



Position paper for the
Workshop on the
Future of Social Networking

Submitted by



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0. Introduction / About Peperoni

Peperoni Mobile & Internet Software GmbH is a Wireless Application Service Provider focused on User Generated Content and Mobile Social Networking. They have pioneered this sector in 2001 and since then operate mobile Web 2.0 solutions on started off with Genie / now o2 (Germany) as their first reference customer.

Today, Peperoni serves several international network operators with on-deck applications and solutions they operate on their own. Their off-deck brand www.peperonity.com attracts more than 10 million monthly visitors worldwide. All users and visitors generate more than 400 million page impressions every month and 15 Terabytes of almost purely mobile data traffic get served each month.

Peperoni is obviously a full service provider with great expertise both in on-portal as well as in off-portal applications and operates the world's largest network of mobile sites and profiles. Mobile network operators have detected the opportunity to increase data ARPU and messaging revenues by launching white-label solutions. Brands raise their profile and mobile application manufacturers will drive traffic to their site by advertising into Peperoni's large user base.

At www.peperonity.com users can easily create their own mobile web site, fill and decorate it. They can download any imaginable stuff and make friends all over the world to chat and stay in contact with them.

Peperoni is a global player in this business and its peperonity.com is translated in 10 languages. The available languages are German, English, Spanish, French, Portuguese, Italian, Russian, Polish, Romanian and Greek (supporting UTF-8 character set).

The community is supervised by a computer system. Secondary expert moderators work all over the world and in house for answering questions in the user's language and care for security and observation of the terms and conditions in the community.

Peperoni offers all currently available document types, from WML across HTML up to XHTML.

Among their reference customers are o2 (UK), T-Mobile, E-Plus, WIND and Tele2.



1. Current situation

The Swiss Army Knife with a phone in it

In the early days of telephony, the ambitious mobile phone user was carrying a big suitcase around with him to place a call. This was followed by in-car telephones, pagers and finally mobile phones. It is being equipped with more and more features and is much more than just a communication device.

By Maximilian Stollbrock / English translation by Marcus Ladwig

Those who possessed a phone 15 years ago would easily see themselves confronted by prejudices and patterns like “buy, sell, buy sell” or similar. Only a small circle of business people would be entitled to own such a phone. Much too high costs, a heavyweight device and also what about simply using a phone booth.

It is thanks to technical advances and the fact that there are more phone users than fixed-line PC users in most countries that this perception has changed fundamentally. Phones have become much more handy and smaller. The same is true for minute- and second-based pricing for voice services. More and more attractive offerings drive customers into stores in order to use mobile telephony. The phone has evolved from a technical necessity to a lifestyle product. Without it, the on-the-go lifestyle would hardly be possible.

The mobile phone has established itself also in the global world. Whether that is a good or a bad development is not a matter we will discuss here. What's for sure is that the phone has become an everyday device and a Swiss Army Knife for everyone's daily needs. From text messages and reminder features at the beginning, today's phones can take pictures, record videos and edit them, maintain the schedule of events or show the way to the next appointment with built-in GPS functionality in advance. Not to mention the capabilities unleashed by opening phones up to internet access. Over the last few months and years, speed and improved comfort have contributed greatly to the success of mobile internet – also thanks to 3G networks becoming ubiquitous.

The very basic intention of a phone is to connect people. At least this is the hope for network operators from all over world. One form of communication is Mobile Social Networking. It gives users the chance to present themselves by maintaining a collection of images, text and small videos using his phone. This personal record and storage of events and habits can be published, no matter whether through the internet, at home or on the phone and be fed with more data so that users from all over the world will have access to it. Many phone users create their own, personal sites, a trend that now repeats itself from the early days of the fixed-line internet. Mobile Social Networking becomes more and more commonplace. peperonity.com is a good example for a service that is currently being used by more than 10 million unique users worldwide and that exists since the beginnings of mobile internet back in 2001. Back then, it was an idea, now it is one of the most important trends in the industry.

Many companies have now made use of this development and created platforms to mirror small pieces and aspects of our society, also called “communities”. The affinity of young



people to communication of any kind together with the ever-improving technology will help phones to become even more comfortable and faster especially with mobile internet in the near future.

There are still regions in the world where people who want to use the internet need to use their phone as it makes no sense in countries like India and South Africa to lay out fixed internet lines. Instead, antennas are being installed that will be able to receive and transmit data very fast so that customers will find this a very convenient way to browse the web without having access or even knowing about fixed-line PC-based web.

Despite the ongoing fears of recession, the mobile industry sector currently sees a big boom. More and more people want to browse the mobile internet. Network operators and platform providers alike are very pleased as lots of revenues with advertising can be made and the market shows a lot of synergy potential.

Prices for mobile internet usage will fall. Not only Vodafone has a model for flat rates already, the question is when will mobile phone usage overtake fixed-line PC usage in traditional markets as well like internet usage today outtakes TV or will that never happen?

Our position paper aims to point out the most pressing issues the industry and we as one of the core players in the mobile world face today.



2. Our position

Peperoni has been providing mobile social networking services since 2001. When starting off with such services, we promoted them mainly through network operators as there was no other way of going to market as an off-portal market did not exist. We have come a long way since then and gathered a lot of experience from what we did and from market changes.

What we also see today, however, is an increasing shift of operator business going to off-deck. But in order to provide a successful mobile-only off-deck environment that provides a real alternative to traditional media, there need to be some central hubs of information retrieval like we know from the traditional web to be Google, Wikipedia, Youtube etc.

These players are still emerging plus there are web players moving to mobile which so far further fragments the market instead of consolidating it.

Obviously, the market is in growth mode with a lot of attention being paid to it and those who settle their horses now and do things right will have a good chance of becoming the center of attention in the near future for mobile-centric and/or mobile-affine web-centric people.

The core challenge for web-based social networking sites reaching into the mobile space will be to develop a compelling USP on mobile which gives them a business model of its own there without cannibalising web usage and for mobile-centric sites to make best use of the technology available and operate target-group centric and quickly or even move to the web as well.

3. Challenges and discussion topics

3.1. Operator flat rates and data usage promotion

It has been a while since the first WAP capable phone has been introduced. Since then, a lot of evolution has happened including the development of relatively fast UMTS / HSDPA data access, sophisticated phones, high-resolution displays and a wide range of available handset choices.

Voice: a skimming model

Nonetheless, mobile data usage and active data users remain below expectancies. When looking back at the early days of phone usage, phones were considered as items of luxury and few people could afford them due to high prices. Later on, phones became available to the mass market when prices were falling. Obviously, mobile telephony was introduced via a skimming policy where high prices would contribute to the expenses of developing the technology and obviously it was a success.



Text messaging: a penetration model

With text messaging, it was the other way round: First of all, they were considered data junk and people could send them for free! Technically, text messages are nothing but status messages intended to be transmitted between phones and access points that were later converted into one of the most successful MNO business models besides voice.

The dilemma with data

When data transmission became available to mobile phones, network operators faced the challenge of on the one hand introducing a new technology to the market and on the other hand creating a viable business model instantly as technology costs were higher than with text messaging and lots of data usage would risk voice calls from being dropped which is still the case today. Therefore (and probably for other reasons I am not aware of), nearly all data plans issued incurred either expensive pay-per-minute rates or pay-per-kilobyte rates which were not just costly but also very hard to understand by end customers. Further to that, the user experience and transmission speeds and quality were very poor resulting in a bad user experience despite general interest and acceptance of the technology. All in all it looks as if the skimming model doesn't work for data usage but operators are reluctant to go for penetration policies as they fear for other revenues they currently have.

Situation today

Mobile phones have become very sophisticated compared to what they used to be like, prices for hardware have dropped tremendously and flat rates have become available. But there is still no mass market breakthrough for mobile data usage especially in Western Europe. Why?

From our perspective, there are several reasons for this:

- Flat data rates have hardly been pushed into the market
- It's very hard to reverse an experience the consumer had and get him back
- Ubiquity of data access is still not reality
- Data transmission rates are very much varying especially when travelling
- Very high roaming costs even with flat rate data plans

To be clear, there were other challenges that have been overcome already:

- Lack of attractive end devices with high data speeds and big / Hi-Res screens
- Lack of attractive services
- Lack of available flat rate data plans

In sum, it looks to us as if there is an entire industry providing for attractive and interesting services, also with viable business models, but to no or hardly any avail as network operators seem to be sceptical about real mass market usage of mobile data.



3.2. Lack of reliable metrics and figures

It is the internet age and unlike in traditional businesses, there are few auditing and reporting capabilities or mechanisms that would influence the ranking of social networking sites. Also, it seems very easy to just claim to be the biggest, best, largest etc. network as no one can really verify whether that is true. Our suggestion is therefore to introduce a "ranking for social networking sites" that applies both for online and mobile social sites, however differentiates between usage medium. A suitable metric would help substantial sites differentiate themselves from upcoming and new sites that have little or no usage and still look like a big network from the home page and thus give the users more reliability on which network(s) to give their trust.

There are several metrics that are commonplace and presented by many social networks:

Number of page impressions per month

This is a metric that indicates how many pages of a particular site are being viewed excluding search engines.

This number also includes users referred from search engines which click once and directly go out, so called "Bouncers". Due to the fact that visitors from high-ranked sites are more likely to bounce on the site they visit, the number of page impressions per visitor is a much better indication for the quality of a network's content and its activity than the sheer number of page impressions.

Number of registered users

This is a metric that indicates how many registered users a social network has ever had

This number should be referred to as users ever registered minus already deleted accounts minus inactive accounts. Many of the existing communities advertise with this number. However, this again gives hardly any information on the quality of registrations and the activity of a community. This is especially true if traffic is simply "purchased" e.g. by means of advertising.

Number of active users

This metric indicates how many users return more than once a month to do something inside the community (stickiness indicator)

This number should be referred to as users ever registered minus already deleted accounts minus inactive accounts minus accounts that were not used for more than one month.

This number is much more important than the number of ever registered users, because we have no secure exclusion of "fake-users" like one user having 100 accounts or users who once register and never come back. It is good to have many "heavy" users who know the community well, as they are deeply involved with the service structure and notice any changes, news and particularities very quickly. They will also help other, particularly new users to find their way around the service.

Number of page impressions per visitor

This metric indicates how many page impression a returning visitor makes on average



This can be an indicator of sticky content as well as of sticky communication inside the community, this number tells us more about the activity inside the community as the number of registered users – how much is a community with 1 millions of registered users who only register once to get some content against a community of 100.000 users who communicate and add content more than once a month

Number of content pages

This metric indicates the depth of the service, that is offered to the user base.

Number of messages sent between users

As a social aspect, this metric indicates the interaction and vitality inside the community.

It shows the importance of communication inside a vibrant community and contributes to activeness measurement.

Friendships entered in total

This metric indicates the stickiness of a community.

A user who has many friends inside a community has more reasons to come back often to read and answer new messages. Also, interesting content and news will be spread by forwarding it to a sum of friends. This is relevant for the activity of a user, i. e. as the more links there are between users, the more possibilities of getting content and friends (more interest can be inspired) exist. While users clicking through the sites or profiles of their friends, new ways (themes) are offered to them.

Now we put these figures together into a table with some example figures:

<u>Metric</u>	<u>Online</u>	<u>Mobile</u>
Monthly PI	Must be > 20 million	Must be > 20 million
Registered users	Must be > 50,000	Must be > 50,000
Active users	Must be > 20% of regusers	Must be > 20% of regusers
Number of PI per visitor	Must be > 10	Must be > 10
Number of content pages	Must be > 2 million	Must be > 2 million



Number of messages sent between users / month	Must be > 50,000	Must be > 50,000
Friendships	Must be > 50,000	Must be > 50,000
Year of launch	Must be 6 months existing	Must be 6 months existing

The workshop should discuss how these factors should be weighed and what exact metrics to introduce in order to differentiate high-class social networks. There may be a differentiation in metrics necessary between pure chat services, social content services and others. Also, the talk should be around thresholds necessary for a company site to call themselves e.g. a mobile social network. Something like "reach the threshold in 6 of 8 metric values in order to call yourself a social network".

3.3. Lack of industry standards and common APIs

Mobile social networking sites claim to make the best use of the technology available for mobile phones.

However, it is difficult to operate a worldwide service if there are no common standards that enable real ubiquitous communication without having to have a contract with each network operator. Therefore, we suggest the following discussion topics:

- Having a consortium that maintains worldwide accessible MMS and SMS MO shortcodes, just like domain names
- Having common API's that enable application service providers to make easy use of LBS functionality without contracting with each MNO
- Having a policy that regulates opt-in necessities regarding data protection worldwide
- Providing phones with a unique identifier sent with every request (need not be MSISDN!!) that enables content providers to recognize any handset accessing in order to present personalized greeting messages AND to prevent misbehaviour and enable blocking of particular phones in certain cases
- Being able to access network operators' user profiling data in order to optimize for targeted advertising, if the user opts in to that and share revenues with operators on this if applicable in order to build a viable business case on mobile advertising
- Have a denser network. Mobile data access is not really ubiquitous and not always a compelling experience unless you are in a big city. Especially when travelling e.g. on a train, network connections keep getting lost. This can be frustrating especially when downloading larger files.

We are well aware of the fact that these issues require more or less collaboration between network operators, regulation authorities and content providers alike but if more people should use a mobile phone than use a PC for information retrieval, there must be a more easy means to communicate globally, not just locally and with individual contracts as this limits the potential that is available for no reason.