

Trio out to protect film sector

Pirate Pay's creators say they can prevent movies from being copied online, writes Elena Shipilova

In 2009, brothers Andrei and Alexei Klimenko and their friend Dmitry Shuvaev created a file-sharing, traffic-management solution for an internet-service-provider (ISP) network. Shortly afterwards, the three twentysomethings realised that their application had some unintended but potentially significant opportunities for intellectual property protection.

"After creating the prototype, we realised we could more generally prevent files from being downloaded, which meant that the program had great promise in combating the spread of pirated content," says Andrei Klimenko, now the chief executive of the trio's Perm-based company, Pirate Pay.

The technology prevents file sharing in torrent networks. These peer-to-peer (p2p) file-sharing solutions allow large amounts of data to be transferred between individuals. After the first user uploads a file to an accessible network, the file does not live in any central location, but is accessible only from people who have already accessed it. In order to download a file, however, these secondary users must know the internet protocol (IP) address of a computer that has the file. Without the data, the connection terminates and the file cannot be downloaded. Shuvaev and the Klimenko brothers found a way to prevent these secondary downloads from taking place, even when the IP address is known.

"It was not so hard to do from inside an ISP's network. But to turn the technology into a global service, we had to convince all ISPs to acquire our solution. This is, what someone could call, mission impossible. So to create a global service, we had to find the way to do it from the cloud," Andrei Klimenko says.



"So we needed money for development."

The partners quickly found that obtaining the financial support needed to refine the technology into a successful venture was not a simple task, but after taking part in many grant competitions, their efforts began to pay off. The Microsoft Seed Financing Fund has invested US\$100,000; the Bortnik Fund, which assists small innovative enterprises, contributed approximately US\$34,000; and, perhaps most significantly, the Skolkovo Innovation Center accepted the company as a resident, which will result in certain tax benefits and interaction with other innovators. The trio have recruited four programmers, expanding their staff to seven people.

"The underlying technology of Pirate Pay has no analogues in the world," says Alexander Turkot, executive director of the Skolkovo Information Technologies Cluster. Potential residents at Skolkovo, Russia's government-supported answer to Silicon Valley, are assessed according to several criteria, including scientific in-



Dmitry Shuvaev

- > **TITLE:** DEVELOPMENT DIRECTOR
- > **AGE:** 27
- > **STUDIED:** MANAGEMENT

Dmitry Shuvaev completed his studies at the Perm branch of Moscow's Higher School of Economics in 2004, specialising in developing IT start-ups. He later worked with a commercial design studio and a telecom company.

Andrei Klimenko

- > **TITLE:** FOUNDER, CEO
- > **AGE:** 29
- > **STUDIED:** PHYSICS

Andrei Klimenko was a physics teacher before he joined a Perm-based telecom company as a sales manager in 2002. Three years later, he launched Perm's first network of Wi-fi hot spots. He also founded another local start-up before launching Pirate Pay.

Alexei Klimenko

- > **TITLE:** FOUNDER, CTO
- > **AGE:** 28
- > **STUDIED:** PHYSICS

After earning a degree in physics at Perm State University, Alexei Klimenko worked as an engineer before his stints in sales and management in the local telecom sector. Before Pirate Pay, he was involved with implementing services for telecom clients.

novation and the prospect of commercialisation.

A solution for a pressing problem

The problem of copyright infringement in Russia is extremely serious, and there is significant international pressure on the government to crack down on what is seen to be rampant piracy. Foreigners in Russia find they can obtain foreign films before their release dates in the United States. According to various estimates, filmmakers lose about US\$500 million a year to piracy. Hundreds of thousands of gigabytes of illegal content are downloaded every day through file-sharing services, including computer

software, music and films. Threatening internet users with legal liability or appealing to their consciences has largely failed, and, as a result, the company has attracted attention. In December last year, the film *Vysotsky. Thanks to God I'm Alive* came out in cinemas and, for a month after its opening, Pirate Pay protected the film on torrent networks.

"We used a number of servers to make a connection to each and every p2p client that distributed this film. Then Pirate Pay sent specific traffic to confuse these clients about the real IP addresses of other clients and to make them disconnect from each other," Andrei Klimenko says. "Not all the goals were reached. But nearly 50,000 users did not

complete their downloads." This company's successful defence of the film brought in its first big payday. Company officials will not discuss exact earnings, but say that projects would cost clients between approximately US\$12,000 and US\$50,000, depending on the resources needed to mount a defence.

"We try to conduct deals with a profit margin," Andrei Klimenko says. "However, significantly more is currently being spent on development than what we are earning, and thus there is not yet an opportunity to recoup our expenses."

In the next two years, the company plans to consolidate its place in the Russian market and gain an international foothold from Skolkovo.

Nation's online presence booming, McKinsey says

Anna Andrianova RGC

Russia's established internet players are now competing with global giants, and their success could pave the way for investor interest in new start-ups.

A new report by global management consulting firm McKinsey & Co suggests Russian players will see significant growth over the next few years, partly thanks to the rapid growth of Russian applications. Russian is the second-fastest-growing language on the internet, after Arabic.

"Within the next two or three years we'll witness quite a bit of growth being driven essentially by the infrastructure being rolled out as well as huge investment going into the internet sphere," says Aigool Khalikova, an associate principal with McKinsey. Speaking during the Digital Life Design Conference in Moscow, Khalikova said the "number of large budget e-commerce start-ups started within the past year is huge, each driving [online] penetration, traffic and revenues".

Last year, Yandex, Russia's leading

search engine, launched a facility for Turkish users, offering search, news aggregation, local maps, images and videos. The company announced that it had hit 100,000 visitors per day in Turkey earlier this year. Yandex leads in the Russian market with 59.60 per cent, followed by Google with 25.9 per cent, according to LiveInternet data for 2012. One of Yandex's new innovations is social search, which aggregates feeds from Twitter, Facebook, and Russian networks like VKontakte, Odnoklassniki and LiveJournal. "Social networks will [increasingly]

penetrate into other businesses, like music, video and e-commerce," says Ilya Shirokov, vice-president and head of social networks business units at Mail.ru Group. Social network Odnoklassniki, part of Mail.ru group, entered Uzbekistan with a project tailored for Uzbek users as part of a test to brand itself among non-Russian speakers. Some internet businesses in Russia are focused only on Russians, such as Ostrovok, a hotel-booking service. Last year, Ostrovok received a first round of investment of US\$13.5 million from backers such as

General Catalyst Partners, which also funded Kayak, the US online search service for travellers. Deputy Prime Minister Arkady Dvorkovich, said that "the internet and digital technologies make life easier and the Russian government has to provide an infrastructure for innovation".

He cited the Skolkovo Fund as a catalyst for development. Skolkovo aims to open an innovation centre near Moscow, and already has partners such as IBM, Intel, Microsoft and General Electric.