LET GO - AND BECOME PART OF A LARGER COMMUNITY

Back in 2004, the American publisher and conference organizer Tim O'Reilly coined the word Web 2.0 to describe some interesting features he saw in many of the most popular new Web sites. Rather than each site publishing its own, complete and self-contained content, like an online newspaper or encyclopedia, Web 2.0-sites are platforms for information, interviews, discussion and collaboration, aggregated from a wide range of online sources, including the users themselves.
Wikipedia, YouTube, Facebook and Google Earth are some of the prominent examples of these sites. Google Earths own geographical data can be mixed with data sets from a real estate agent, so the houses that are for sale, show up in a layer on top of the map. Videos from YouTube or Vimeo can be embedded in a web page or a blog post, so the content can be activated and viewed directly from there. This allows data from different Web services to reinforce each other because they can be directly exchanged, combined and re-purposed.

Among the characteristics that Tim O'Reilly pointed out about Web 2.0, was that these systems get better, the more people who use them and the more data that's part of in the interaction.
Web 2.0-solutions are characterized by having a structure that allows for new and greater value to build up and emerge out of the many disparate contributions. As O'reilly puts it, they can "harness the collective intelligence".

Amazon is an example of this type of opening up for contributions: At Amazon.com, other vendors offer their own goods fully visible and in direct competition with Amazon's own offerings. If you look up a book on the site, there are typically a number of other booksellers offering the same book; often used and cheaper than Amazon itself sells it. But by opening up the site to other third party sellers Amazon's site becomes more attractive for buyers to visit, and in that way they can maintain their position as the natural place to start looking.

Expressed in the terms of complexity theory, Web 2.0 is a clear example of *self-organization*: We can see how an increased interaction between many parties leads to the emergence of completely new qualities. And these new qualities make participation on Web 2.0-sites a *win-win* situation: as a content provider you lose the exclusive control over how your own bits are used. On the other hand, you can enjoy the benefits that can emerge when your content interacts with the bits that others contribute.
In IT lingo, this is known as *network effects*: when the value of a technology increases with the number of users. The obvious example is the telephone. There is not much use in being the first to have a phone, but as more phones are connected to the network, the value increases. Web 2.0 sites work like this: The more extensive the network of participants becomes, the better utility it provides for everyone.

<u>Knowledge created in large communities</u>
Wikipedia is probably the finest example of how thousands of people can share their knowledge for the benefit of all. It is an amazing source of knowledge - by October 2010 it contained over nine million articles in 250 different languages. Every day approximately 220,000 additions and corrections were made, and a total of around 285,000 registered users had helped build the encyclopedia over a few years.

The name Wikipedia derives from the type of software that's used to organize the effort. It's called a *wiki*, and the principle behind it is quite simple: It offers users access to create new articles and to correct and add to the articles that already exist. Furthermore, you can go back in the history of an article and see who made what edits. If you disagree, you may even choose to undo changes that others have made - and of course, others may subsequently choose to undo your change. More importantly, you don't need to install a special program on your computer; a wiki can be used via a standard web browser. It's easy for anyone to pitch in.
Wikis are used in many other contexts than for Wikipedia. Many organizations or companies use wikis to organize projects, as a forum for debate or to gather and organize knowledge. Wikis are often used in international scientific projects, and some countries have even experimented with wikis as a way to involve citizens in writing new laws.

Another inspiring example of Web 2.0 co-creation is the website patientslikeme.com. The site is a forum for patients with chronic diseases, and through it you can get a very useful insight into the experience of others who have the same disease, or are receiving the same treatment. As a user and contributor, you create a personal profile describing the illness you suffer from, and you fill in variety of information about what medications you take, what dosage, how long you have taken it for, how well it works, if there are side effects and so on. Then you can compare the treatment that you receive, with the treatments that others are getting. By opening up to each other participants and learning how others cope, the participants gain a much better sense of their own situation.

Web 2.0-sites lower the threshold for participation. They make it possible for people who used to be passive and without access to knowledge, to become participants, and contribute with useful knowledge.

Patientslikeme.com only recently begun to use the data for actual scientific research, but some of the interactions between the users show the potential for new ways of researching. A Brazilian user with a rare disease called ALS happened to read a description of a research project that investigated whether it could help to take lithium. The patient began taking lithium, and reported about it on patientslikeme.com, continuously uploading his data. Within a short time more than 200 other patients began taking lithium too, reporting their results to the website. Unfortunately, it proved that lithium did not help, but in a scientific sense, the case was interesting, because pharmaceutical companies often have great difficulty recruiting enough patients to do solid research on rare diseases. In this case, the patients recruited themselves, quickly and in fairly large numbers.

<u>A nest of small and large contributions</u>
Users of patientslikeme.com contribute a lot of very personal information. It requires some commitment from the participants, but the power of Web 2.0-applications can also manifest itself from much smaller contributions.
As professor at New York University's Interactive Television Program, Clay Shirky, points out, it is one of the great strengths of online social networks, that they can incorporate and utilize even very small contributions.
You don't have to spend weeks writing a long and carefully researched article in

order to contribute to Wikipedia. Correcting a typo or adding a single sentence that you think is missing is fine, too. Any contribution helps. Hitchhikers help each other through hitchwiki.org. As a layer on top of Google Earth you can insert comments about good places to catch a ride, you can rate the place with of one to five thumbs and even post pictures of it. But a quick note is better than nothing. The result of the many large and small contributions becomes a unique and useful collection of highly specialized knowledge.
Similarly, musicians help each other by uploading lyrics and chords of songs they have figured out by listening to the records. In the collectively created online collections, you can find lyrics and chords for virtually any song. And in the same way thousands of other sites are open for user participation and building up new, shared knowledge, posting by posting.

It used to be that involving a lot of participants would make a project messy and confusing, but now the diversity of contributions enhances the quality. The system is able to make use of all the small contributions that previously would have disappeared.

As Clay Shirky, author of the book *Here Comes Everybody puts it*:
"Participants do not need to be deeply motivated. The threshold at which you can make a worthwhile contribution has been lowered, and therefore, people who just care a little bit about an issue can participate a little, but still be effective in aggregate"

The English writer and consultant Charles Leadbeater uses a beautiful metaphor to illustrate the way a greater, shared knowledge emerges in the network: He compares it to a bird's nest, assembled piece by piece from twigs, leaves, feathers, hair, and what ever other small and large figments can add to the construction.

It really doesn't take much to give. Many sites ask their users to evaluate the quality of the content, for example by giving it between one and five stars. It requires very little from the individual to rate a video, an academic article or the quality of a hotel room. But if there are enough who do it, then the sum of the assessments provides an interesting clue for other users. Similarly, "I like" button on Facebook is a quick way to give a pat or to recommend something to others.
Most blogs and online newspaper articles allow readers to post comments, and thus the article becomes often more informative and interesting for all readers.

In many cases, users do not actively contribute at all; the system works in a way that it automatically becomes smarter just by using it. Every time you perform a Google search, the result is used by Google to improve their PageRank algorithm. When you for instance choose the sixth on the list of sites that are proposed, Google's computers use your choice to better understand what is the most relevant result for the specific search. The system gets better by being used.

"Tagging" is another example of how a very little effort from the individual user can lead to a new level of insight. On Facebook, you can tag photos with the names of those in a photo - and this is a very useful input to the system. It is difficult for computers to decipher what a picture show, but if someone has taken the trouble to add a tag to a photo depicting "Roskilde Festival", "Bob Dylan" or "John Olson," then it becomes much easier to use search engines to find images.

A particularly elegant example of how the system can be improved by being used is Google's translation service, translate.google.com, which can translate text between more than 50 different languages. The result of the automatic translation is impressively accurate, but certainly not perfect. No wonder, It's a difficult task. There are an untold number of exceptions and ambiguities in our languages, far more than any linguistic expert can manage to embed in the system. To catch exceptions and loopholes in the system, Google has placed a button that says "contribution to a better translation" link next to the field where you see the machine's proposal for a translation. This allows the many users who think they have a better proposal than what Google came up with to "train" the system.

From zero sum to plus sum - from atoms to bits

The radical message behind the Web 2.0-philosophy is that we need to think differently about the traditional division between *yours and mine*. Not necessarily because we will love each other more in the future, but because the logic of the accounting change. It becomes cheaper and more rewarding to share - and more dangerous to try to manage on your own.

A key factor in this respect is that an increasing proportion of value creation in society is linked to digital information. You might say that the focus of the economy has gone from *atoms* to *bits*.
The old economy was about atoms: steel, grain, oil, cars, refrigerators and other physical goods. Atoms are heavy, and it takes time to send them from place to place. Atoms can only be in one place at a time. And when you sell a physical product to others, you no longer have it.
The modern economy, however, is very much about knowledge, about anything that can be expressed in bits. And by now that includes a very wide range of items - a gene sequence, a CAD drawing, a management system, or a recipe.

The economic logic behind atoms and bits are almost opposite each other. The physical world of atoms is largely a zero sum game in which the goal is to secure ones share of a finite amount of goods. The more I take, the less will be left to others. Physical goods are said to be "rival". If someone uses it - whether it's a bike, a parking space or some fresh air - it is not accessible to others.

In the marketplace, the price of atoms is controlled through the classic relationship between supply and demand. An item, which is rare but sought after, becomes expensive. If supplies are plenty and easily accessed for everyone, the price falls. If there is plenty of water and it doesn't cost much to make it available, then the price of water should be low. If there is a shortage of water, you can ask a higher price for it. It's in the seller's interest to restrict access to the product – because it is the exclusivity, which gives the product value. That is, for instance, why the members of the OPEC cartel of oil producing countries make agreements to reduce the production of oil if prices go too low to their liking. Generally, it makes sense to hold on to your atoms.

Bits are different. There is no natural scarcity of them, it costs next to nothing to make multiple copies, if anyone wants them, and the copy is just as good as the original.

Actually bits typical *lose* value if they are not brought into play. Information goes obsolete faster and faster, so bits rarely benefit from being locked away. Rather, most information should be kept alive and in circulation, so it can grow in value and be renewed by being adjusted, edited and combined with other information. As the former director of Xerox Parc labs John Sealy Brown puts it: Bits are flows, not stocks.

Unlike atoms, we can keep the bits ourselves, even though we share them with others, and in that sense, we lose nothing by sharing our bits. On the contrary, by exchanging and combining information, new, more valuable information can emerge – which we would not have had access to if we had kept our information to ourselves. Exchanging information is a plus sum game, in which the bits get better by being used.

Copyright conflicts

If you want to make your bits exclusive, it takes some effort. You must patent your information, and requires that you enforce your copyright. The information must be encrypted, provided with passwords, and you need to hire lawyers who can track down and prosecute pirates who make unauthorized copies.
There may be good reasons for doing so. If I have invested a substantial sum in developing the formula for a new drug or to record a James Bond film, I'd obviously like to ensure that I would receive payment from anyone who enjoys the results. How else should I reclaim my investment?

But actually bits don't have to be scarce. Unlike atoms, bits could - in principle - very cheaply be made available to anyone who might benefit from them, and thus the information could create much more value. In fact, one could argue that information, which is not available to the community - for example because it's patented or copyrighted - blocks for further creativity and value creation for the community. In cases, where a company insists on its exclusive right to information which is central to culture or science, for example, a very famous picture or a fundamental mechanism in biotechnology, the owner can prevent others from building on that information.

This type of conflict, between the value of the individual and the value for the community, comes up again and again. Of course it would be very sympathetic to make our bits freely available to the community and thus potentially more valuable to everyone. On the other hand, it becomes very hard to earn money. And without money you cannot afford to fund the continued production of new bits.
In this dilemma lies the foundation for an ongoing theme in the media and courtrooms over the coming years: How do weigh the respect for the individual's copyright in relation to the value of the information to the community? How do you find a reasonable balance, where those who make an effort and invest in creating something new are secured a chance to earn a reward for what they have created, while avoiding blocking for further creative development through the use of others and to the benefit of society? Like so many other complex issues, this is not a problem you can solve once and for all. It needs ongoing management and navigation.

It's to my advantage that other people use my bits

There are two different approaches to the problem.
As an example, if Disney cannot control whether and how others can use the Mickey

Mouse figure, Disney may lose revenue, while others make money from using a figure that Disney originally developed. Seen in this perspective, the situation is a classic zero-sum game, in which one person's gain is another's loss.
The same example, but interpreted as a plus sum game would be that Disney lets everyone use the Mickey figure freely in the expectation that when others use Mickey, it will create more interest for all kinds of Mickey products, including those that Disney itself produces.

In the Mickey Mouse example, there is little doubt that it serves Disney best to rely on the zero-sum model - and they have indeed done something so emphatically - but there are many other situations where the opposite holds true: In which your bits become more valuable, the more people use them. Valuable, both for the creator and for others.
This book is an example. Ever since it was only a long list of keywords, I have posted the content on my website, hoping to get feedback and to generate interest in the subject. My reasoning was that if someone was reading my material and commenting on it, it would likely be people with a keen interest and insight in the book's themes, and therefore their comments would lead to a better book. It has held up, I have accepted contributions with open arms from people I never met before - and should any of those who have read my drafts along the way have been inspired in their work, then yes, that's just what I was hoping for.
Moreover, long before the book was finished, I have benefitted from being hired to give lectures about it, from people who knew what I was working on. For my part, openness served me well and I am certainly not the only one who plays that game. There are thousands of writers, consultants, coaches, scientists, musicians and photographers that post much of their production on the web. They do it to show others what they can and to establish themselves as players in the development on the subject.
On the Web, the link between what you give and what you get, is typically indirect and difficult to track. When you contribute to the common pool of knowledge by writing in Wikipedia, or by providing some good advice in your blog, it's a very abstract bet that something will come back. You give to someone you can’t see, and you get from someone you don’t know - but it works because so many people choose to engage in the exchange.

The exclusive and the sharing approaches to information exchange match the two opposing economic logics that meet in the *long tail*, that we previously mentioned. In the "head end" of the market, in the realm of blockbusters and serious business, the market is typically a zero-sum game; a fierce competition to capture as large a portion of the customers' money and attention as possible. Out in the long tail end, among the obscure and special productions, the economic motive diminishes for good reasons, and instead the exchanges are driven by desire for recognition, and from the pleasure of socializing and being part of a shared project. If that is the game you are playing, you are best served by allowing free access to your bits.
The most interesting area, however, is where the two games overlap. Where players wish to earn money, but preferably as a part of the common project, developing new opportunities and markets for all in the process. A large part of the information economy has in recent years been experimenting with setting up communities of cooperation that can create greater value to both themselves and the community than if all had just fend for themselves and block access to their information.

Secrets are wasted opportunities

The World Wide Web, which we are all totally dependent on today, is a large-scale example of the value of sharing. Tim Berners Lee, who invented the protocol, which makes it possible to click your way around the Internet, deliberately chose *not* to patent his idea. He made it freely available, and therefore anyone could begin to develop solutions based on the WWW-protocol without fearing that the owner of the patent would try to control and cash in. Tim Berners Lee did not become rich as Bill Gates, but he is doing all right - he's even been knighted. Sir Tim himself is convinced that the WWW would not have been so successful if he had patented the protocol. Had he tried to restrict access to the invention, the world would have waited longer for a technology that could unlock the potential of the Internet.

In a plus sum game the participants realize that the whole is best served when all information is available to anyone who wishes to work on it. It is a potluck party where everyone contributes, and thereby creates something which is bigger and has qualities that no single participant could have achieved alone. Tim Berners Lee the logic of the plus sum game.

If you see your own success and the success of the community as interdependent, it is inappropriate to keep knowledge to yourself. Innovation and development takes place when ideas are connected in new ways, and therefore it would waste opportunities to create value if you choose to keep your knowledge secret and out of circulation and interaction

Will the net splinter?

It may seem completely contradictory, but in recent years there has actually a growing tendency to create more closed subdivisions of the Internet. The Internet has grown to what it is because everyone has been able to connect, construct websites and provide services that anyone else can access. Now, many fear that this net neutrality is threatened.

Today companies like Google, Facebook and Apple have assembled so many users, and the services they offer are so technically advanced that they can afford to set their own rules and specifications for who they will allow to use their platform. A kind of *networks within the network* has begun to emerge. One of the spearheads of this is the popularity of *apps* - small programs that can deliver a service that only works as long as it fits within the framework dictated by the owner of a service platform. For example, there are numerous apps that can add new functionalities to Facebook. Everyone is welcome to create such new apps, but they only work within the Facebook universe. Similarly, third parties can write apps that can run on Apple iPhones and iPads, but it's Apple that singlehandedly approves what apps are allowed to be offered in their App-store, where almost all programs for Apple devices are downloaded from.

The strategy is understandable, because it consolidates the service. As a provider, you can keep out competitors and you have better opportunities to charge money from users - but the strategy only works if you are a very dominant player. Unless your platform clearly has the best content and the most dynamic interaction, users will find other places to meet. The largest platform providers need to strike a delicate balance: They depend on the contributions that the community of users bring – but they would

like to ensure that the interactions are unfolding on their platform and according to their specifications.

Once again, two different games clash: The large commercial interests aim to conquer and control as much of the market as possible - and at the same time making lots of smaller and non-commercial players are enjoying themselves building and exchanging in order to create shared value, sometimes on the open network, sometimes in the more closed platforms.

It's complex; an ever-changing mix and balance of selfishness and community spirit, but fundamentally, the tendency is steadily towards greater interaction and more information sharing.

A different deal

Both as a company and as an individual, we try to make the most from what we have. However, the logic of the game is changing. We are used to restricting others' access to our property, we make physical products rare, and we keep knowledge secret, because the more exclusive, the more it is worth.

But now, it's a different deal. What we own and create is increasingly bits, not atoms, and therefore we can share them without losing them. The risk of sharing is diminishing, and the cost of communicating decreases with the development of information technology.

Furthermore, our bits can become worth much more through interaction with the bits and work of others, when new opportunities and additional benefits for all participants emerge in the exchange. Conversely, there is a risk that your bits lose value or that their potential is not realized if they don't come into play with others.

This is the insight of a new generation: that you lose something by standing alone. The chances of winning by sharing and collaboration grow, the closer we are connected. By opening up, using what others offer, and letting others use what you have, you can become part of a development that is far beyond what you could achieve on your own.

It may sound like a naive, romantic fantasy about community, but in fact, it is exactly what we can actually observe on the web. Think about it: To a very large extent we are utilizing and benefitting from the valuable information that millions of people have posted for our free, common use. And many of those who are open and share their knowledge have been rewarded, as they have gained a prominent position as experts and key players in their field. The individual may indeed benefit from strengthening the common good.

The key word is "letting go" - let go, share your information, connect to other people's information. Our attitude must be changed from an almost instinctive secretiveness to a default attitude of greater openness. Lower your guard, don't hold back. And feel to use and benefit from what others contribute to the interaction with.

As Tim Berners Lee said: "It is about getting excited about connections rather than nervous".