to have an opinion of everything. This radical openness did not come free of charge, however. MySQL AB was known as a company whose staff could debate topics endlessly. Some of our employees and managers were frustrated with the long decision-making cycles. Sometimes openness became the priority rather than a means to an end.

But in retrospect, it is difficult to regret the way we operated. Although the principle of openness may have at times taken a toll on our productivity, it also helped foster employees who were brilliant spokespersons for the company and brilliant decision makers on their own, all the while being amazingly

passionate about their jobs and the mission of MySQL.

Today, three years after MySQL was acquired by Sun, I can still easily detect the MySQL spirit in my past colleagues when I meet them here and there. There is an assumption that information will be shared. There is a conviction that dehate is useful. What we all know is that inclusiveness and openness of open source communities, when injected into a company culture, can create something special.



AN ARCHITECT OF PARTICIPATIO

Mårten Mickos, CEO of Eucalyptus Systems (originally published June 2012)

What happens when half of the world's population lives in cities? When over three billion people are online? When there are more than 15 billion connected devices?

Old organizational models hit end-of-life. People behave differently. Organizations behave differently. What worked in the old world doesn't work in the new

Through the ages, people have collaborated around common goals. Joint creation and ioint production are not new ideas. It could be argued that the old religious scriptures were crowd-sourced. Most other activity back then was strictly controlled by a ruling leader or harsh environmental conditions. But when people engaged in new and intriguing topics of the time, they worked together. They collaborated.

What is changing now is that participatory models are becoming the rule, not the

exception. The world used to be about command and control. Someone told you what to do. There still is a lot of that. But collaborative innovation is taking over. We are coming to a stage in our civilization where regular functions are masterfully automated and industrialized, and our focus as human beings can and will increasingly be on innovation. In the area of innovation, the most powerful creation happens in teams, groups, and crowds — across organizational boundaries. When we architect for such participation, we can multiply the power of innovation.

Linus Torvalds stumbled over this mechanism over 20 years ago. In an act that was part abandonment and part invitation, he somewhat unknowingly threw out an intriguing challenge to software developers all over the world. Work with me to build a free

operating system. And people did — willingly, spontaneously, and brilliantly.

Soon, a number of free and open source software projects were defining the architecture of participation — a model for how to engage people with different ambitions, different mandates, different employers (or no employer at all), and different communication habits in joint projects that unpredictably but inevitably produce superior results.

That's the essence of the architecture of participation. You construct rules of engagement that allow disagreeing people to let their work products agree. This is a system where the designer invites input from contributors. The end result is an ecosystem that evolves faster than any individual initiative, resulting in a work product with fewer deficiencies.

The architecture of participation is more than open, and more than crowd-sourcing. Open, strictly speaking, means that you share your production with others. It doesn't necessarily mean participation. Crowd-sourcing means many people contribute to a production. It doesn't necessarily mean that they would exchange value with each other. It's not enough to be open and it's not enough to crowd-source. We must build an architecture of participation where different participants with different agendas can exchange ideas and models, and everyone has access to the end results. It's not easy to do that, but it also is not impossible.

The beauty of a well-functioning architecture of participation is that there is no significant distinction or conflict between the public good and the private good. It's just good. It's good for each participant, and it is good for all. It does not matter whether there are free riders or freeloaders in the system, because the moment they take any action whatsoever, they become at least marginally useful to the entire system.

Millions of freeloaders providing a marginal benefit amounts to much more than a small number of contributors each providing a big benefit. This is why the size of the ecosystem matters. With three billion people on the Internet, freeloaders are more abundant and more useful than when we had just three million people on the Internet (which was approximately the time when the Linux project started).

This is why the architecture of participation is now overtaking systems of command and control. The volume of participants is so large that any attempt to be fully in control inevitably leads to a group too small to have meaning. The number of people you can control are vastly outnumbered by the people you can only hope to influence, but not control

Let us also be clear that the architecture of participation is not anarchy. It is also not a democracy. Every architecture of participation has an architect. There is a steward of the project. The steward can be a single individual (like Linus Torvalds), a team (think about the creators of the Apache web server) or a company (such as MySQL AB). The steward of the project sets the rules of engagement.

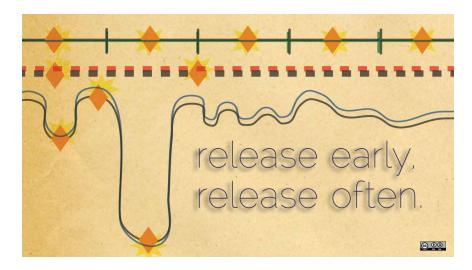
If the rules are too strict or egregious, people will not participate. If there are no rules, people will not know how to participate. In the ideal architecture of participation, there is a steward of the project that sets priorities and design goals and then simply ensures that the field is open for participation by anyone and everyone. To scale collaboration, it makes sense to create useful interfaces — APIs that allow individual initiatives to evolve at their own pace while interacting with each other through the agreed interface.

Architectures of participation exist all over the technology sector today. It's not any longer just about open source. Wikipedia

brings together those who can express facts and concepts in writing. Facebook brings together those who can express their daily lives. oDesk and the Mechanical Turk bring together those who have work capacity to provide to others. Kiva.org brings together those who have a penny to spare for someone who is working hard. Twitter brings together those who can express useful information very briefly. The Human Genome Project brings together insight about DNA. The Khan Academy brings together the best in educational practices. The Linux Foundation continues to bring together those who can express computer behavior in the form of kernel code.

We are only in the early stages of the architecture of participation. Cloud computing is a participatory endeavor. The mobile application space is exploding with participation. Large traditional corporations are launching social initiatives and participatory fora. National governments are opening up for citizen participation. The list steadily grows longer.

The ideal architecture of participation combines the best of ownership of design with the best of collaboration by the masses. If you have no architect, you have no participation. But if you have no participation, it matters little what the architect does. When the architect (whether it's a person or a team) is a master of the trade and also a welcoming recipient of contributions and participation, the results can be amazing.



OPEN SOURCE. HARDWARE: FAST AND MATTEABLE

Nate Seidle, CEO of SparkFun (originally published May 2012)

SparkFun is not like BMW. We will never be the company to produce the luxury market version of breakout boards and development tools. I believe the only way SparkFun will survive this quickly changing world is to be malleable. We have to be ready to change.

SparkFun's audience is often a first-time user and we want them to have the hest experience with the documentation and resources like tutorials, pictures, example code, and anything else we can provide to make them successful. By constantly revising our products, we often find ways to make it more likely for our users to succeed. The firmware will get better, we will figure out better power protection, and we'll make the end product easier to use. This causes lots of stress on our production line (there's

lots of bribes from engineering when we forget to break out the right test points), but over the past 9 years of building stuff, we've figured out ways to change quickly. Thanks to the huge efforts of a team of people¹ we can change any part of a design (PCB layout, schematic, BOM, firmware, test procedure, test jig, kit instructions, product description, product images, you name it) in days, not months.



opensource.com

Phillip Torrone recently posted a great article on problems and counterfeits² in the Open Source Hardware (OSHW) world. All sorts of great discussions ensued! Jan Malasek³ from Pololu made some great points about the appropriate time and place for OSHW and Paul Stoffregen⁴ raised some valid concerns that OSHW may encourage lower quality products. I'm here to state two things about OSHW as it works for SparkFun.



1. OSHW makes us a better company.

Releasing the design files⁵ for a product means you have enabled all your customers and a few competitors as well.

We sold the original Fio⁶ for about 12 weeks before Seeed Studio⁷ sold a better version.

Fric Pan runs Seeed Studio and does a fine job of it. They did everything right (kept the license intact, gave attribution where required) and even improved the design a bit (they used easier to find parts).



Now imagine what it was like in the Spark-Fun offices the first time we saw our product (our baby) built by someone else? It was not easy. But guess what came of it? We now know we need to innovate, and do so constantly. If we can't be the best at something, we'd better get the heck out of the way. Intellectual property allows for some protection, albeit at a legal expense. On top of that, IP holders can be tempted to sit on their laurels and in this day and age, that can be the kiss of death. We use open source hardware as a way to stay sharp.

2. OSHW makes for better products.

We believe it is better to iterate on a design and be and transparent and forthcoming as possible. You will find some SparkFun products with silkscreen errors8 and even green wires9. We have even shipped kits without the PCB (!!!). Yep, we screwed that one up badly but we contacted the customers as soon as we found out and sent out the missing PCBs. All lessons cannot be learned in a vacuum. At SparkFun, we find it's better to give our customers the most options possible, listen, then incorporate their feedback into new product revisions, which is very much in line with the spirit of open source.

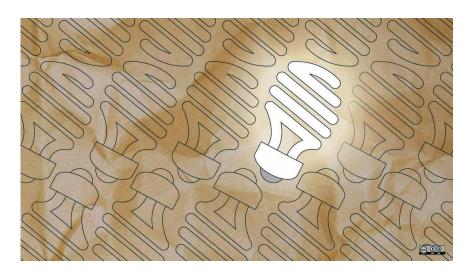
Some could argue that shipping an unfinished product is not the correct way to do business. I have had to train myself and the people around me that a project is never done, there are always ways to make it better. This is the basis of engineering. We believe we should get the product to do one thing well and then set it free and allow others to hack on it. What we thought was an important feature may turn out to be needless.

It may not appeal to everything, but is this fast release cycle a good thing or bad thing for Open Source Hardware? I believe this is the core of why OSHW is fantastic. We have learned from our problems and we

share them¹⁰ so that others do not make our same mistakes. In a very clear way, we educate and enable our customers and our competition equally. Similarly, we will stand on the shoulders of folks who have had great ideas (Leah Buechley¹¹, Brian Schmalz¹², Bill Premerlani¹³, and countless others) and made powerful tools (Arduino¹⁴, Saleae¹⁵, mbed¹⁶, the list goes on). What will separate companies from one another in the future is not their designs, it will be their service, their quality, their price, and their ability to produce meaningful products. This is the nature of the game we play and it is my job to make SparkFun the best at responding to incremental change that allows for better end products and happier users.

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BEST IDEA WINS

Jim Whitehurst, CEO of Red Hat (originally published May 2012)

There's a Southern expression that goes, "Says easy, does hard." In this case, it's easy to say that your company is focused on collaboration and ideas. But many executives conflate the terms "collaboration" and "consensus." Seeking consensus and creating a democracy of ideas is not what we at Red Hat would call collaboration. In fact, it's a misstep. Rather, managers at Red Hat make it a practice to seek out ideas from those who've shown that they typically have the best ideas — those who have risen to the top of our meritocracy.

To get to the top, though, it's not enough to merely have an idea; you'll also need to defend it against all comers. That means there may be disagreements. Voices will be raised. Building your reputation, therefore, can take time, patience, and a thick skin.

This environment can seem harsh at first But keep this in mind: Open source software developers say, "In the end, nothing matters but the code. The code wins." And the kernel of that thought has helped shape collaboration at Red Hat, even when we're addressing business questions unrelated to software per se. Working this way means that nothing matters but the idea. The idea wins.

Just as it's neither possible nor advisable to listen to every person's input on every issue, we don't want to get to a place where we hold hands and agree on everything. At Red Hat, we want to foster effective collaboration. and create an environment focused on ideas. Over time, the people who consistently have good ideas will be listened to.

Of course, no one's immune in the Red Hat meritocracy. Being the CEO doesn't protect me from being called out sometimes. I, too, have to be ready to defend my ideas. And you know what? I encourage it. I celebrate it. That's how you can ensure the best idea wins in the end

OPEN-MINDED CEOS

INTERVIEWS



INTERVIEW WITH GLEN MORTARTY CEO OF NIXTY

(Originally published September 2010)

Why is open education important?

Open education is hugely important for a variety of reasons. There are several writers who have covered this space much better than I can; a couple of key people in this space include David Wiley¹ and George Siemens². Rather than attempt to cover the full range of this question, I'll highlight a few reasons why we think it is important and especially relevant to what we are doing with NIXTY

Reason #1: Education is too expensive

In the United States, house prices have dropped 30-40%, gas has decreased from \$4.00 to \$2.44, and for those with children (yes, I have 3), a gallon of milk has dropped from \$4.00 to \$3.19. What has happened

to education? It has gone up! It goes up no matter what. When inflation is up, education goes up even more. When we are in a deflationary environment, as we are now, education still goes up. It is simply not sustainable. I won't bore you with details about the "education bubble." The interested reader can check out Anya Kamenetz's DIY U3 for more details. The primary point here is just that education is too expensive and open education is a brilliant way of dramatically decreasing educational costs.

Reason #2: The US approach to higher education doesn't scale

David Wiley astutely observed several years ago that educators have limited bandwidth. They simply do not scale. We need to find

ways to harness non-educators and technology to meet the needs of people across America and around the globe. Our current system of closed education cannot meet the goals of the Obama administration, nor can it meet the demands of a growing globalized economy. Open education can help solve these problems because it scales.

Reason #3: Copyrighted materials are limited and decrease educational progress

Educational materials that are protected, top-down, and static are limited and hinder educational progress. Open educational materials are the opposite: they can be remixed, altered, and tailored to meet the needs of a variety of people.

How has NIXTY involved the existing open source community and how have they rallied around NIXTY?

People in general love open education, and they seem guite enthusiastic about NIXTY. We have received a ton of press (this invited article included!), and we are very thankful. We are still in the early stages, but people see the vision, and it is something that most people want to get behind.

We have consulted with many open education experts. Many of them see the value in NIXTY and have helped us spread the word to others. We are very fortunate to have several experts on our Open Education Advisory Board.

We are excited about playing our small role in the open education movement. I'm not sure there could be a better group of people to work with. John Seely Brown⁴, in his new book, The Power of Pull⁵, talks about working with people on the edge. His main point is that people on the edge transform the center. From our perspective, the open education movement, now at the edge, is the primary driver behind transforming

education. We believe the open education movement will be at the center of education in 5 years. We are delighted to be part of this group.

There have been comments around your content management challenges — how will you control content quality?

We have several controls in place to help control content quality. First, you can only post or comment if you are logged in. Second, all contributions (posts, comments, and soon content) can be upvoted or downvoted6. These votes are tracked in each person's reputation points. Additionally, all comments and posts are cataloged and can be searched on a person's eportfolio⁷. When a person visits another's eportfolio they see their display/professional elements (CV, resume, recommendations, work examples, etc.) and their process elements (comments and posts published across the platform). Third, each instructor has full delete capability. They can delete any part of their course. Fourth, and this will be released in the near future, items published in WikiCourses will have the option of being marked for deletion. Once a certain threshold is hit, the content will be automatically deleted.

What are some of the principles from the open source way that will help NIXTY's growth?

There are a number of principles from the open source way that will help NIXTY's growth. The first is a sense of community. We actively work with students, educators, instructional designers, and open education experts to inform what we do. They are part of our community, and their feedback results in real change on the site. That said, we need to take things further. We have open forums on our site but need to find more ways of making direct contributions executable. We also plan on releasing an API. The second is

20 Open-Minded CEOs

a commitment to releasing early and often. We are a fairly small group of people and have limited resources; it helps to look at this as a strength. It ties us closer to the community and causes us to engage and listen in deeper ways. Third, NIXTY is tied to the idea of universalism. We are actively working to build a global default educational system that scales. We care deeply about providing tools, and the ability to remix content, so that it can be tailored to different contexts and geographic regions. Finally, the last main principle would be user innovation. NIXTY is a platform that others can build on to help solve the educational problems we face.

^{1.} http://opencontent.org/blog/

www.elearnspace.org/blog/

^{3.} http://diyubook.com

^{4.} www.johnseelybrown.com

^{5.} www.edgeperspectives.com/pop.html

^{6.} http://nixty.com/login

^{7.} http://nixty.com/eportfolio/glen



INTERVIEW WITH A ARON FULKERSON, CEO OF MINDTOUCH

(Originally published May 2010)

Can you tell me a little bit about the culture at MindTouch? How would you describe the culture at the company that you built? How does it reflect the open source way?

First and foremost, everybody at MindTouch is really passionate about open source and open standards. Furthermore. Steve and I built this company around three cultural tentpoles: honesty, excellence, and pride. We want to work with people who love what they do and are always trying to make themselves better at what they are doing.

The way that we've adopted and systematized these three doctrines (or pillars) ties in very directly to the open source way. For example, we don't fire anybody on the spot if you've been with MindTouch for more than 6 months. Have you ever worked at a company

where people are scared because they don't know if they will be fired from day to day? Well, that never happens at MindTouch. Instead, we put people of concern on a correction plan for 60 days.

Regarding excellence, we want our people to excel. That's why we give all of our co-workers \$600 per quarter to spend on professional development, which could include classes or any other development tool of the employee's choosing.

And finally, pride. We've worked hard to foster a culture where everyone at MindTouch feels comfortable bringing attention to the co-worker who might be in need of some improvement. "You know that work you just did? Well, it's not the best work I've seen."

And that goes all the way to the executive team.

I'll give you an example. One of our marketing admins had a concern about how one of our outside vendors was being treated. She felt comfortable enough to go to the head of the department and say, "Look, I don't like how you're treating this outside vendor. We've been delaying, delaying, delaying in giving the vendor an answer and haven't yet paid them."

There is absolutely a cultural meritocracy at MindTouch. The guy who runs our support team started out as an office manager, and very guickly moved into running the entire support team. He just excelled at it.

And almost every single one of our developers, every single person in engineering, has a side project that they are working on — whether it's a side company, or an open source project.

Leaving Microsoft to start an open source company must have been an interesting transition. Can you compare and contrast the culture at the company you've built with that of Microsoft?

For me, my experience at Microsoft wasn't that different from working at an open source company because Steve and I were in a small research team that reported directly to Craig Mundie¹, who had been the CTO. On my team was Chuck Thacker², who just won the Turing Award a few weeks ago, and guys like Henrik Frystyk Nielsen³ who also worked on HTTP 1.1 and co-wrote the SOAP 1.1 & 1.2 specifications. Somehow Steve and I lucked into this small group.

My time there was very different from what most people's experience might have been at Microsoft. It was more academic. I had the opportunity to not only work with a Turing Award winner, but I met other award

winners like Jim Gray⁴ and Robin Milner⁵ in my time working there. It was a very different experience from what one might expect within Microsoft.

Speaking of Turing Award winners, I studied under another while a student at UNC-Chapel Hill. Of course, that man is Fred Brooks⁶, author of the Mythical Man Month and founder of the computer science department at UNC. He's a god.

In your experience working at proprietary companies, do you feel that aspects of a company's culture can stifle innovation? And, conversely, can aspects of an open source company's culture accelerate the rate of innovation?

Some people, when they first come into MindTouch, are surprised by how much freedom they have, both in rising to the occasion and taking on responsibility that might be outside of their specific domain or sphere of influence, but also in simple things like engaging the community.

I had a new employee once ask me "Can I write a blog post on this?" I said, "Well, yeah, why are you asking me that? It's like asking me if you can go to the bathroom." (laughs)

Who can tweet on the MindTouch account? Whoever wants to! (laughs)

It's that culture of openness that is so typical of open source companies and you don't see in most software companies.

As MindTouch grew and we started bringing on some people who might have had more of a background in proprietary companies and were unaccustomed to working with open source, it even became apparent to me that for them it felt odd. But as we all grew to be more comfortable being open and honest and authentic, it created a humanness for the company that resonates with users and prospective customers. And it drives more

users and prospective customers. So that's one key thing that I've seen.

Another thing that I have come to realize is that companies that have tried to own the protocols and own the standards generally don't succeed. Look at what happened during the SOA era — you know, SOAP and all these very heavy web services — the reason why those web services were created the way that they were was because large companies like IBM and Microsoft and all those people who were involved in the standards creation wanted to sell very expensive heavy tools on top of the services infrastructures. And it was frankly a huge failure that undoubtedly set us back 5, 7, maybe 10 years because they wouldn't embrace these open standards that already we've proven could scale and provide a very extensible platform.

Specifically I'm talking of course about HTTP and XML. You look at how these very large companies put all of their weight and dollars and marketing budgets and essentially everything they had into creating this new world of SOA, and all these promises were made... it was all about them owning the protocol, owning the platform, providing very heavy tools and ultimately it was proven to be a huge failure.

So instead we opt to live in a completely different world where it's open standards and everybody benefits — including companies like MindTouch who adhere to open standards. Everything at MindTouch is like-orienting... meaning it's all HTTP. Everything we do revolves around open standards. And again, it's a huge benefit.

The third thing I'll say is that MindTouch would have gone out of business a long time ago if we hadn't been able to build up an install base. In the beginning we bootstrapped this company — we certainly didn't have all the resources to dump into sales and marketing and other such things to go out and fight against Oracle and Microsoft.

We've been successful by making our products freely available, building up a large, very fanatic install base of users, and then offering them commercial solutions built on top of that.

Opensource.com is about applying open source principles beyond technology. How do you see open source playing a role in areas such as business, education, law or government? Can you see any opportunities in today's world for the open source way being applied to solve some of our biggest problems?

Absolutely. We're seeing it in education, obviously, with MIT and several other very prominent universities making their courseware, videos, and tutorials available online.

I have also witnessed firsthand how this is changing the legal landscape. It's funny and most people don't realize this — but the small start-up open source companies that came up in the 2004-2006 cohort, of which MindTouch is one of the younger ones, all shared the development of things like legal contracts and partner agreements to save on legal costs. My contracts might be a little different now, but I remember for the first few years. MindTouch's contract templates tracked back even to IBoss

What I'd like to see — and I've pushed hard on this but have never been able to see any movement yet from my efforts — is an emergence of open source as applied to manufacturing. We have seen some projects around electric cars, and people like the BugLabs guys and others working on personal devices and things like that. But what I foresee happening is that as more and more of our manufactured products become commodities, true innovation will come from sharing with one another just how these

things are manufactured. I think everyone will benefit as a result.

MindTouch recently released a list of "The 20 Most Powerful Voices in Open **Source"**⁷. According to the post, the list comprises "the most vocal" open source leaders, i.e. the ones holding the "biggest megaphones." In a community-based format, do you feel that being the most vocal is equivalent to being the most powerful?

No, I don't think that's necessarily the case. MindTouch conducted what was (and probably still is) the most comprehensive survey of best practices in sales and marketing in the enterprise open source space, back in September 20098. We had 25 open source companies participate in the study, including SugarCRM, Jaspersoft, Alfresco, and others.

One of the questions we asked was, "Who do you think is the most influential person in open source?" We had 50 executives respond to the question and released the results of that question in a post to the MindTouch blog in October 20099. Larry Augustin¹⁰, CEO of SugarCRM, received the most mentions. Matt Asay¹¹, Mårten Mickos¹², Jim Whitehurst¹³, and Dries Buytaert¹⁴ rounded out the top 5.

The "Most Powerful Voices" study was a different way of looking at this metric. We developed an MPV measure that considered

an individual's Twitter and Google "buzz" to determine one's impact and broadcast power. I was a bit skeptical at first but agreed to conduct the analysis, but told my team I wanted to see the list first before posting it.

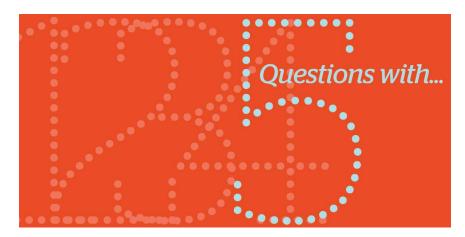
A bit hesitant, I looked down the list and thought "yeah, I can see it breaking out this way." What I thought was especially cool about it was that there were a lot of people who I didn't even know on the list. Channy Yun¹⁵ from Korea, others from abroad... names and faces that aren't instantly recognizable. And I thought that was pretty awesome.

We expected the "I don't know any of these people, so it can't be right" reactions. But that's OK. They might be huge in Korea, or huge in Italy, or huge in the communities in which they participate.

So overall, no, I don't necessarily believe that having the biggest microphone makes you the most influential person. In fact, with regards to open source, I think volume can actually be ineffective. Megaphones aren't always the best way to reach engineers.

- http://en.wikipedia.org/wiki/Craig_Mundie
- 2. http://en.wikipedia.org/wiki/Chuck_Thacker
- 3. http://en.wikipedia.org/wiki/Henrik_Frystyk_
- 4. http://en.wikipedia.org/wiki/Jim_Gray_ %28computer_scientist%29
- 5. http://en.wikipedia.org/wiki/Robin_Milner
- 6. www.cs.unc.edu/cms/our-people
- 7. www.mindtouch.com/blog/2010/03/17/mpv/
- 8. www.mindtouch.com/blog/2009/09/01/whythis-open-source-success-formula-will-increaseyour-revenue/

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- 10. www.linkedin.com/in/larryaugustin
- 11. www.linkedin.com/in/miasav
- 12. www.linkedin.com/pub/marten-mickos/0/1b/7b5
- 13. www.linkedin.com/pub/jim-whitehurst/9/ 33a/625
- 14. www.linkedin.com/in/buytaert



INTERVIEW WIT

(Originally published October 2010)

What one big opportunity, outside of technology, has the best chance of being solved the open source way (i.e., through collaboration, transparency, sharing, meritocracy, rapid prototyping, community, etc.)?

I think we are at the beginning of a huge shift in our economy where we are trading in the mindless consumption of the 20th century for a more sustainable, collaborative model where we value community and access to the things we need over ownership. In recent years, people have become increasingly frugal and aware of the impacts of their consumer habits. Our strained pocketbooks and our values as a society no longer support the conspicuous consumption that has driven our economy for decades. Simultaneously, we have become increasingly comfortable sharing and connecting with others online. This has created a fantastic opportunity for new technologies to

emerge to help facilitate sharing of resources. And emerge they have! Countless services such as CouchSurfing, Bright Neighbor, Chegg, Relay Rides, and NeighborGoods have launched recently to help people share rooms, cars, textbooks, and household goods.

Two books have recently debuted analyzing this trend, What's Mine is Yours: The Rise of Collaborative Consumption¹, and The Mesh. A recent study published by Latitude Research and Shareable Magazine shows that our increasing use of online sharing tools is a solid predictor of increased offline sharing: "75% of participants predicted that their offline sharing will increase in the next 5 years."

I know it seems overly optimistic, but I believe the more opportunities we create for people to share and connect instead of spend and

purchase, the happier we will be. Now that's a business model built the open source way.

What are some of the unexpected things you've discovered from NeighborGoods2 experiences that have strengthened the communities where people live?

The environmental and financial benefits of sharing physical goods instead of buying new are obvious. And honestly, being more sustainable and saving a few bucks is reason enough to borrow a lawnmower instead of buying a new one. But it's not the reason people are sharing on NeighborGoods. By far and away what we hear from our members is that the primary benefit they receive from sharing is meeting their neighbors. In my own neighborhood, our sharing group has done wonders to strengthen our community. With a vacuum cleaner here and a wheelbarrow there, we've created a really solid support group in our neighborhood. We help each other move furniture, watch each other's pets, and check the mail when someone is traveling. NeighborGoods helped create a small town feeling in the middle of Los Angeles.

Thinking about your role in Al Gore's An Inconvenient Truth, what is the most difficult thing about building communities online, and what advice would you share with others?

The biggest mistake is thinking you can "build a community" to start with. Especially when you're dealing with an issue like global warming, it's silly to think you can spark a movement from scratch. The key is to figure out which communities are already aligned with your sensibility and give them a way to take up your cause for you as a part of their own identity. So you're not asking people, "Hey, come be a part of our new community." Instead you're saying, "Hey, look! We're a

part of your community. We're just like you. We created this space to help you connect with your community."

What attributes from the open source way stand out as pillars for community building, online and in real life?

Honestly, all the pillars of what you dub the open source way (i.e., collaboration, transparency, sharing, meritocracy, rapid prototyping, community) play a role in community building. There is a certain sense of humility underlining all those terms that is vital to fostering any community. The word "community" gets tossed around a lot these days, but it's not the same thing as an audience or customer base. Community requires the participation of its members and that requires humility on the part of the organizers.

How do you apply the open source way in your everyday life?

A few years ago, I experimented with what I called The Open Source Dating Project. The idea was that I would go on dates and post all the details so people could vote for who got a second date. It was more of a thought project than anything real since I didn't guite have the nerve to do it. But yeah, I would say that I incorporate the open source way in a lot of what I do in everyday life. I decided early on with all this social media stuff that I wouldn't have much of a filter. I try to be as transparent and authentic as possible with how I present myself on the web. And that openness has provided countless opportunities for me to make a name for myself and to meet amazing and interesting people. I also really enjoy the process of collaboration. I consider myself lucky every day to be surrounded by smart and talented people who are willing to share their knowledge and ideas with me. I try to always do the same.

 www.opensource.com/life/10/9/bookreview-whats-mine-yours-rise-collaborativeconsumption 2. www.neighborgoods.net

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The open source renaissance

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