The term Web 2.0 is a phenomenon of last few years.

Every now and then you can hear or read about it. It is said that we are experiencing a revolution. That the Internet is changing and we are in the new era. Social networks, sharing, collaboration, cooperation – these are just few of keywords we can hear together with Web 2.0. But is it really true? Can we really see the difference?

Personally, I don’t think so. For me, the development of the Internet is like a continuous evolution, not a revolution. Web 2.0 is just hype, just a marketing term to attract new customers. It is dangerous because it is a lie – like a false advertising. In addition, we can hear about Web 3.0 or even Web 4.0. This trend is almost malicious, because it is only spreading more confusion. Well known sharing services like YouTube or Flickr are really interesting, but they don’t mean Web 2.0 – in the same way as e.g. an automatic transmission in car doesn’t mean Transport 2.0.

So this paper is about the Internet and about Web 2.0. Or to be precise: it is about Buzzword 2.0 – the hype so big that it can be perceived as a new version of an ordinary buzzword. Because what we can see is not a next generation of Web, but just a next generation of hype or marketing.
BUZZWORD 2.0 [1]
In my professional life, I have encountered so called “Web 2.0” on many occasions. I noticed, for example, that on many conferences, there is the whole Web 2.0 section. Library conference, symposium about information society, and even conference about computer games – Web 2.0 was everywhere. If you look into various media (especially online journals, but in some offline sources as well), you can notice now and then another dose of Web 2.0 related articles. And if you look on Web in general, you can see that everything is trying to “upgrade” to that second version too (especially when website has funky colors and a word “Beta” somewhere).

What does it mean? Is Web 2.0 really so important? This term became an Internet phenomenon and now it is spreading like a virus. Yes, that quite a negative connotation is intended, because I am certain that Web 2.0 is not something special. It is a phenomenon, yes, but mostly from a marketing point of view. A catch-phrase, an Internet bubble, a buzzword. In this Paper I will try to explain my attitude.

WHAT IS WEB 2.0 [2]
We can start with a little bit of theory.1

“Web 2.0 refers to a perceived second generation of web-based communities and hosted services — such as social-networking sites, wikis, and folksonomies — which aim to facilitate creativity, collaboration, and sharing between users. The term gained currency following the first O'Reilly Media Web 2.0 conference in 2004. Although the term suggests a new version of the World Wide Web, it usually does not refer to an update to any technical specifications, but to changes in the ways software developers and end-users use webs. According to Tim O'Reilly, „Web 2.0 is the business revolution in the computer industry caused by the move to the Internet as platform, and an attempt to understand the rules for success on that new platform.“

The supporters of this term are using very interesting and quite logical arguments. It is true that we can notice some changes on the Internet, and we can bump into things we haven’t seen few years ago. One of the most

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important key-word of every Web 2.0 article is “sharing”. Now we share everything – video, photographs, music and other files; thanks to Digg we can share news, thanks to del.icio.us we can share bookmarks, and thanks to Wikipedia we can share information and knowledge. This sharing is in relation with another term: “social networks”. On the Internet we can see new emerging communities, where people are sharing, communicating with each other, cooperating & collaborating, and so on. For example, MySpace social web has a community of 180 million people!

Another very important aspect of Web 2.0 is a focus on user. Users are not only some kind of passive audience, but they can influence the content and even easily create it. Many of us maybe saw a picture comparing Web 1.0 and Web 2.0 (see below). In the first part, there is a very thin arrow called “user generated content” while in the second part – the Web 2.0 part - the arrow is very strong, almost as strong as the opposite arrow called “published content”. It means that users has much more important role. For example the blogging evolved into a phenomenon and became an important source of information and sometimes even self-realization. User has much more power as well – for example customization and personalization became an important aspect of many web pages and portals. And during his work with information, user can use a tagging – which is a great new way and a possibility to get rid of an old pre-recorded (pre-coordinated) taxonomy.
Next big group of new services is connected to interactivity and multimedia content. For example, the embedded videos are almost everywhere. Not only on portals like YouTube, but they are on news portals, in personal blogs, profiles on Facebook and so on. Many new services are combining with each other, or we can say they melt together, and as a result we have something called “mash-up”. The most frequent example is a combination of Google Maps with “something”, for instance with Flickr, YouTube or a statistic data of murders or an air pollution. There are many possibilities in this area.

2 Created by Jan Makovička and Tomáš Jindříšek
DIFFERENT PERSPECTIVE [3]

All aspects I have just mentioned are usually connected to Web 2.0. And it is true that at first glance they sound reasonable. But we should ask ourselves the question: “Is that enough?”; or more precisely: “Are these changes really changes?”. Isn’t it just something old, only wrapped into a new and fancy box? I have to say that I am not convinced that these new aspects and new services are enough to establish a next generation of Web. So now, I would like to look at it from a slightly different perspective.

We can start for example with sharing. In almost every article one can sooner or later discover this interesting word. According to these texts, users are almost constantly sharing nearly everything. But that is not a new thing, because sharing was an essential part of the Internet since the very beginning. As we know, there were two main reasons why the Internet was created. First, to establish a decentralized military communication network to provide information sharing even during a potential nuclear warfare; and second, to create a scientific network, again for sharing and exchanging information, and to share valuable computing time of old computers. And then, when Internet became public, the most important service (which is true till present days) was e-mail, quick and effective way of sharing news and messages.

To make a long story short, the sharing was the alpha and the omega of the World Wide Web since its creation, and present services are merely successors of that tradition. Of course, the same things apply for a community building as well, because the beginning of the Internet was bound with first communities. At the beginning there was a community of scientists, interconnected by first lines of emerging academic network. Then there were communities of technical enthusiast, or we can say “nerds” or “geeks”, who started to discover this new medium. And others soon followed: community of hackers and crackers, subculture of cyberpunks, demoscene and so on. Of course, there was no Facebook or YouTube, but the point is that social networks existed since the beginning, and so it is nothing new.

The focus on user and on user-generated content sounds like a very strong argument, but again, the situation is a little bit different. Important thing is that users always created the content. The content of the Internet haven’t ap-
peared out of the blue, someone had to write it, create it and upload it. Of course, today we can see much more content than years before, but it is simply because there are much more users with access to the network. But the ratio of active creators and passive readers is not higher, and probably it is even lower.

In the beginning, there were only few people online, and almost all of them tried to contribute and to create things together. But now, vast majority of people with access to the Net are only passive users. I know that “picture with arrows” implied a different trend, but sadly that’s not true. Yes, people are sharing a plenty of data. Yes, people are logging into social networks. And yes, they are creating content… But only a tiny fragment of them.

Few months ago, there was a survey conducted by agency called Hitwise, and this research brought quite unexpected results. The massive trend of user-generated content is only an illusion. It is just not true. The best results had Wikipedia, where 4.38% of visitors were actually uploading something (or at least correcting or expanding articles). As you can see, it is not a high number, but other services ended up much worse. On Flicker, only 0.12% were not only browsing, but actively uploading some photographs. And on YouTube the amount of uploaders were only 0.18%. So are we really in a world where almost everybody is sharing something and where almost everybody is generating content? I really don’t think so…

[Diagram showing participation rates of different websites]

Ratio between passive users and active content-creators

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4 Source: Hitwise US Research Note (Bill Trancer)
OTHER ISSUES [4]
The same confusion applies to multimedia as well. Yes, we can see a wild spreading of for example video content. But does it really mean a revolution? About seven years ago, we witnessed a boom of music sharing. And even sooner (say twelve years ago) we could see an introduction of pictures. And I suppose that that change was even more important, because at that time, a strictly text-oriented communication platform changed dramatically to the visually-oriented medium. Anyway, it is just a development. Text, pictures, videos... and in five years we might see e.g. a boom of 3D or another kind of content.

Not even the interactivity can make a difference. We have technologies that can change static websites into fully dynamic portals. Nice example is for instance “AJAX”, which is “Asynchronous JavaScript and XML”. Everybody is talking about AJAX now, and many people claim that this it the main technology that fuel majority of interactive Web 2.0 applications. But please, have a look on that abbreviation once again: “Asynchronous JavaScript and XML”. I am not a historian, but both technologies – Extended Markup Language (XML) and JavaScript – are here for longer then a decade. It is really nothing new at all. And of course, we have other means, like Flash for instance, how to create an interactive applications. We had these possibilities much sooner then something like “Web 2.0” appeared.

And allow me say at least something about well known “tagging”. I frequently read that tags and the whole folksonomy is a great thing which completely changed the way how we store and sort information. But I fear that tagging is not as great as we may think. First of all, today we have an effective full text searching, so the question is why to even bother with tags. But sometimes it is useful – for example when we need to describe specific documents like pictures or videos. But is it really that better then “classic” pre-recorded (or pre-coordinated) taxonomy? You might think that yes – because you can create whatever tag you like. But that is as well a very big disadvantage. Imagine you have a very nice video on YouTube about taxonomy. So you want to use your own keyword, but you make a mistake and write down a “taxomony”. As a result, no one will ever find it, because
of that bad descriptor. You surely know the saying “with a great freedom comes a great responsibility”.

As you can see, the Web 2.0 arguments are not as strong as at the beginning. There are new possibilities, like personalization and customization of web pages, but it is not enough to push World Wide Web to another level. Last thing that comes to my mind are new applications, e.g. mash-ups. We can put aside the question if they are useful at all (most of them not, I am afraid), but let's focus on how “new” they are. Well, I think that principle of mash-up is even older then the Internet. When I was in elementary school, we attended geography, and we used atlases. And inside, in addition to classic geographic maps, we had a series of smaller maps with a specific info like air pollution or traffic density in some areas, life expectancy or weather conditions in some countries and so on. Thus it was like “a map and a something”, ergo some kind of a mash-up from an analogue era.

NOT A SECOND GENERATION [5]
So, my point is that Web 2.0 shouldn’t be perceived as some kind of a giant leap for mankind, or as a next generation of Web. The development is gradual a continuous, and it is tricky to assume that between Web 1.0 and Web 2.0 is some kind of a dramatic difference. The name “2.0” itself suggests something immediate; like that the “second version” started in e.g. 1st of January 2005, like if it is some kind of new software or a new operating system. But as I have already mentioned, the development of the Internet is a continuous process, and technologies and services are emerging, dissolving, and changing all the time since the ARPANET.

By the way, why just “two point zero”? It looks like people from the marketing departments are trying to imply that nowadays we are experiencing only the first bigger improvement (from version one to version two). But that is not true either. In past we’ve experienced quite bigger changes then we do presently – for example the already mentioned introduction of pictures, which was the beginning of our current visual culture. Then we had first moving images (like animated .gif pictures), vector animations (Flash) and so on. And recent widespread of photo sharing, video content or interactive applications is just a super-structure of that development. I sup-
pose that even an introduction of CSS (Cascade Style Sheet) had much bigger impact then all mash-ups and tagging together.

I am not saying that nothing happened over the past few years. Of course we can notice quite a difference, but as I have pointed out earlier, this is merely part of a continuous progress. Take an example of cars. Today, much more people have a car then ten years ago. Cars are much more technologically advanced. We can see new airbags, automatic transmissions, hybrid engines and so on, but still it is only a car. Not a “Car 2.0”. Or “Transport 2.0”. Or whatever. It is just a progress. If I may use a “software” association, then present Web is not in its next version, but during years it has merely downloaded some patches and updates. And if someone really likes numbers, we can for example say that in last five years, the Internet has been upgraded from version 1.22 to version 1.35. Or at the most, 1.4 Beta.

Web 2.0 mind map

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Author: Markus Angermeier, adaption: Luca Cremonini
The situation with “Web 2.0” buzzword is almost bizarre, because this “madness” is getting more and more attention, and it is more and more complicated. Many people are even seriously talking about Web 3.0, and I heard about few concepts of Web 4.0 (which might finally introduce some aspects of a semantic web they say). Anyway, this “phenomenon of versions” is becoming a little bit dangerous, because if it will speed up, then we might sooner or later end up with Web 75.0, which is quite ridiculous. And it is quite sad as well – for more then twenty years we just had one Web, but now, almost every second year a new version must be introduced, just to make sure that everything is fine and development continues.

COMING TO CONCLUSION [6]

But let’s get back to our new “Internet Bubble”. Luckily, not everyone is admiring this new term, so my view is not a scarce one. For example Vint Cerf, who is often recognized as “the father of the Internet”, said that Web 2.0 is just a marketing term. And Tim Berners-Lee mentioned that many Web 2.0 components existed since the early days of the Web, and it is merely “a piece of jargon”. Many other users are openly criticizing “Web 2.0”, and are often using even a coarse language. And although I wouldn’t describe it with such degree of expressivity, I have to generally agree. I am sure that pseudo-term “Web 2.0” is just an artificially created word without any relevance or importance. And above all, it is a great marketing lie.

I wouldn’t say anything, if “Web 2.0” was just a name for scientists to make depiction of development easier. Just to describe some stages and so on. We can see a similar example for example in history, where for instance the Stone Age is divided into Paleolithic, Mesolithic and Neolithic era. But it is mostly for scientists, because generally we are not interested. But with Web 2.0 it is different. In fact, it is completely the other way round. Scientists themselves are objecting this term, and they are unable to coin a proper definition, but people from marketing lobby are trying to promote it as much as possible. Why? Because Web 2.0 sells! We need funny colours and

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6 Yes. It is scary but true. I heard some presentation on conferences (e.g. Inforum), and on the Internet you can find various articles about this topic.

7 He mentioned it on few occasions, lately in his speech in Prague (in April 2007)


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big icons, logo must be mirrored on surface, every article needs few tags - users will love it...

**FINAL WORDS [7]**

To elucidate the title of this paper: it is a very interesting thing that “cool and trendy” word Web 2.0 is itself frequently described with other “cool and trendy” words like “social networks”, “folksonomy”, “convergence” and so on. These are other weird phrases that sound expertly, but their meaning is often unsubstantial. So in fact we have a buzzword described by other buzzwords. But that means a completely new level of “buzzword-ness” – or simply: Buzzword 2.0.

In conclusion, over-hyped Web 2.0 is merely a catch-phrase. It is only stylish but vague word without any deeper meaning. Yes, it became a phenomenon, but it is still of no value. Scientists are puzzled, more and more people are making fun of it, some of them are even angry. But emotions aside, the usage of that word is itself improper, because there is no second version. Even now we can witness the evolution of the Web - but not a revolution.