**A PLATFORM BIOGRAPHY FOR THE WEB: VKONTAKTE (VK) SOCIAL NETWORK.**

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"A number of major social, technological, economic, and cultural transformations came together to give rise to a new form of society, the network society"

(M. Castells, 2010, "The Rise of the Network Society Vol. 2")

**Introduction**

A significant part of the Web nowadays is focused on social networking. Generally, social networking service can be described as a web-based platform that provides its clients the opportunity of creating personal proﬁles, publish photos and links, join communities and search for friends among all the users. Millions of people all over the world use international Facebook or Twitter every day, besides local networks should not be overlooked. Such ubiquity is easily explained by the functionality and the capability to communicate with people through a messaging system all over the world.

None of the above would have been possible without both technologies and social impact equally, therefore, this makes any social networking platform be an accurate example of Actor Network Theory. This means that the social network is a continuously developing place where technologies and society are closely intertwined. Without technologies, there is no tangible human impact or interaction within Web-society. At same time no machine works in a proper way until it is involved in a social process by human being. This symmetry demonstrates connections between successful results and level of collaboration between human and technology (MacKenzie, 2012). Otherwise, there is a high probability of huge risks in unexpected areas – it could be poor hardware or network externality – both can lead to dramatic effect.

Speaking about such impact on social network there is an important aspect that needs to be mentioned. In last few years Social Web space has become a field where a number of social networks using P2P (peer-to-peer) payment system is continuously increasing. At the same time, P2P has been considered as a revolution for companies providing their businesses on the Web. This led to assuming quite strict penalties for those who get procedures with payments wrong. However, those who can make it right will get a reward. Either way, nobody knows exactly which outcome will prevail because making payments or providing transactions on the Web depends not only on technological support or human element but both of them. So that makes P2P architecture be a clear example of ANT.

**P in P2P is people[[1]](#footnote-1)\***

As it is generally believed, the history of peer-to-peer, or P2P, phenomena began from Napster online service, so-called pioneer of the file sharing between several peers that actually were PCs of the ordinary user. Founded in 1999 by Shawn Fanning it had the following structure: all users were connected by a single server that could track all the uploaded files. The service was initially planned as music-focused one, so these MP3-files were kept on the client's PC that was considered as a peer in the chain. It means that the individual storage capacity of all the combined users was leveraging so the server could provide help with transferring of requested file to another peer (Securing IM and P2P Applications for the Enterprise, 223). That led to the ability of Napster to exchange a huge amount of data due to P2P distribution.

Although, the earliest systems were focused on censorship resistance. The purpose was to create secure net to serve different groups of critics or dissidents or other aficionados that could be illegal in some areas. Thus, each participant had to protect each other's statements (R. Anderson). However, there was a high probability of censor attacking by trying to impose a particular preference, thereby meeting the approval of some nodes but not others.

Another way to use P2P systems is money transfers through e-mail or cellphones. The number of mobile apps has been set up to help to send and receive money via smartphones in last several years. Circumventing traditional bank account transfers P2P payments simplifies the process for general public and reduces costs of enterprises. One of the consequences is that fact that by 2016 the P2P transfer market has proved a key target for investors (R. Arnfield). Most outstanding examples of implementation of P2P service into social network are Facebook (Messenger payment), Snapchat (Snapcash), Google Wallet, and, of course, PayPal. All of them provide in average 3 days to clear and no fee for debit cards (except PayPal). Besides, some of such services have limits of sending sum of money (e.g. daily).

In the light of the foregoing, there is no any concrete definition of P2P because it can be described in different fields by different groups with different ideas. Therefore, there is a point that P2P is abbreviation of person-to-person architecture. On the one hand, in its simplest form, P2P system can be explained as a computing infrastructure for entertainment and consumer applications. On the other hand, the most complex form implies P2P as a resistance movement among a cyberelite. However, there is the common thing – P2P should be a direct connection between equal individual peers (machines or people) so no user has more access than another or controls another user.

Nevertheless, implementation of P2P service in every business construction can cause as many troubles as the existing structures, especially when there is no special need for such service. Thus making a decision whether use P2P or not may, in fact, be the biggest challenge in doing web business.

**Russian Facebook**

VK.com or formally VKontakte (or InContact as translated in English) – Russian social network service that is ranked 2nd place in Social Network category sites, after Facebook, and 13th place in "The top 500 sites on the web" (Alexa, 2016). Now it is owned by Mail.ru, the giant of Russian-speaking segment of the Web. Started in 2006 as a network by student Pavel Durov for students' community within Saint-Petersburg State University at the present moment VK is the most popular social platform in Eastern Europe with almost 80 million visitors per day and more than 380 million users registered (vk.com, 2016). The VK audience mainly lives in the post-Soviet space including such countries as Ukraine, Belarus, Kazakhstan, Azerbaijan, Estonia, and Lithuania, however almost a half of the website visitors live in Russia (Alexa, 2016). In general, VK developers provide 85 languages including European, Indian, Arabic and Asian linguistic groups.

Development of the most popular network in Runet (Russian Internet) was connected with lots of difficulties throughout all 10 years, and last three years were extremely tough for owners. In that period the platform was exposed by several massive hackers' attacks during which thousands of users couldn't get access to their accounts. At the same time, VK was suffering from governmental persecution. For example, in 2013 it was being banned occasionally by The Russian Federal Service for Supervision of Communications, Information Technology, and Mass Media for several hours without clear official cause. Later in the summer, VK was banned again by national copyright policy because of pirated content. Besides Russian pressure, Italian government limited access to the website as a reaction on copyright infringement.

The reason seems to be hidden in functionality of this platform – VK has several features that are quite interesting. First of all, as the most social networks, VK provides private messaging with the opportunity to attach documents, photos, maps, videos and audio files up to 10 units in one message. This content can be exchanged between up to 30 people in one group chat. Also, every user has his own profile wall to post anything – text or attachments (again, up to 10) – so it will be shown in the news feed among all other content. It should be noticed that news feed itself can be filtered for more specific posts from several friends or public pages or, by default, all related content including photos, videos and audio tracks. Sharing photos in VK is available in two ways – either attached to post or uploaded to albums. Besides, the images can be sent directly to a person in private message. In that case, user can choose the quality – uploaded as a document photo will have higher resolution.

Video and audio in VK are the most controversial features as some content comes under copyright infringement. Although it often becomes the main reason of proceedings with right holders, VK users can listen to music or even watch movies for free, upload video and audio tracks and share them with others. Videos can be uploaded to VK site directly from PC or smartphone by app or using links from YouTube, RuTube (Russian version of the famous video hosting site) or other web pages. And as for audio, there are musicians, such as The Offspring, Moby or Marilyn Manson, who use the VK platform for the promotion and upload their sound samples to their official accounts.

And finally, similar to Facebook, VK has communities divided into groups, public pages, and events all of the different interests – university societies, about science or handmade, meetings and concerts. And some of them are used for business. For example, giants of their markets, Zara or even Coca-Cola, use the platform for marketing purposes. Such companies use VK communities that can be marked as official brand communities (as well as on Twitter or Facebook).

Meanwhile, there are still huge amount of small local online shops that use VK platform not only for advertising but for sale itself. Therefore, implementation of new possibility to make online P2P transactions this year became a big benefit for them. However, the process is convenient also for ordinary users to transfer a sum of money to relatives and friends without using bank apps.

**Kontakt payments**

The new product was introduced on the official VK page at 20th of September 2016 and since that day all users can easily transfer money to each other without applying for third-party apps. Background of this innovation was connected to the increase of users' operations with credit/debit cards and growth of links between banking and VK accounts in the last couple of years (rbc.com, 2016). However, people were spending money either for different apps or voices that can be exchanged for stickers or VK gifts and now they have an opportunity to make a money transfer. And finally, platform is providing peer-to-peer, or P2P, payments. The VK Money is very similar to services provided by Facebook or Chinese messaging app WeChat. However, using this services widely is prevented due to the fact that payments are allowed only within the same country while using VK money user can receive money with cards issued by Armenia, Azerbaijan, Belarus, the Czech Republic, Estonia, France, Georgia, Germany, Israel, Italy, Kazakhstan, Latvia, Lithuania, Moldova, Romania and Uzbekistan (vk.com, 2016).

The P2P payment tool is now available not only for PC version but also for VK apps for iPhone, Android, and Windows. Remitter only needs to have a debit card but in the same time he or she doesn't have to know recipient's card details thus only the payee decides where money will be sent to (vk.com, 2016). This feature is available for holders of Russian MasterCard, Maestro or Visa cards however they can send money, as it was noticed earlier, to users from other several countries. All the payments are provided in Russian rubles or converted by bank-issuer. Transferred amount of money is limited – 100 rubles as minimum and 75.000 rubles as a maximum sum of transaction. Besides, commission fee for the operation is 1% of the whole sum while holders of MasterCard or Maestro don't have to pay any fee till the end of 2016.

Technical support of transactions is provided by three main operators. The first one is VTB24 – subsidiary of VTB bank – that provides the payment itself. Other two are responsible for processing of payments – Mail.ru and processing company MultiKarta. The point of the whole process is to ensure the security of transaction in every stage.

To use the service, person needs to choose "Money" option in private messages, specify the sum and enter valid card details. After this algorithm, the transfer should be confirmed by validation code sent by SMS. And after that recipient should specify details of the card where he or she wants to receive money.

All the VK Money transactions are secured by 3-D Secure system. This protocol developed by Visa and adapted for MasterCard allows authentication of cardholder by issuer through the use of a password. Such system is provided, first of all, for reducing the likelihood of frauds in using cards however it also enhances confidence of transaction. 3 Ds stands for 3 Domain Secure or for three parties involved in the process: Vendor, Acquiring Bank, Visa and MasterCard (web-merchant.co.uk). In case with VK Money, these three Ds are user-sender, bank of user-receiver and processing element. Users don't need to have special software or specific skills to use this protocol, meanwhile 3-D Secure provides reduce the risk of frauds and decreasing number of disputed transactions.

However, since the very beginning of P2P system in VK, there have been lots of critics from VK users who were sceptic about new feature. The point is that there is significant amount of fraudsters among network service clients. They are hacking accounts to send messages to user's friends requesting an amount of money to borrow. The biggest problem nowadays is that there are hackers who firstly read through the chat to understand which sort of behaviour can be seen unsuspecting to other user and after that start a dialog. Unfortunately, the solvation of this problem at these days is totally up to users. Besides, there is still a quite big range of unreliable online stores asking prepayments for their goods. And next big step for VK management should be providing control of these kinds of frauds.

**Conclusion**

Social Network platforms are an integral part of the Web as it impacts both on society and technology. As it working for Actor Network Theory, technological and social parts are inseparable – by attempting to simplify some social processes developers of such platforms improve technical tools. Examination of social networking platform VK demonstrates really high level of integrity of technologies in society and vice versa. Such collaboration is considered as one of the most widespread networks because of its effectivity in connecting people from all over the world in different groups, communities and the society itself.

Web networking platform is, indeed, a creation of technological development. More and more products of software engineering have been used in this particular field in last several years. However, it is SOCIAL network with its social norms, economic and political rights and duties. Thus interacting in the social networking system users should take into account lots of things.

Like the majority of P2P payment systems VK Money luck sender and receiver protection. As it meant to be personal the service targets money transfers back and forth only with people user know and trust. Despite all protection there is always probability of human error.

Therefore, risk reduction requires not only solving computer security problems but also social consciousness of Web clients.

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1. \* Dave Winer, software pioneer [↑](#footnote-ref-1)