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# Investment case

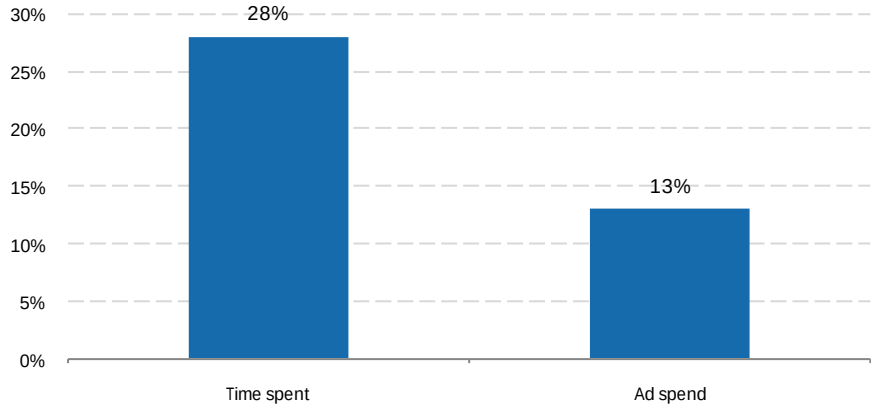
Mail.ru group is a holding of various internet assets put together in 2009 to create Europe's largest internet company. The lion's share of Mail.ru's value is its stake in Facebook, which is worth 31% of the group's value. Together with other minority stakes, these represent 50% of the group value. The remaining consolidated business (50% of the value) consists of a web portal, MMO games and social networks.

Fig. 1: Sum of the parts valuation for the Mail.ru Group, $m

Ownership

Advertising shifts online, but slowly. The inventories of Russian online companies are far from being sold out, since internet usage is rising faster than the corresponding budgets directed toward online advertising. This is not unique to Russia, as we see a similar picture in the US, where the money share of online media is only half of the viewership share. As such, the 40% in advertising revenue growth expected by Mail.ru could surprise on the downside. We see 25-30% CAGR over the next 5 years, implying a slower transition away from traditional media (such as TV and print).

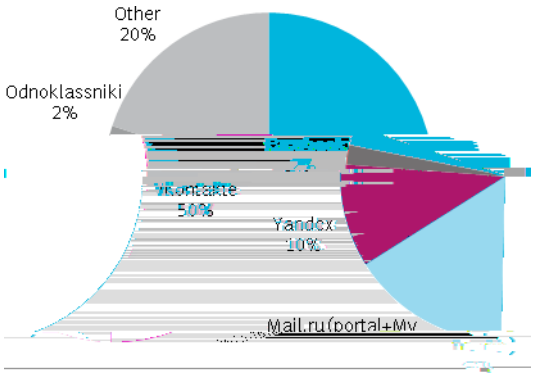
Fig. 3: US viewership vs. ad revenues share for internet




Source: North American Technographics, Yahoo

**Mail.ru's share in online advertising will be flat at best.** Mail.ru's monetization in display ads is already above average and its 30% share of the display ads is unlikely to increase. Based on daily page views by Russian visitors, we estimate the viewership share of Mail.ru at 16%. We see a substantial high risk that market share will go to Vkontakte (in which Mail.ru has a 32.5% stake) and to Yandex (likely to IPO in June-July 2011). sia correeva o,weheras is

Fig. 4: Daily page views by top Russian websites




Source: TNS, Otkritie estimates

**Russian social networks' ARPU higherSourceDaR2 Tr 0.n0@0560003way from ADaS91-10(**

# Valuation

## Discounted cash flow valuation

**In the DCF valuation we used** 12% WACC, a 4% terminal growth rate, and a $2.9bn value of associates. The fair equity value based on DCF is $6.0bn, or $28.4 per diluted number of shares. **Our 12 month targe price is $31.5/share.**

Fig. 8: DCF calculation

| | 2011E | 2012E | 2013E | 2014E | 2015E |
|---|---|---|---|---|---|
| EBIT | 171 | 223 | 275 | 332 | 395 |
| Tax on EBIT | -43 | -56 | -69 | -83 | -99 |
| DDA | 32 | 42 | 52 | | |

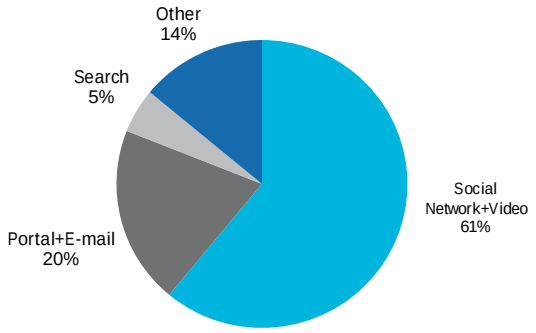
## Peer comparison

Mail.ru trades at a 5

Ot

In contrast to usage patterns in the US, social networks dominate among the total time spent online in Russia. We do not expect Russian internet usage to converge with the US pattern, as Russia's internet is younger and thus reflects different user preferences. The key point worth here is that growth of social networks in Russia is not a convergence story. The situation in China is similar to Russia (see the BRIC section of this report for more on this issue, on page 32).

Fig. 15: Portion of time spent for top content categories in Russia




Source: comScore, Otkritie estimates

Fig. 16: Portion of time spent for top content categories in US

Source: comScore, Otkritie estimates

## How do Russian internet companies monetize

Russian social networks lead in terms of per user monetization due to a strong focus on social games and other virtual content. E-commerce already occupies a larger share in retail than in Western countries. However, Russian online advertising lags behind, though it is catching up. Internet value added services (IVAS) are a completely new market enjoying robust growth, but it is difficult to accurately assess how long it might last.

Online advertising takes market share from traditional media, such as TV and print. The more time people spend online the higher the value for advertisers. Moreover, more time online means that advertisers can better target their audience since more information becomes available per each user (which is not the case with TV). Buyers of TV advertising receive viewer information on gender and age group, which helps online advertisers know how to tailor their messages to likely viewer interests and taste (for example, by information from social network profiles). The reality however is that in Russia (as in the US) advertisers are still not used to dealing with the complex profiles of target audiences, hence they still relegate online advertising to a small portion of their ad budgets, which are viewed

multiples used for valuing such companies. Consequently, we looked at the Chinese, Indian and Brazilian internet worlds since these countries are large enough to incubate big internet companies that do not necessarily have to go global (we do not see Russian internet companies going global). As such we asked ourselves whether the market for Russian internet users is worth more than the market for Chinese internet users, and if so, by how much. We came to the following conclusions:

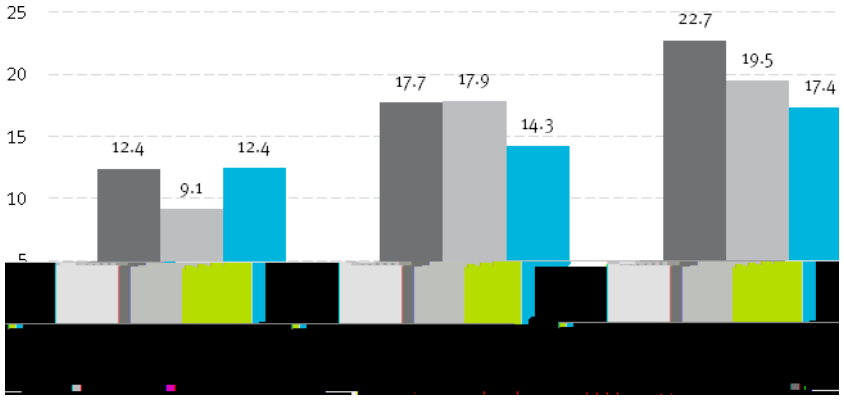
- Chinese users already exhibit comprehensive online behavior, with high levels of data-heavy services used (Games, Video, Music). Russians and Brazilians demonstrate behaviour oriented to common social networks, while Indian users mostly spend their time on news sites and e-mail.
- Users in China have higher ARPUs than Russians and Brazilians, though the disposable income of the average Chinese user is 4 times lower than users in Russia or Brazil, hence has growth potential.
- Telecom infrastructure to develop in China**.** While urban areas are already well-developed, telecom infrastructure in rural areas is not suitable for massive internet usage. We see great potential for new users to join life on the internet in China and India, while infrastructure in Russia is well-developed and the majority of users have available internet access.
- Chinese users are the most valuable among the BRIC countries. Given the above, we think that Chinese companies should trade at a premium to their BRIC counterparts.

# Bottom up analysis of businesses that Mail.ru consolidates

In the bottom up valuation we have divided Mail.ru business into 3 segments:

- Social networks

Fig. 25: Russian social network unique user dynamics, m users

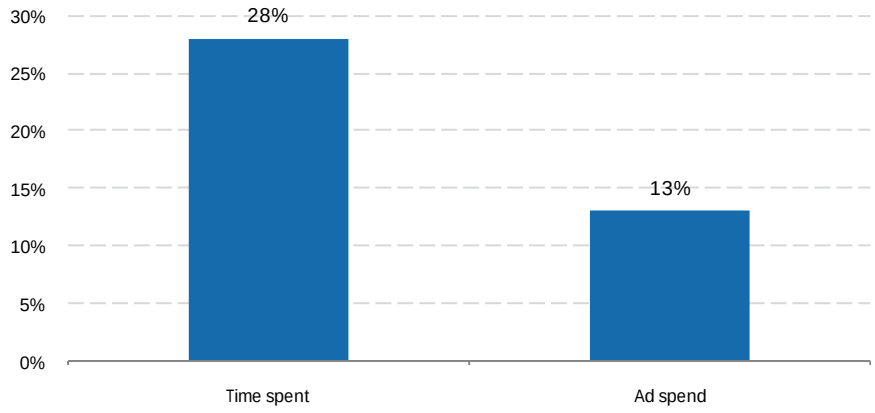



Source: TNS

Online advertising will grow at 32% CAGR for the next 5 years… The figure of 32% growth is a fairly safe assumption, compared with TV ad market growth of 18% CAGR. The internet is clearly taking away its share of viewers from other media, mostly from print and TV. However, in order to challenge TV advertising's dominance, the amount of viewer time spent online would have to at least triple.

…, but not more. We do not expect growth to be much faster since the shift of advertisers towards new media is slower than the shift of actual consumers. For instance, in the US there is a significant disconnect between the share of viewers and the share of advertising money that is spent on the internet. In another words, in the US the internet already has a far larger share of viewers than it has a share of advertising revenues. Assuming that Russia follows this pattern, we will first see a pickup in internet usage, while advertisers rotate their budgets at a much slower pace.

Fig. 26: US viewership vs. ad revenues; internet and TV




Source: North American Technographics, Yahoo

The community value added services are bigger than online ads. The success of social networks, especially in Russia, has been a function of the popularity of community games and virtual goods, called community IVAS. It is an absolutely new market, which saw a substantial pick-up starting in 2009. Russians are already among the global leaders in terms of average time spent on community IVAS, which we estimate reached $0.75/month in 2H10. The dynamics of this new segment are strong, and we anticipate community IVAS ARPU to grow at 16% CAGR until 2015.

Fig. 27: Community IVAS growth

Fig. 28: Community IVAS ARPU: Russia vs.

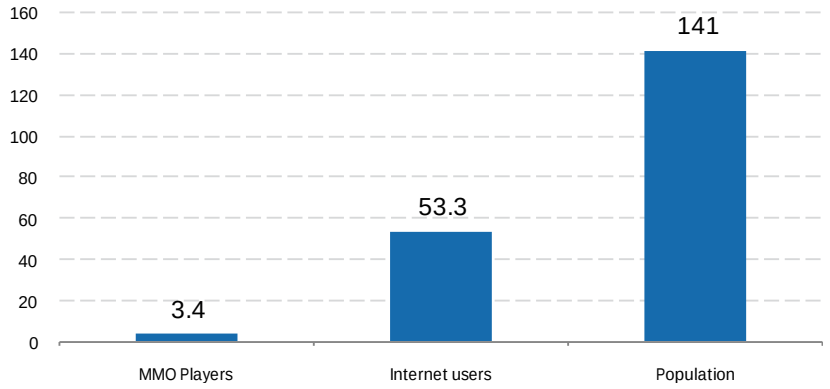
Perfect World. We consider the Chinese game developer Perfect World to be the closest peer to Mail.ru's MMO game division. Perfect World is a $1bn company with more than a million active players in China, who play self-developed games. In addition, Perfect World generates 12% of its revenues from licensing its games abroad. A game with the same name as the company, *Perfect World*, is the #1 game in Mail.ru's portfolio. Revenues of the company Perfect World increased 10% in 9M10, reaching $276m, with an EBITDA margin of 32%. The stock of China's Perfect World trades at 2x of 2011 sales and 5x on a 2011 EBITDA.

Aging titles of Mail.ru. The top 3 games of Mail.ru generate 2/3 of its total MMO revenues, representing 55% of the total active player base of Mail.ru. Two out of the top three games have been running for over 2 years, while Allods is a fairly new release (in 2009). Given that the typical lifetime of an MMO game is 5-7 years, the top 2 games will need to be replaced, which poses some risk to revenue estimates for 2011 and beyond.

Fig. 33: Top 3 games: active players, paying players

| Name | type | ownership | Active users, '000 June 2010 | Paying users, '000 June 2010 |
|---|---|---|---|---|
| Legend | MMORPG | Mail.ru | 102 | 20 |

Fig. 35: MMO players vs. the internet users vs the population, m people




Source: Otkritie estimates

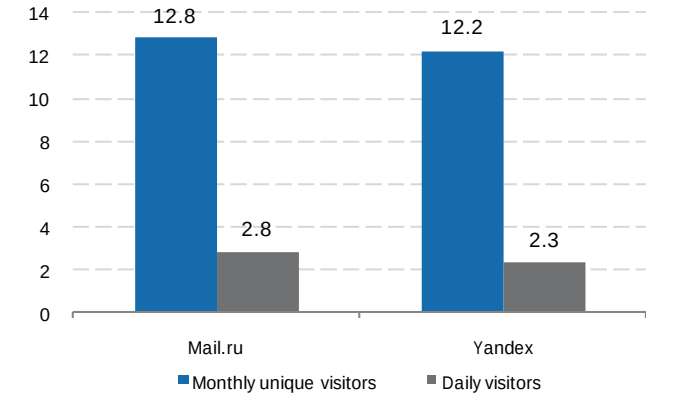
Plenty of competition. We estimate Mail.ru's market share in Russia at below 20%, with competition coming not only from locals but also from localized foreign titles. The main competitors are Innova (tit-9€04C3m0 0 1 35.4 811.56 -3(p 1e50.0455)0g1 505.7

## Mail.ru portal

Portal drives the cross-usage of Mail.ru sites

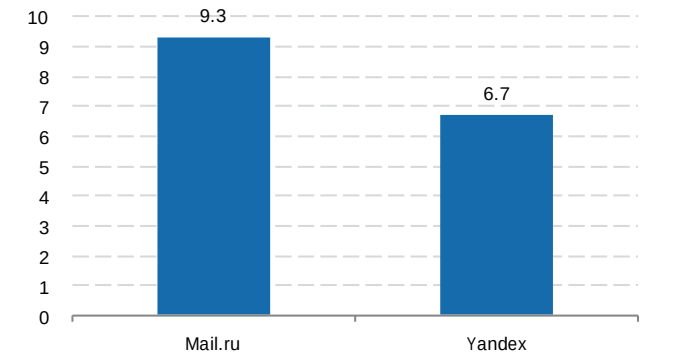
Display advertising –

Fig.39: News, average visitors (December 2010), m people




Source: TNS, Otkritie estimates

Fig.40: News, total pages viewed per day (December 2010), m people




Source: TNS, Otkritie estimates

Yandex clearly beats Mail.ru in total for all categories where the companies share a presence. Though Mail.ru leads in TV-guide, auto reviews, and postcards, Yandex garners the majority of users for weather forecasts, price comparisons, online maps and dictionaries.

Fig.41: Competing portal sites' average visitors (December 2010), m people

Fig.42:

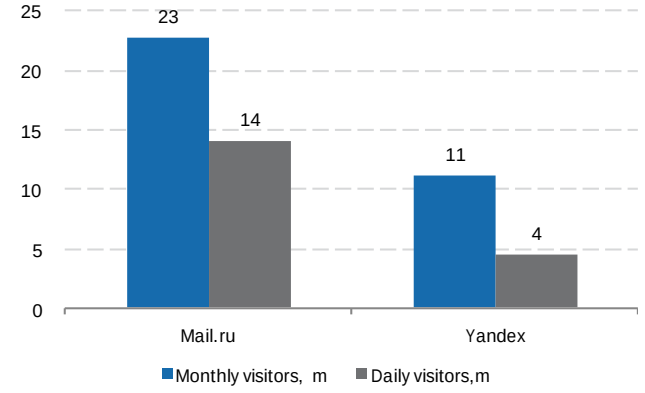
## E-mail and Search

Mail.ru's e-mail service is the most popular on the Russian market, while Mail.ru's search engine is the 3rd popular search engine in Russia.

Context advertising – its main revenue source. Though the overall display advertising market is expected to grow at 28% CAGR in 2010-2015, Mail.ru is expected to lose market share.

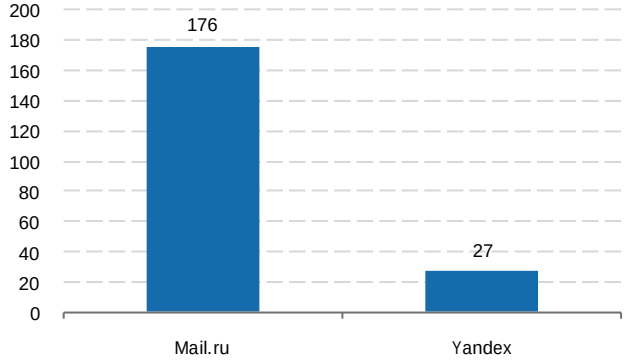
Mail.ru dominates the Russian e-mail market with 23m unique users every month, which is more than 43% of Russia's monthly internet audience. Its closest competitor, Yandex mail, is only half as popular. Moreover, Mail.ru e-mail users are more active, each visiting on average 15.8 pages on its website daily, which is 2.5x more than Yandex mail users.

Fig.45: E-mail average visitors (December 2010), m people




Source: TNS, Otkritie estimates

Fig.46:E-mail total pages viewed per day (December 2010), m people




Source: TNS, Otkritie estimates

Mail.ru has the 3rd most popular search engine on the domestic market. Mail.ru provides internet search services that help users find webpages, photos, videos, products and services, using Russian language search terms. Mail.ru's search engine has an average of 2.0 million daily unique users in Russia, 11.9 million monthly unique users in Russia, and 292 million monthly page views from users in Russia (TNS December 2010 data). According to data from liveinternet.ru, the search services of Mail.ru had a 7.3% share of Russia's total search market in February 2011.

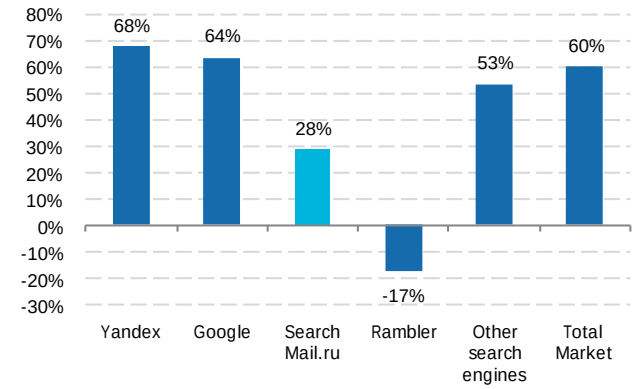
Fig. 47: : Portion of Russia's search market by redirects from search sites (February 2011), m redirects



Source: Liveinternet, Otkritie estimates

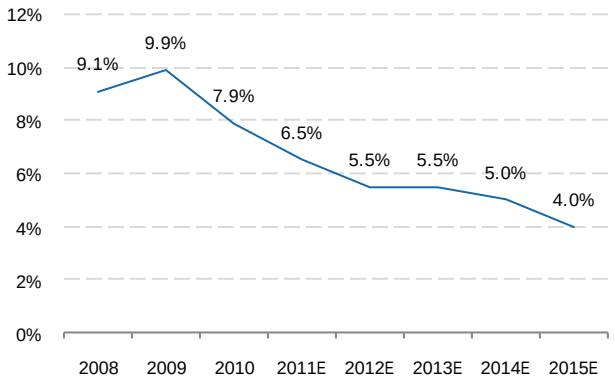
Mail.ru is losing market share in the search segment because it is growing at a slower pace than the overall market. Likewise, it is underperforming its major competitors (such as Yandex and Google) in terms of growth dynamics. Since the beginning of 2010, Mail.ru's market share has slipped from 9.8% to 7.3%, while Yandex saw an increase in its market share from 61.9% to 64.9% YoY.

Fig.48: 2010 YoY growth in search usage , %




Source: Liveinternet, Otkritie estimates

Fig.49:Mail.ru's search market volume share, %




Source: TNS, Otkritie estimates

We expect Mail.ru's market share to drop to 4% by the end of 2015. Mail.ru uses its own internally developed search engine technology, which was introduced at the beginning of 2010 in order to replace its use of Yandex's search engine.

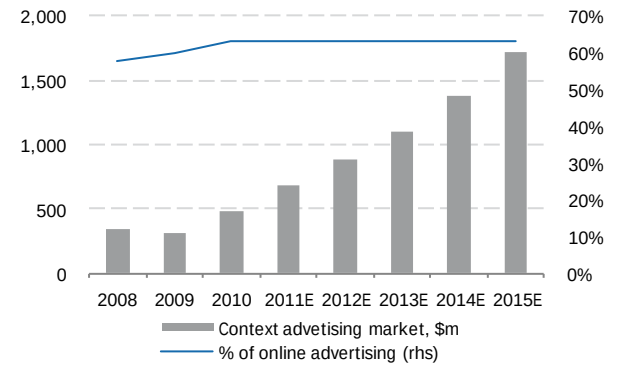
Mail.ru's search and e-mail services generate revenue through context advertising made through Google's AdWords technology, which displays relevant ads using an auction-based program from Google in which advertisers bid to have their sponsored advertisements appear when specified search queries are entered. When a customer clicks on a sponsored advertisement, Google receives a fee from the advertiser, and shares a portion of that revenue with Mail.ru.

Valuation drivers. As e-mail and search websites derive revenue primarily from context advertising, there are 2 main drivers of its valuation:

Context advertising market growth. We expect context advertising to grow at 29% CAGR, representing a stable 63% of total online advertising in Russia.

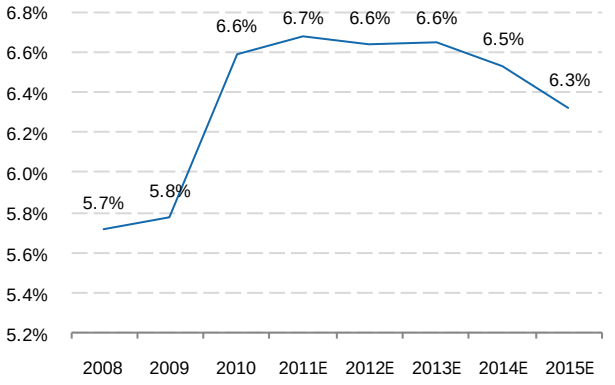
Mail.ru's share of the context advertising market. Its share of this market is driven by user engagement in search and e-mail, along with the monetization of this engagement. While we anticipate that its user engagement will decline, Mail.ru is expected to boost monetization in 2010 and 2011, which will stabilize its market share until 2013.

Fig.50: Context advertising market




Source: Otkritie estimates

Fig.51: Mail.ru's share of the context advertising market, %




Source: Company data, Otkritie estimates

## Jobs

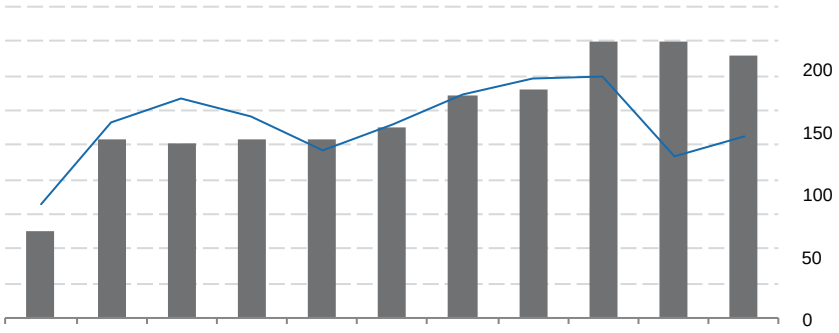
While Headhunter is the most popular job site in Russia, it represents only a minor portion of Mail.ru's business.

We expect Headhunter revenues to grow at 19% CAGR in 2010-2015.

Jobs segment is a minor portion of Mail.ru's business. The jobs segment is represented by the Headhunter website (HH.ru). This segment generated revenues of $16.7m in 2009 and $28.7 in 2010, mainly through subscriptions to its job listings.

The recruiting business is cyclical and depends on overall labor market sentiment. 2010 was a very successful year for recruitment, with the usage statistics for headhunter reflecting a 200% increase in its monthly user base and a 60% rise in the total number of pages viewed on the site.

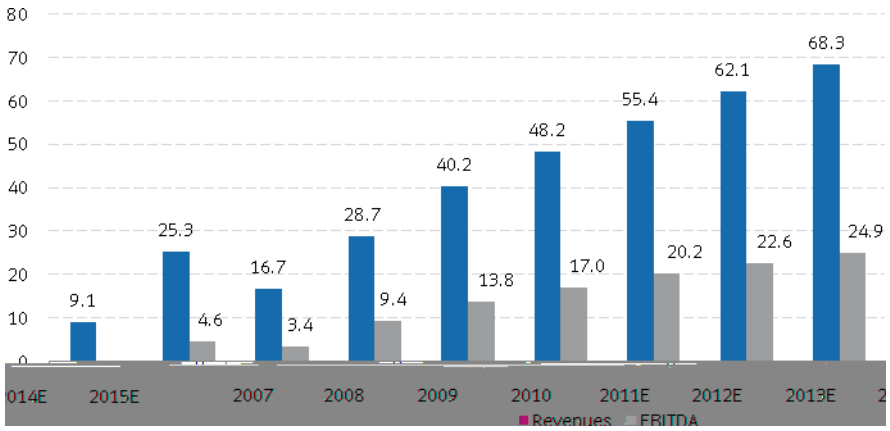
Fig. 54: Headhunter usage statistics, 2010




Source: TNS, Otkritie estimates

Headhunter revenues reached $29m in 2010, and we forecast growth at 19% CAGR thereafter. We attribute most of the revenue growth to 9% CAGR of internet penetration in Russia, on the back of the overall growth in the country's GDP. Operating costs are forecast to grow at 10% CAGR, reflecting the overall inflation in the cost of operations and wages of data centers.

Fig. 55: Headhunter financial projections, $m




Source: Company data Otkritie estimates

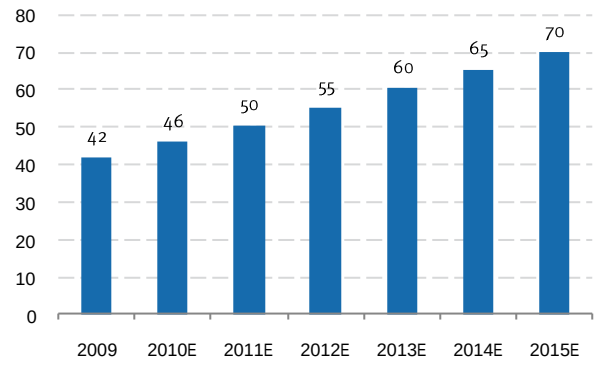
# Valuation of minority investments

We estimate that 50

Fig.58: Facebook valuation model

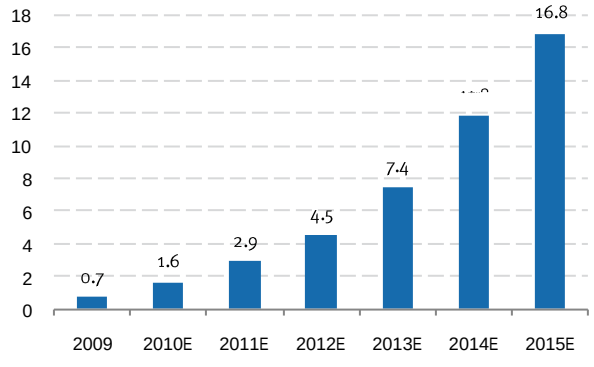
| | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|---|---|
| World GDP, $bn | 58,068 | 60,797 | 63,533 | 66,329 | 68,982 | 71,051 | 72,472 |
| World GDP growth, % | | 5% | 5% | 4% | 4% | 3% | 2% |
| Global ad budget % of GDP | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% | 0.6% |
| Online add budget at % of total ad budget | 12% | 13% | 13% | 14% | 15% | 15% | 16% |
| Online add budget, $bn | 41.81 | 45.96 | 50.43 | 55.28 | 60.37 | 65.29 | 69.93 |
| Facebook audience, m peop20(2)4(8)-135 | | | | | | | |

Fig.61: Global online advertising spending, $bn




Source: WARC, UN, Zenith Optimedia, eMarketer, Otkritie estimates

Fig.62: Facebook revenue, $m




Source: WSJ, Otkritie estimates



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In

Fig.70: Mail.ru's venture investments

| Company | Website | Mail.ru stake,% | Daily active users, '000 | Description | Value per daily user, $ | Company value, $m | Mail.ru stake value, $m |
|---|---|---|---|---|---|---|---|
| B2B | b2b-center.ru | 15% | 4.9 | Business to business online trade system | 15 | 0.1 | 0.0 |
| Diary.ru | diary.ru | 50% | 218.6 | Blog service | 15 | 3.3 | 1.6 |
| Finance.ua | finance.ua | 25% | 37.17 | Ukrainian business portal | 15 | 0.6 | 0.1 |
| Free-lance | free-lance.ru | 38% | 176.1 | Free-lance job search portal | 15 | 2.6 | 1.0 |
| Habrahabr | habrahabr.ru | 44% | 581.5 | Collective blogs | 15 | 8.7 | 3.8 |
| Internest | adriver.ru soloway.ru | 20% | 133.5 | Display advertising technology solutions | 15 | 2.0 | 0.4 |
| LiveInternet | li.ru | 30% | 1449 | Blog service with online statistics | 15 | 21.7 | 6.5 |
| Meta | meta.ua | 26% | 91.7 | Ukrainian portal | 15 | 1.4 | 0.4 |
| Nadavi | nadavi.com.ua | 25% | 0.01 | Price comparison website | 15 | 0.0 | 0.0 |
| Nezabarom | nezabarom.ua | 25% | 0.01 | Ukrainian travel portal | 15 | 0.0 | 0.0 |
| Nigma | nigma.ru | 32% | 75.3 | Niche search engine | 15 | 1.1 | 0.4 |
| Nival Networks | zzima.com | 13% | 54.5 | Online games operator and developer | 15 | 0.8 | 0.1 |
| Sape | sape.ru | 27% | 628.7 | Links exchange | 15 | 9.4 | 2.5 |
| Subscribe | subscribe.ru | 40% | 239.7 | Email marketing service | 15 | 3.6 | 1.4 |
| Ucoz | ucoz.com | 30% | 279.4 | Website creation tools and hosting | 15 | 4.2 | 1.3 |
| Total | | | | | | 59.6 | 19.6 |

Source: Company data, Otkritie estimates

# Internet in BRIC

## Summary

In order to accurately value the internet user, we need to ascertain the difference between users in BRIC countries and compare that to users in developed markets. Understanding the current online behavior of users helps us recognize and predict what to expect in terms of consumer patterns in the future.

Chinese users are the most valuable among the BRIC countries. Chinese users already demonstrate comprehensive online behavior with high levels of data-heavy services used (Games, Video, Music). Russians and Brazilians spend most of their time in social networks, playing casual games and socializing with friends, while typical Indian users spend the bulk of their time on news sites and e-mail.

Low ing with frie

cities has already taken place, due to high availability and accessibility of all internet means. We anticipate that the current 20% penetration rate in Russian cities of over 100,000 inhabitants will rise only to 30%, which means an additional 8m users. China and India will experience higher double digit growth rates, with limitations mainly related to the development of 3G in rural areas.

Fig.76: Internet penetration , %

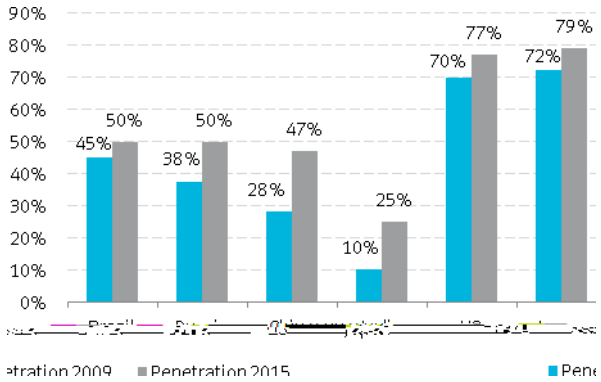
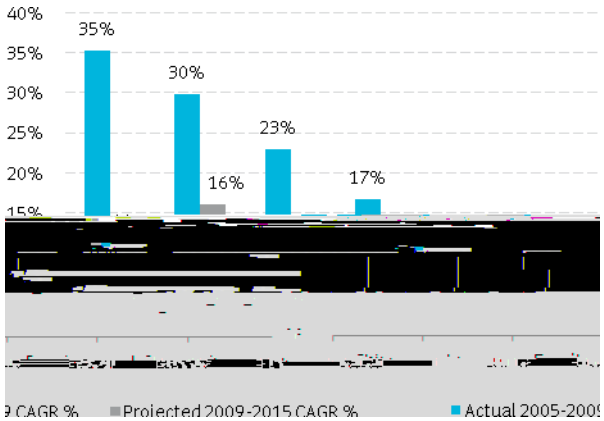



Fig.77: Internet penetration growth, %




Source: Euromonitor International, J'Son & Partners, BCG, Otk.98 925sitie

availability is limited, some users skip the stage of PC ownership and start exploring the internet directly from mobile devices. Mobile-handset affordability in India arises thanks to the existence of local brands, along with cheap handsets made available by global players. Given their already high penetration levels, mobile phones could be the groundbreaking tool for wider popularization of digital services and the internet.

Russia leads the BRIC countries in terms of SIM card penetration, followed by Brazil. Mobile phone penetration in these countries is at the level of developed countries like the US and Japan (or even higher), owing to the common practice of having more than one SIM-card.

Fig. 79: SIM cards penetration in 2009, % of population

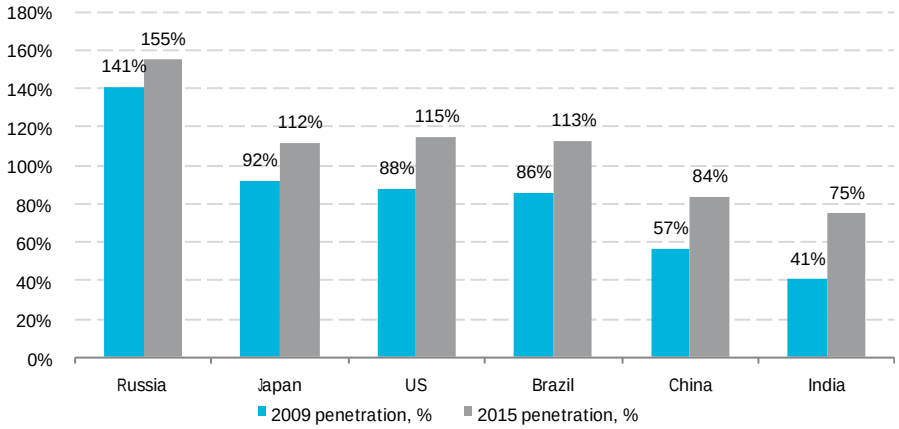
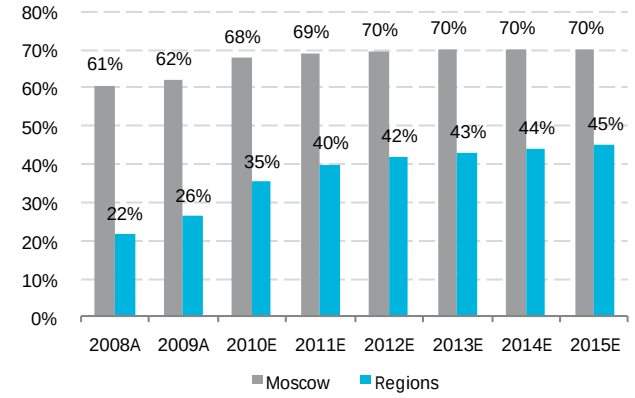
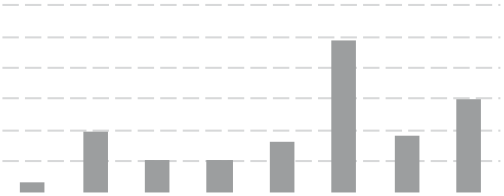


Fig. 81: Russian fixed broadband internet access penetration, %




Source: J'son & Partners, Otkritie estimates

Fig. 82: Russian regional internet penetration and average connection prices



Source: GroupM, Otkritie estimates

In relative terms, the same broadband connection in the country's Far East is 8x less affordable for the average citizen than in Moscow. It is therefore not surprising that there are vast differences in internet behavior across the country. We expect broadband penetration in the regions to grow at the moderate pace of 5% CAGR to 2015.

Fig. 83

## Internet Activity

The means of internet usage, the cost of internet connections, internet availability and cultural specifics, combine to determine user internet behavior.

China is a fairly developed market, with consumers demonstrating comprehensive and highly content-based behavior. They use internet connections for entertainment and for communication with each other. Chinese generally prefer instant messaging over e-mail: 87% of internet users use it for instant messages and 53% for e-mail. Chinese internet users are the most active in terms of online music, gaming, and news reading. As in the other BRIC countries, availability is the key driver of online usage.

Russia and Brazil exhibit similar activity patterns, with Brazilian users paying more attention to social networks. Search engines and e-mail are still the most popular activities in both Russia and Brazil. Russian users are also interested in weather sites (included in other categories).

India is quite different from the other BRIC countries. The most popular activities among Indian users are job hunting, e-mail, sports sites, dating, and e-greetings (included in other categories).

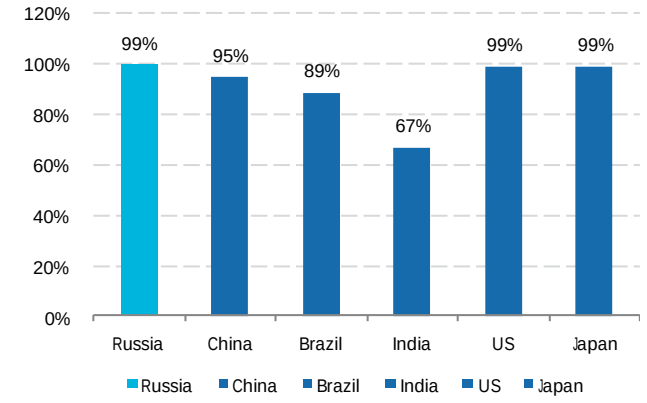
Fig.84: Predominant internet activities in 2009 by country, based on % of users engaged in each activity

| | Brazil | Russia | India | China | US | Japan |
|---|---|---|---|---|---|---|
| Instant messaging | | | | X | | |
| Music | | | | X | | |
| News | | | | X | X | X |
| Video | | | | X | X | |
| Search engines | | | | | | |

not so far from the global average of 74%. Relevant data shows that literacy is not a limiting factor for internet penetration and usage. Consumers in BRIC countries can use the Internet, and are able to adapt to new services and sites without difficulty.

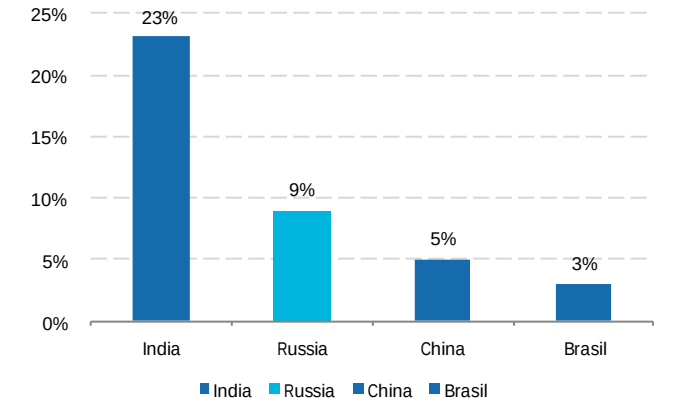
Only a fraction of the BRIC populations speak English, which leads to greater popularity of web services in local languages. This helps explain why Russian users stick to Russian language search engines (Yandex, Google, Mail.ru) and domestic social networks (Vkontakte, Odnoklassniki). In India, the country with the highest number of English speakers, three quarters of the top internet sites are international. Localization of international websites in BRIC states could be one of the major drivers for users to expand internet usage.

Fig.86: Literacy levels, %




Source: CIA, Otkritie

Fig.87: Percentage of population speaking English, %



# Revenue forecasts for Mail.ru Group

Fig. 88: Revenue forecast for Mail.ru segment (unconsolidated)

| | 2009 | 2010 | 2011E | 2012E | 2013E |
|---|---|---|---|---|---|
| Display advertising | 44.5 | 70.8 | 102 | 131 | 165 |
| Context advertising | 16 | 30.0 | 42 | 55 | 69 |
| MMO Games | 64.9 | 100 | 121 | 132 | 134 |
| Community IVAS | 7.1 | 19.8 | 30 | 39 | 49 |

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