

VO
ST
OK

NE
W

VE
NT
UR
ES

AVITO CASE STUDY

Below section is a summary of previously published Avito vertical deep dives. Even though Avito is no longer (since early 2019) part of the portfolio, this analysis is still very relevant and can be applied on many of our other marketplace and classifieds investments.

3Q17: Avito study – a collection of verticals

Background

Classified companies are often divided into verticals (Rightmove, Autotrader, Zillow, REA Group, etc) or horizontals (Blocket, Leboncoin, OLX).

Verticals have the benefit of a more specialized offering and a more clearly defined market positioning, which often make them the go to resources for anyone who wants to sell something of value in that specific vertical. Furthermore, market-leading verticals become “must haves” for professional sellers and therefore have substantial pricing power. However, they have limited touch points with consumers. Horizontals, on the other hand, have a much higher stickiness with consumers. In the mobile age, they often get a piece of the very valuable real estate on consumers’ smartphones. In market after market, we have seen horizontals expanding their traffic market share at the expense of verticals. However, due to a too generic product, limited sales efforts and lack of a strong vertical positioning, they have historically not had the pricing power of verticals. They have also been seen as more vulnerable to disruptors (e.g., Facebook Marketplace) and to pressure on advertising revenues.

In the vertical vs. horizontal taxonomy, Avito is currently considered a horizontal. However, thanks to Avito’s deliberate verticalization strategy during the past 5 years, it also makes sense from an investor’s perspective to analyze and evaluate Avito’s long-term potential as a collection of verticals. In this study, we will provide our analysis supporting this view and also present our way of thinking of the potential future value of Avito if considered as a collection of verticals. In subsequent Vostok New Ventures reports, we will dive deeper into each of the verticals.

What are the key differences between a vertical and a horizontal?

In table 1, we have done an overview of what we believe distinguishes verticals from horizontals in a number of key areas.

Where does Avito stand?

In each of these key areas, we think Avito is becoming more similar to the vertical classifieds players (table 2).

Still, Avito gets considerable horizontal synergies

Still, Avito does get a lot of synergies through making common solutions and collaborating across verticals where it makes sense.

By working across verticals, Avito gets economies of scale versus purely vertical competitors. The economies of scale translate into lower costs than vertical competitors, which means higher margins which, everything else equal, warrants a higher valuation.

In addition to the above, Avito also has a considerable advantage by being a single entry point. As more and more traffic moves to mobile devices, the real estate on consumers screens becomes more and more valuable. Having a single entry point to a number of verticals is a great advantage here – consumers often simply do not bother to download multiple vertical offerings but tend to use one horizontal marketplace. This is reflected in the higher share of mobile traffic of horizontals compared to verticals, which can be seen in multiple markets.

Implications for how investors will look at Avito’s future valuation potential

We believe there are three concrete implications for Avito’s long-term potential when looking at Avito as a collection of verticals rather than a horizontal.

1. Higher pricing power to drive top line growth

By comparing Avito to other horizontals, we believe investors are underestimating the future earnings power of Avito given their current positioning in each of the verticals. The future earnings power of Avito is better estimated by benchmarking each vertical independently to vertical leaders in other market. Avito has moved away from selling “pay as you go” products to moving professional clients to recurring subscriptions, very much in line with the leading vertical players internationally.

2. Lower risk of disruption reduces discount rate and warrants higher multiples

Investors tend to view horizontals as more vulnerable for disruption than verticals, and this is probably reasonable. But given Avito’s strong positioning in the verticals and given the high share of revenues coming from professional users in high ticket categories (a segment where social networks have historically been very weak), the risk of disruption in Avito’s case is lower than for horizontal players.

Another risk factor has been pressure on advertising revenues as giants such as Facebook and Google take a larger and larger share of advertisers’ revenues. Avito currently has a very low dependence on third party advertising revenues and we believe that future revenue growth will mainly come from other sources.

Table 1: What are the key differences between a vertical and a horizontal?

	Vertical	Horizontal
Product and monetization	<ul style="list-style-type: none"> • Dedicated for the vertical needs of both professional users and consumers • Recurring subscription revenues from professional users 	<ul style="list-style-type: none"> • “One size fits all” across categories • “Pay as you go” monetization products
Organization and sales	<ul style="list-style-type: none"> • Organization set up to serve the needs of the users in the vertical • Large sales forces building relations with professional users, high share of total revenues from professionals 	<ul style="list-style-type: none"> • Organization set up to serve the needs of the “lowest common denominator” across verticals • Large share of self service sales, i.e. customers buying services directly online, large share of revenues from private users
Market positioning	<ul style="list-style-type: none"> • The go to place when you want to sell or buy something of value • Top of mind in the vertical, highest share of leads 	<ul style="list-style-type: none"> • “Flea market”, mainly for used goods, low ticket items • Number two after vertical specialist, complementary marketplace for lower end items

Table 2: Where does Avito stand?

Product portfolio	<ul style="list-style-type: none"> • Increasingly tailored products to suit needs of each vertical. Products packaged into subscriptions that are sold on a recurring basis with high uptake among professional users • Launched completely new vertical offerings in e.g. real estate (Domofond) and auto (Autoteka) to take advantage of market opportunities • Custom made vertical products on the core Avito platform, e.g. CV database in Jobs • Custom made software solutions for professional users (ActiAgent for real estate agents, ActiDealer for auto dealers, moving into other verticals as well with similar offerings)
Organization and sales	<ul style="list-style-type: none"> • Heads of each vertical, • Vertical unit in product and development team to solve vertical specific pain points • Large, dedicated vertical commercial/sales teams with sales reps who have built long relationships for many years with key clients to build retention, step by step expanding ARPU (Average Revenue Per User) as product offering grows
Market positioning	<ul style="list-style-type: none"> • Top of mind in all categories • Not just seen as a “flea market” but Avito Auto, Avito Jobs, etc., each have high awareness in their respective category. Market leader in each of the verticals.

3. Synergies between verticals to deliver best in class margins

Avito has a cost advantage over vertical players due to fact that they can develop common solutions where it makes sense. Furthermore, advertising efforts also have scale effects since advertising for one vertical Avito brand often spills over to others. Lastly, Avito operates in a very large market and has already reached significant scale. We believe that Avito will be able to reach best in class margins of at least 70%.

Top down long-term valuation potential of Avito using international benchmarks

Given Avito’s market position as the clear number one in the key verticals and their verticalized approach, we don’t see any reasons for why Avito shouldn’t be able to monetize in line with leading international vertical peers over time and therefore attract a similar market cap, adjusted to the transaction values in the verticals in Russia.

What we have done in table 3 is to:

1. Look up an international peer with a position similar to the one we believe Avito will reach over time
2. Calculate a “market size ratio”, i.e. how the size of the peer’s market relates to the Russian market. Here we have looked at both how the number of transactions compares and how the average value per transaction compares
3. Calculated an “implied market cap”, which essentially is the current market cap of the peer divided by the market size ratio

Reaching a level of revenues and profits that would justify a valuation north of USD 10 bln will not happen overnight, but our view is that over time Avito should be able to reach such numbers given the “winner takes all” dynamics of the market and the company’s position.

Table 3: Top down long term valuation of Avito using international benchmarks

Vertical	Peer	Market size ratio compared to Russia	Implied market cap (USD bln)	Explanation of market size ratio (i.e. how the size of the peer’s market relates to the Russian market)
Auto	Auto Trader (UK)		2.9	Approximately same number of used cars sold per year. Price point in Russia lower
Real Estate	Rightmove (UK)		3.4	Number of transaction of secondary homes in Russia 2 times larger, but average UK home 3 times more expensive
Jobs	Seek (ANZ)		1.5	Russian job market substantially larger (6x), but average salary only a fraction of that in Australia and New Zealand.
Services	–		0.5	No good comparable publicly listed. Based on current run rate and Thumbtack raising at USD 1.3 bln
General	Mercadolibre (LatAm)		2.2	Mercadolibre’s addressable market 4.5 times larger in terms of population. GDP/capita relatively similar
Total			10.5	

4Q17: Real Estate

In the last quarterly report we presented the case for looking at Avito as a collection of verticals rather than a horizontal player when assessing the company's long-term potential. In this report we kick off the deep dives in each of Avito's verticals, starting with Real Estate.

Background

Our view is that the intrinsic value of a classifieds property can be derived from the total addressable market multiplied with the property's share of leads generated in that specific vertical.

The logic behind this is quite simple. Advertisers in a given vertical have a bag of money to spend on advertising. This bag of money can grow bigger (or smaller) with time, but the size of the advertising spend is unlikely to change with more than single digit percentage numbers per year. The total addressable market is often fairly stable.

What can change relatively quick, however, is how advertisers chose to distribute this spend.

In the last decade we have seen a tremendous shift in spend from offline to online. Advertisers have simply followed consumers as they have shifted their time allocated from offline to online, from print classifieds to online classifieds. As consumers' time allocation shifts from one type of media to another, so does the number of leads generated. And as one resource starts working better than the other – that is, starts generating more leads – advertisers move their spend to the best performing sources.

In the long run, a property's share of leads generated and share of spend should converge. In the short to medium term there might be nuances in different properties' monetization strategies, sales capabilities, etc., but we prefer to take the long view.

Therefore, in this report we will first look at the addressable market – in this case the Russian real estate market – and then at Avito's competitive position on this market. We will then use those data points as input for a discussion for Avito's real estate vertical potential on a stand alone basis.

The Russian real estate market

The inner workings of real estate markets might differ substantially from country to country. In some countries the real estate agent profession is licensed, in others (like Russia) all you need to call yourself an agent is a mobile phone and an account on the largest classifieds property. In some countries agents have exclusive mandates (i.e. the seller is bound to sell with the chosen agent for a period of time), and in other (like Russia) a property can be marketed by an unlimited number of agents.

Despite the differences, our experience is that the way agents think about marketing spend is remarkably similar. The price of the property multiplied with the commission rate equals the agent's gross proceeds from a sale. Every agent understands that a certain percentage – often around 5-10% – needs to be allocated to marketing of the

property. Each agent of course want to minimize this number, but the way the market works in most countries agents understands that this is a necessary cost of doing business. Again, there might be nuances deepening on region and subsets of the market, but our experience is that the above is correct on a high level.

So the formula for deciding the total addressable market is quite straight forward:

*number of properties sold per year * average price * average commission * share of gross revenue allocated to marketing.*

The Russian real estate market is huge in terms of number of transactions – we believe that around 2.5 million properties are transacted every year in a way relevant to Avito. The total number of transactions is substantially higher, but some of those transactions are not relevant to Avito since they happen without agents or are between family members or similar. 2.5 million is our rather conservative estimate (Avito's main business is in secondary sales – Avito is not as strong in new homes yet). This can be compared with 1.2 million homes on the UK market, the home of both Rightmove (USD 5.7 bn market cap) and Zoopla (USD 2.1 bn market cap). Or it can be compared with the Australian market where 0.5 million homes are sold each year and where REA Group is the leading property marketplace (USD 7.8 bn market cap with 94% of its revenues coming from the Australian market).

However, the average selling price in Russia is relatively low in an international perspective, much because of the weak rouble. We have used the pricing function on Domo-fond.ru and based on that made the assumption that the average price is RUB 4.0 mln.

The commission is typically between 2-3% – much in line with international benchmarks.

These numbers result in a total addressable market of about RUB 17.5 bn per year, summarized in the table below.

Metric	Number
Number of properties per year	2.5 mln
Average selling price	RUB 4 mln
Average commission	2-3%
Share of gross revenue allocated to marketing	5-10%
Total addressable market	Ca. RUB 17.5 bn

Internet's share of spend

According to the AKAR, The Association of Russian Advertisers, Internet surpassed TV as the largest advertising channel in terms of spend in the third quarter of 2017. This is a major milestone in the structural shift towards online, and the trend will continue. More than 40% of budgets are now allocated to online channels. Among smaller advertisers – such as real estate agents – the share of spend going to online is naturally much higher since this type of

advertisers cannot afford TV. We think it is reasonable to assume that at least half of RE agent's spend is allocated to online channels. So of the RUB 17.5 bn we assume that agents spend, around RUB 8.5–9.0 bn is directed to online channels.

Avito's position on the Russian real estate market

Avito's position on the Russian real estate market is immensely strong. In this section we will walk you through the different products Avito offers in the vertical and what market position the company has reached in the vertical by aggressively pushing these products to the market.

Avito Real Estate – Russia's leading RE vertical under Avito's umbrella brand

The Real Estate section of Avito has been present since the very early days, but it was not until 2012 that the company started to put serious efforts and resources behind creating awareness about the RE vertical for the general public. At this time, a large part of the transactions still happened through agents sitting on closed databases with objects for sale, and classifieds sites were mostly used to attract potential clients with fake items that were too good to be true. Through consistent marketing, sales and content moderation efforts, Avito Real Estate managed to build a functioning marketplace which quickly grew into the largest federal real estate marketplace in Russia.

Domofond – a 100% owned stand-alone vertical second only to Avito Real Estate

Domofond was started as a joint venture between Avito and South Africa's Property24. The rationale for launching was that there was no dedicated federal real estate vertical in Russia at the time, and that the Russian real estate market certainly is large enough to have both a leading horizontal player (Avito) and a vertical player. Unless Avito themselves took the position, someone else would. Among the pure Real Estate verticals, Domofond is now the largest federal vertical.

ActiAgent – a SaaS offering simplifying agents' daily life

ActiAgent is a software for agents where they can manage all their listings in a easy and intuitive way. Whereas the listing interface on Avito is built for private users, ActiAgent is built solely for professional users with their needs in mind. This creates a stronger connection between Avito and the agents, and become an even greater part of their everyday work.

Market position

Avito has a strong position in the real estate vertical in Russia with Avito Real Estate and Avito's wholly owned dedicated vertical Domofond. Together they are the clear market leader in the space. We estimate that Avito has 60–70% market share in terms of traffic and ultimately also leads. This is supported by research performed by independent market researchers, e.g. “sales tests” where the same homes are published on all services available and then the response is measured and from what site the response came. Similar numbers are reached for Avito when you ask people who have used Internet to search for properties about what service they actually used.

For the purposes of this exercise, we assume that agents allocate their spend in the same proportions as they get their leads. That is, that $\frac{2}{3}$ of the budget goes to Avito.

Valuation approach

Using this top down approach to calculate the pricing power and “fair revenue share” of Avito Real Estate, we land at approximately RUB 5.5–6.0 bn for the current year.

Zillow trade at 22.5 times 2018 earnings, Rightmove at 20.7 and REA Group at 20.1, but they all have substantially slower growth rate than Avito. A peer group of online classifieds in emerging markets trade at 27.4 times 2018 earnings. Given the growth rate of Avito, the quality of the company and for the reasons laid out in the 3Q17 report (higher pricing power, lower risk for disruption and synergies to drive best in class margins) we think a multiple of 25 is fully justified for Avito Real Estate on a stand alone basis. Assuming 60% EBITDA margin, we believe that the present value of the RE vertical only is somewhere around RUB 90 bn or USD 1.5 bn.

In the last report we calculated “implied market caps” of each verticals where we took a much longer horizon. In that report, we assigned a long term value potential of USD 3.4 bn to the RE vertical based on the current market cap of Rightmove and the relative sizes of the Russian and UK real estate markets. We still believe this number makes sense. With time, a number of important factors play into the Avito's hands: 1) the overall marketing budgets in Russia will grow, 2) more and more will move over to online, 3) Avito will take an even larger share of overall spend thanks to the industry dynamics, and 4) Avito will continue to launch new and innovative products expanding the market further.

1Q18: Jobs

For the 1Q18 report, we dive deeper into the Jobs vertical.

Background

As stated in the last report, our view is that the intrinsic value of a classifieds property can be derived from the total addressable market multiplied with the property's share of leads generated in that specific vertical.

While we believe this holds true for the Jobs vertical as well, one could argue that the picture is slightly more complex in this vertical. This is because the channels to find jobs are more fragmented than in other verticals. When looking for a home or a used car, a classifieds property is the starting point for a large majority of people. But for finding a new job – or a new employee – there are many alternative ways: recommendation from friends or colleagues; using a headhunter (or being headhunted); finding candidates or openings through offline advertising; recruiting from an internal or external database of CVs; etc.

Globally, there are fewer success cases in the Jobs vertical compared to e.g. Auto or Real Estate, and our view is that the fragmentation of ways to find a job is the main reason. The pricing power decreases when there are viable alternatives to the online platforms.

That being said, a couple of players (Avito being one of them) has managed to build successful and highly profitable businesses in this vertical. SEEK of Australia (with a strong international footprint) is another notable example, with a USD 7 bn market cap.

The Russian recruitment market and Avito's relevant addressable market

In simplified terms, the size of the recruitment market in any country is a product of 1) how many vacancies there are in a country each year and 2) how much money is being spent on average to fill each vacancy.

In this report, we will not do an attempt to calculate the *total* addressable recruitment market (including headhunting fees, etc.) since this would be too cumbersome and provide little additional value in assessing the opportunities ahead for Avito Jobs. Instead, we will focus on the *relevant* addressable market. In addition to calculating the number of vacancies and the spend per vacancy, we will also try to estimate how large share of vacancies that closed through online sources and thereby “monetizable” by Avito. This gets us the size of the market as of today.

How many vacancies are there?

The number of vacancies is a product of the size of the working population and the employee turnover – i.e. how many in the working population changes jobs each year. Russia is the 9th most populous country in the world with a population of roughly 147 million people (according to the Russian state statistics agency Rosstat). The working population is around 76 million people and is expected to be relatively stable or slightly declining in the coming years according to the same source. The turnover rate is between 25% and 30%, i.e. the average Russian employee changes workplace roughly every 3–4 years on average. This results in roughly 20 million job openings per year.

How large share of vacancies are relevant to Avito?

Not all vacancies are closed through online sources but are instead filled through other channels. Those “other channels” could be offline recruiting using e.g. advertising in print, recommendations from friends, headhunting or multiple positions being filled through one advertised vacancy.

Headhunter – the largest stand alone jobs vertical in Russia – has published their prospectus for a potential listing. According to their data (provided by J'Son & Partners), only ¼ of unique job positions were advertised online last year. This share is expected to grow rapidly over the coming years – to ⅓ next year and close to ½ in five years. This is a shift that is part of the wide structural shift from offline to online – a trend we believe will only continue.

With roughly 20 million total job openings and about 28% being advertised through online channels, we get to close to 6 million vacancies being advertised online per 2018.

The money spent online to fill each vacancy

High competition for talent have led to a great increase in the money spent online per advertised vacancy over the last years. This has been driven by structural factors of the Russian jobs market: low unemployment and low mobility of the work force, both resulting in that you have to fight harder to fill each vacancy.

Our estimate is that the average amount spent per vacancy advertised was RUB 1,500 in 2017. This is a high-level estimate based on the price lists of different job boards and the typical level of cross postings (posting the same ad on different job boards). We have also sanity checked the number through expert interviews.

Job positions advertised online

Metric	2014	2015	2016	2017E	2018E	2019E	2020E	2021E	2022E
% of unique job positions advertised online of total filled in job positions	15.6%	16.1%	19.5%	24.2%	28.0%	33.3%	37.1%	38.9%	41.4%

Resulting relevant addressable market

Putting our estimates together, we believe that the current size of the relevant addressable market is around RUB 9 bn yearly.

Size of labor force	75 mln
Turnover rate	25%
Number of job openings per year	20 mln
Share of job openings closed through online	30%
Number of vacancies relevant to online (approx.)	6 mln vacancies
Spend per vacancy advertised	RUB 1,500
Resulting online recruitment spend	RUB 9 bn

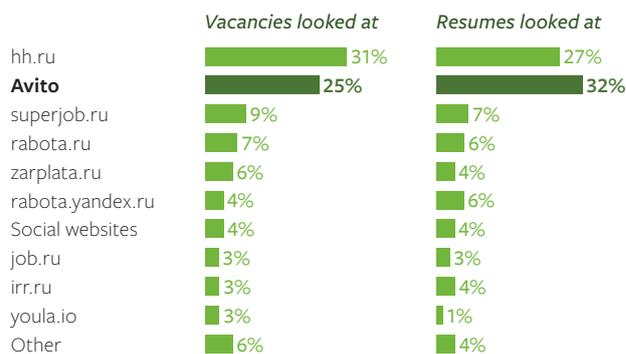
Avito's position on the relevant market

Avito holds a strong position on the recruitment market. It has a very strong position on the blue collar recruitment market. In white collar jobs, the position is not as strong, especially not in Moscow or St. Petersburg. But interestingly, since its launch in 2013 Avito Jobs has step by step moved up the ladder to more and more high-skilled jobs. If you are a Russian company operating in one of the regions, it is not uncommon to find your Head of Accounting on Avito. While having done an amazing job for a very long time, Headhunter is now being squeezed by Avito (growing from the blue collar segment and up) and professional networks (growing from the top percentages in Moscow and St. Petersburg and down).

To recruiters, Avito offers the possibility to publish job openings for a fee. Currently, 250,000+ such job openings are posted. The other option available to recruiters is to search in Avito's database of CVs posted by job seekers. A recruiter can see all details of the candidate in open view, but needs to pay a fee to get the contact details of the candidate.

A job seeker, in turn, can browse job openings posted by companies, contact employers via phone number directly from the mobile app and also attach his or her CV to the vacancies he/she thinks are relevant.

Through the development of these products and a deliberate sales, marketing and distribution strategy, Avito has managed to capture about 25% of the online recruitment market according to our estimates. When asking active job seekers (active during the last 12 months) what resource they used primarily, 25% answered Avito. When posing the same question to employers who actively looked for candidates, Avito's share is 32%.



A market share of about 25% is also supported by other estimates, such as top of mind research where approximately one third of job seekers mention Avito as their first-hand destination when looking for a job.

This leads us to believe that Avito also captures about 25% of the addressable market.

Valuation

Putting the above together, we land at current yearly revenues of about RUB 2.3 bn in the Jobs vertical for the last year, a number that should increase year by year driven by 1) the structural shift from offline to online, driving up both the share of vacancies published online and the spend per vacancy, and 2) Avito's market share increasing. In the current year, we expect the number to increase by at least 20% to about RUB 2.7 bn.

We believe that the Avito Jobs vertical should trade at similar multiples as other Avito verticals, given the future growth potential (see additional comments below). Applying a 60% profit margin and a 25x profit multiple, we land at a stand-alone value of about USD 700 mln (with a RUB/USD exchange rate of 60).

A few words about the future

The job markets are undergoing a huge change. It has never been easier to take up part-time or freelance jobs, and the preference to do so keeps on increasing among millennials worldwide. This part of the work force is ready to accept limited-term positions and often combine two or more jobs (or "gigs") at the time. The border between jobs and services is getting more blurred. To attract job seekers, you will need to be able to offer all types of opportunities. Needless to say, being a category leader in both Jobs and Services, like Avito, is a great competitive advantage as this shift materializes.

2Q18: Auto

Background

Auto has traditionally been one of the strongest classifieds verticals globally. There are plenty of success stories – AutoTrader in the UK, Autoscout24 in Germany, carsales.com in Australia and Blocket in Sweden, to mention a few. What is common for all these success stories is that they make the bulk of revenues from car dealers who advertise *used* cars on their platform. They are also active in countries with very well-developed dealer networks that have been active in the used car space for a long period of time.

In emerging economies, the car market is often structured differently. Dealers are primarily focused on selling new cars, and the used car trade is more done by privates or by so-called “grey” or “unofficial” dealers. A structure like that makes it harder to make substantial revenues from the traditional model of classifieds – private sellers are harder to monetize and no classifieds player has really cracked how to make real revenues from new cars as of yet.

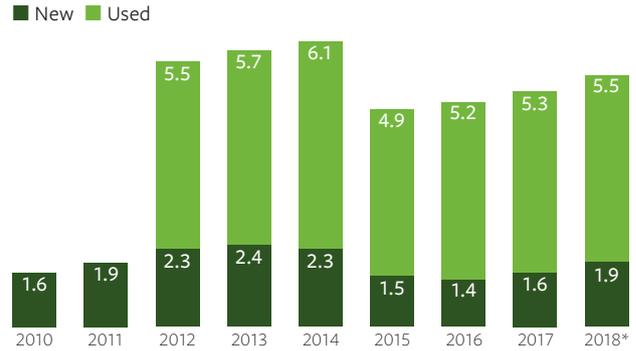
There is a lot of innovation going on in the digital car trading space. A common theme for most new models is the push to increase trust and transparency. Auto1 has built a multi-billion-dollar business by bringing liquidity and transparency to private sellers and professional car traders, and a number of clones have emerged across a number of geographies including Russia. This model includes an offline component with physical inspections being made of the car, and classifieds companies have not been late to offer the same service. There is also innovation happening in the new car space, with companies like TrueCar in the US and Carwow in the UK leading the charge.

Regardless of model – auto is a vertical where huge values are being transacted, and companies that connect buyers and sellers in a seamless way stand to profit handsomely.

The Russian auto market

Each year, somewhere between 6.5 and 8.5 million cars are transacted in Russia. Somewhere between 1.5 and 2.5 million of those are new car transactions. The number has varied considerably in the last decade with swings in the economy. Used car sales are more stable and typically fall between 5 and 6 million cars per year. The last few years, total sales numbers have stabilized and grown modestly after a sharp decline in 2015.

Annual sale of new and used cars in Russia, million



* Forecast.
Source: Autostat.ru, AEB

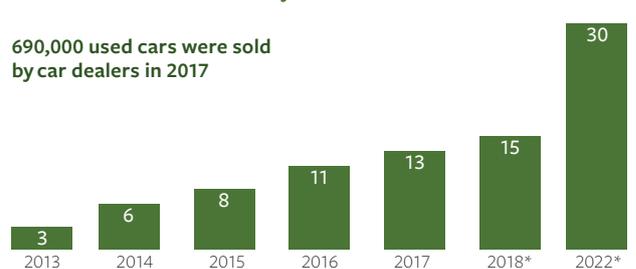
All new cars are obviously sold by car dealers, and a majority of used cars are sold by privates, which is a key difference compared to e.g. the UK or Nordic markets. Prior to the financial crisis in 2008, Russian auto dealers were almost exclusively focused on selling new cars. There was a strong consumer demand to buy new “innomarki” – cars from non-domestic brands – which were suddenly within reach for ordinary Russians thanks to rapidly increasing income levels.

At this time, the dealers’ share of used car sales was in the low single digits. The rest were dealt directly between consumers, or through “grey” dealers.

When the financial crisis of 2008 and 2009 hit, new car sales dropped significantly. In the years that followed, dealers started to look for other sources of income, and a few of them (especially in Moscow and St. Petersburg) made large bets on the used car market. Sales of new cars picked up significantly between 2011–2012, but then started to fall in 2013. 2015 was a crisis year when sales dropped 36%.

When sales of new cars started to tumble again in 2014 and 2015, more and more dealers moved into the used car space and the share of used cars sold by dealers really took off. The share has risen from low single digits in 2013 to 13% last year. This year the Russian Association of Car Dealers predicts that the share will grow to 15%. By 2022 the same organization believes the number will have increased to 30%. In Moscow and St. Petersburg the number will likely approach 50% – not too far off from the levels we see in countries like UK and Sweden (where dealers’ share of used car sales is around 65%).

Share of used cars sold by car dealers in Russia, %



* Forecast.
Source: Russian Association of Car Dealers (ROAD)

Relevant addressable market

A growing share of used cars sold by car dealers is very good news for classifieds companies, since it is hard to monetize private sellers. If you try to charge private sellers too aggressively, the risk is high that the seller will try to find other options to sell the car, especially if there are head-to-head competitors offering a liquid marketplace. When estimating the addressable market, we will therefore mainly focus on dealer spend. In order to estimate the classifieds spend per dealer in Russia, we will benchmark numbers from international peers.

By studying the latest annual report from AutoTrader, we can learn that AutoTrader charges the average dealer a bit north of GBP 20,000 per year and forecourt. 5 million used cars are sold every year by a bit more than 13,000 dealers, which means an average 380 cars per dealer and year.

Classifieds spend per car on AutoTrader is in other words around GBP 54 (GBP 20,340/380 cars). AutoTrader holds a market share of approximately 60% according to company reports and equity research. In total, a dealer therefore spends roughly GBP 90 per car on classifieds. Using the same methodology, we arrive at similar numbers in e.g. Sweden.

Assuming the same spend per car from Russian car dealers, we would arrive at a total dealer spend of approximately RUB 4.6 bn in 2018 after adjusting for car price differences (0.8 m used cars sold by dealers in 2018 multiplied by an average spend per car of RUB 5,750 (GBP 69). This is a fraction of e.g. the classifieds spend of UK dealers, and it is worth pointing out again that the key difference between the two markets is that the share of used cars sold by dealers is much higher in the UK compared to Russia. With time, this will change.

We conservatively estimate that a full 70% of total revenue in the vertical comes from auto dealers advertising used cars. The other 30% is made up by advertising revenues from car manufacturers, revenues from private users and other sub-verticals (such as spare parts, motorbikes, boats and heavy machinery), etc. That brings the current total market size to roughly RUB 6.5 bn.

Avito's offering

Avito Auto has developed a set of tools aimed at providing as much liquidity, trust and transparency as possible, regardless if you are a professional or private party in a car transaction.

Classifieds platform

The classifieds platform is the very core of Avito Auto's offering. This is where sellers go to publish items and where buyers go to browse.

The classifieds platform does not only include cars but also categories such as spare parts, motorcycles, boats and heavy machinery.

Professional tool for dealers

For dealers with high turnover of stock and high demands Avito has developed a professional tool that allows them to seamlessly add a large number of items, track price development, follow statistics of number of item views and contacts, track calls, etc. The effort is a part of making Avito Auto an even more important part of dealers' day-to-day operations.

Autoteka

The Russian used car market has been plagued by fraud for a very long time. A very high share of used cars sold are "clocked" – i.e. the mileage has been changed prior to a sale to yield a higher price.

To fight this problem, Avito Auto launched Autoteka – a database containing key information about Russian cars – two years ago. Avito enriches its own data with data from a multitude of other sources, such as dealer data, governmental data, data from banks and insurance companies, etc. A user can use the database to find out the true mileage of a car, if it has been in an accident, if there is a car loan tied to the car, etc. This type of data was previously very hard to access in Russia, and the lack of such a tool was frequently cited as an obstacle for more serious players to enter the used car space. In April this year, the Russian Association of Car Dealers merged their similar project with Autoteka and became minority shareholders in the stand-alone operating company. The database now contains data on 40 million Russian cars, which are all searchable by VIN number. 75% of all cars posted on Avito now have an Autoteka report attached to them, and any interested buyer can access the report for RUB 99.

Carfax is a well-known company that offers a very similar product. One Carfax report costs USD 40, or approximately 25 times as much as an Autoteka report. Autoteka just sold its millionth report, and it is not a wild guess that a significant portion of those reports was sold in the last couple of months. That would mean that Autoteka is generating meaningful revenues already, despite the very low fee per report.

Inspections

Another initiative to increase trust and transparency is the launch of offline inspection zones, where sellers and buyers can meet to do an inspection of the car by a third party before a transaction is done. The initiative was just launched together with a partner.

Avito's competitive position on the market

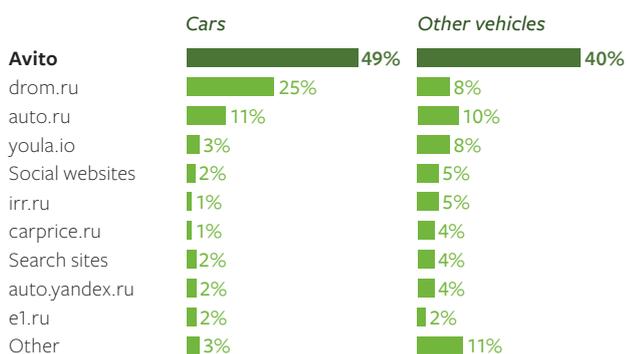
The auto classifieds market in Russia is highly competitive. Apart from Avito Auto, two auto verticals (Auto.ru and Drom.ru) are highly active as well as an Auto1 clone called Carprice. There are large regional differences, but Avito is the strongest player on a consolidated national level by a wide margin.

Auto.ru was founded in the 90s and is since 2014 owned by Yandex. According to our estimates, Auto.ru has a strong position in Moscow (slightly stronger than Avito) and is relatively strong in St. Petersburg (but weaker than Avito), but is significantly weaker elsewhere. Drom.ru is extremely strong in Siberia, where it outcompetes both Avito and Auto.ru in number of leads generated to sellers. Luckily, Siberia has a relatively low share of total car transactions compared to the rest of Russia.

All players are actively developing and marketing their products, with Auto.ru being the most active from a marketing perspective. Despite having Yandex' muscles behind it, Auto.ru has seen limited increase in consumer preference according to our analysis.

Through our own research, we estimate that Avito Auto holds a market share in the range of 45% when it comes to leads generated to sellers, which we believe is the core metric to track to determine market share. The head of Avito Auto recently cited a similar number in an [article](#) in the leading Russian business paper Vedomosti.

Avito holds ca 50% share of the car market and is 4 times bigger than closest competitor for other vehicles



Valuation

A 45% market share on a market worth RUB 6.5 bn would result in approximate revenues of RUB 3 bn. Assuming a 60% EBITDA margin this would result in 1.8 bn of EBITDA. A 25x multiple on 1.8 bn of EBITDA would result in a value of the vertical of RUB 45 bn or around USD 0.7 bn.

Our view is that such a valuation would not sufficiently take a number of important factors into account:

- Rapid top line growth (30%+) for many years ahead, underpinned by a structural shift where used cars are increasingly sold by dealers. This is in addition to the structural shift of more and more marketing spend is moving from offline to online
- The option value of M&A in the vertical, which would lead to significantly increased pricing power, possibly also for private sellers
- The option value in Autoteka
- “Hidden” opportunities in sub-verticals not touched in this report, such as spare parts

Factoring in all those aspects, we think that the value of Avito Auto is more like RUB 60 bn or close to USD 1 bn. This would mean roughly a 25x multiple on next year's profit (which we think will grow by at least 30% to RUB 2.3 bn). In our view a conservative estimate for the leading car vertical in one of the world's largest car markets, with strong macro tailwinds and an exciting roadmap for the future.

3Q18: Services

Background

Below we will look closer at Avito's Services vertical where you can find pretty much any type of service you can think of: transport services, construction, beauty, tutors – the list goes on.

Services is a vertical that is very different from other verticals. Unlike other verticals, there is no way to examine what you buy before the purchase. Therefore, trust becomes a key component. Another difference is that from a seller's perspective, you very seldom "sell out" your inventory, but you are more or less always in the market to sell more. This has large implications on how service providers handle their advertising – more about this below.

The services vertical is also special in the way that it consists of subcategories that are so vastly different from one another. Construction services needs to be approached in a completely different way than beauty services, for example. Lastly, Avito Services is unique in that few other major classifieds players have made a large bet on the segment, and there is really no blueprint for success from other players similar to Avito. Still, Avito is making quite significant revenues in the vertical, and the growth prospects are exciting.

The Services market in Russia and addressable market

Number of service providers

The services sector in Russia is huge. Out of about 3 million active SMEs in Russia, more than $\frac{1}{3}$ work in the Services sector. Most companies have only one person – the owner – working for it, and there are very few medium to large companies in the services sector.

On top of this comes a substantial informal sector with private individuals offering their services, and the addressable market here could be up to 2 million additional individuals according to our research. So in total, we believe that up to 3 million entities and individuals are addressable for Avito Services.

Today, there are 1.2 million listings in the services category on Avito. Most service providers have only one listing posted on the service, but some have more. We estimate that roughly 1 million service providers are active on Avito today, which means that the penetration of the addressable market is about $\frac{1}{3}$. So there is still ample of growth potential, with potential to double the number of providers on Avito Services.

Usage of services and ways to find them

About 70% of the Russian population has ever ordered a paid service. A bit more than a third of the total population has found a service provider through the internet, or 50% of those who ever ordered a paid service. Moving services, reparation and renovations are the three most used categories from a demand perspective when looking at the market as a whole.

But the most used channel to find a service provider is actually not using an online resource, but to ask your friends and family for recommendations. This ties back to the point we made in the beginning of this report – it is hard for someone who orders a service to inspect the quality of it before it has been rendered. Online resources need to find a way to bridge the trust gap, e.g. by giving service providers the possibility to show their previous work, by providing ratings and reviews of service providers, etc.

The second largest competitor to Avito is to use a search engine. But since service providers are often micro-businesses and self-employed individuals they often lack their own website.

In addition to recommendations and search engines, there is still a relatively large share of service providers' marketing spend that is going to offline sources such as newspapers, flyers, direct mail, etc. However, these channels are rapidly losing their relevance for those who order services, and therefore we will see a continued migration from offline to online in terms of marketing spend, in our view.

Avito's offering

Avito's offering in the Services vertical is very simple, yet very effective. Service providers list their services as listings, and those who are looking for a service can contact the service providers through either chat or by phone.

It is free to list one listing in Services, but if you want to list more you would have to pay a listing fee for each additional listing. This is to a large extent a measure to prevent spam in the category, since being on the top of the listing waterfall is so important. In other categories, you might look for a very specific item (a car with a specific configuration and mileage, or real estate at a very specific location) but in Services the listings are more generic. If you look for a carpenter or a transport service, you might call 3–5 providers to benchmark prices, availability and references, and then you settle for one of them. You typically pick the first 3–5 relevant providers you find, and therefore being on top of the list becomes hugely important.

This is why Avito's value added services work so well in the Services category. When service providers want to get to the top of the list, what they need to do is to pay to "bump" their ads higher. Services has the highest conversion rate of any vertical when it comes to usage of value added services.

Recently Avito has rolled out a number of features that are foundational to increase the trust element on Avito. For example, all sellers now have a profile on Avito, where you can see their previous history – when they joined, what other listings they have posted and their full contact details. This is an excellent platform that in the future could be used for a service provider to showcase his or her previous work, so that consumers ordering services can become more confident about the quality of the services. Avito is also in the

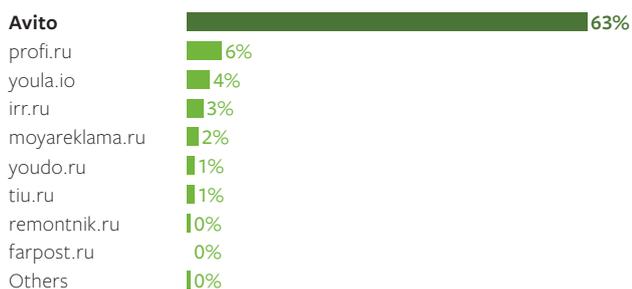
process of rolling out reviews, which with time partly could work as a substitute for asking a friend or family member for a recommendation.

Avito's competitive position on the market

Avito holds a very strong position among its direct competitors in Services. Of the consumers who have ordered a paid service online, over 60% did so through Avito according to our research. That is more than 10x the usage of the second most popular resource.

Avito is a leader in services with over 60% share

Consumers who ordered services



As we mentioned before – the strongest competition is not from other classifieds services, but from search engines and from asking people close to you for recommendations. But by being a simple service to use, Avito can cater to a much wider group of service providers than search engines can. And by implementing the new trust features, Avito can allow consumers to get both reach and trust at the same time.

Potential going forward

When looking at investment opportunities in the Services sector, we believe there are many exciting developments that can largely be grouped into two different buckets:

1. Trust mechanisms that can work as a substitute for asking a friend for a recommendation
2. Tools to make the transaction easier and more seamless for both service providers and consumers

We touched on the first point earlier in this report, and Avito is delivering on features to improve the trust element.

As for the second point – many players have historically made attempts to make the transaction more seamless in the services segment. Some players (such as Handy.com) went for hiring their own staff to have better control over the services rendered, with limited success. Others (such as Thumbtack) have tried to build software for broad groups of service providers. Both Avito and Yandex have tried this approach historically, but have failed because the software tools have been too generic and not suited anyone perfectly (again, there is a big difference between different types of services).

But now we see a new breed of “SaaS-enabled marketplaces” that are truly tailored to specific user groups, that open up new use cases and drastically improve user experience. Our portfolio company Booksy is one such example. They have built a set of tools – such as a booking system, scheduling and payments – for professionals in the beauty industry on the one side, and a marketplace for bookings for consumers on the other side. The integration of the two enables the schedule to always be up to date,

User group	Description	Share of total service provider base	Spend per month and listing
Individual entrepreneurs	“One man shows” with limited marketing skills. Do advertising occasionally when schedule is not full.	85%	RUB 50
Medium companies	More sophisticated users who do marketing more or less constantly, but have limited budgets.	14.5%	RUB 500
Large companies	Advanced users who always want to acquire additional customers and use significant budgets to do so.	0.5%	RUB 5,000
		<i>Weighted average</i>	<i>RUB 140</i>

and bookings are made seamlessly with minimal effort for both service providers and consumers. The marketplace also enables service providers to efficiently acquire new customers and consumers to find providers they wouldn't otherwise have found. With this setup, the marketplace is much more deeply integrated in the transaction and is able to take a much larger take rate.

With its massive user base, Avito is in pole position to act on these opportunities in Russia, either stand alone or by partnering up with market leaders from other markets. There is great potential for vastly increasing the take rate and the average spend per month if they were to succeed with this type of approach.

Valuation

Given the uncertainties surrounding the market structure in Services, we have decided not to do a top down estimation of market size and revenues for this vertical. Instead, we have done our own survey of the base of service providers, and come up with qualified estimations on how much they spend per listing per month on Avito and what share of the total user base they constitute.

We then use the average spend per month and apply it to the existing user base of 1.2 million service providers to come up with an estimated revenue per month.

Number of active listings	1,200,000
Average spend per month and listing	RUB 140
Revenue per month	RUB 168 mln

RUB 170 mln in monthly revenues puts Avito Services on a yearly run rate of more than RUB 2.0 bln. With a 60% EBITDA margin, the vertical should deliver an EBITDA result of around RUB 1.2 bln. Given the current growth rate of Avito, the future growth prospects (both in raising take rate and penetration) and the very strong position in the vertical, we believe that a 25x EBITDA multiple is fully justified. That would translate to value of the vertical of RUB 30 bln, or roughly USD 460 mln at an exchange rate of 65 RUB/USD.

4Q18: General

After having gone through four of Avito's verticals – Real Estate, Auto, Jobs and Services – we now conclude the run through by taking a closer look at the General categories. Because of the recent transaction, we have chosen not to invest time and effort into assigning a value to this part of the business as we have done with other verticals, but we still wanted to give our view on what we consider to be the very core of any horizontal classifieds property.

To call it the “General vertical” is actually a bit misleading, since General encompasses a wide range of very different categories. It consists of Personal belongings, Children's goods, Construction and renovation, For home and dacha, Electronics, Hobby and leisure, Pets, For business and Spare parts. In some respects, it is more a way to collect what is left into one bucket than a logical vertical of its own.

Even if those categories are all very different, they do share some common features that sets them apart from the other verticals:

- Goods are traded (unlike in Jobs and Services)
- They can be shipped and moved (unlike in Real estate)
- The value of the items is relatively low (unlike e.g. Auto)
- Private users make up the bulk of advertisers (unlike Real estate, Services or Jobs), but professional power users (often selling new goods) make up for a disproportionate share of items
- The categories have a relatively high competition from e-commerce (unlike all other categories)

So in this respect, there is some logic in grouping them together. That is what Avito has done from an organizational view and it is also how we look at the business.

If you look at the number of items, the General categories are vastly outnumbering the rest. 85% of Avito's total active items live in the General categories, and Per-

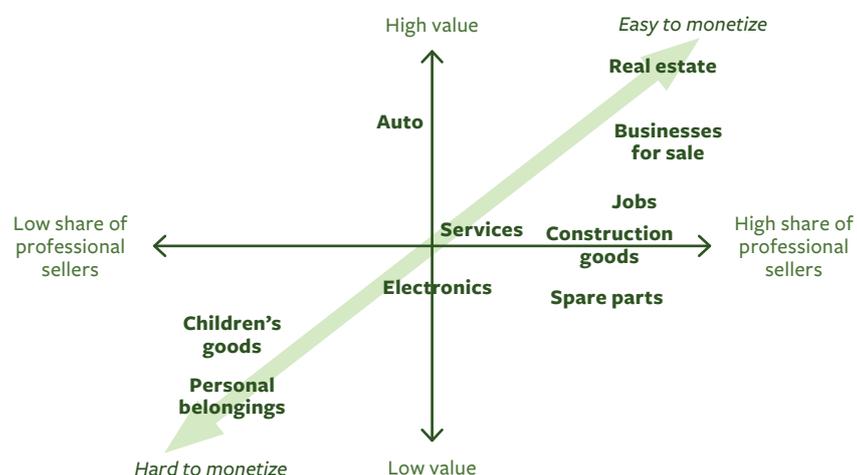
sonal belongings and Children's goods alone make up 40%. Advertisers who publish ads in the General categories also represent a large share of total advertisers on the platform, especially among privates. It is therefore extremely important to have a strong position in these categories in order to keep being relevant and top of mind for a large share of the population.

Total ads	48,618,910
Personal belongings	19,584,067
Auto/Transport	10,409,343
- of which spare parts	9,436,594
For house and dacha	4,537,194
Electronics	3,813,051
Hobby and leisure	3,531,327
Real estate	2,410,437
Jobs	2,095,877
Services	1,336,225
Pets	482,581
For business	418,495

Snapshot over the number of active items on Avito as per February 1, 2018.

But from a revenue perspective, the most item-heavy categories such as Personal Belonging and Children's goods are less important. As in the other major verticals, the bulk of revenues come from professional users (we estimate that up to 75% of revenue in General comes from professionals). The lower the share of professional sellers and the lower the value of an average item, the harder it is to monetize a category through the standard classifieds monetization tools (i.e. visibility features and listing fees). Few privates are simply ready to pay to get rid of stuff they don't need anymore, especially if the value is low. But with a high share of professional sellers who have an inventory to sell, you can make a lot of revenues even if the average value of an item is moderate (as in e.g. Spare Parts or Construction and renovation).

Examples of categories and the possibilities to monetize



Approximately $\frac{3}{4}$ of Avito General's revenues come from four subcategories according to our estimates, and they can be grouped into two subsets:

- **Spare parts, Construction and renovation** and **For business** – these categories are characterized by a) a large share of professional sellers, b) low standardization of items -> many ads, c) moderate to high prices
- **Electronics** – a large majority of the revenues in electronics comes from phones, where the supply is standardized and competition is high which drives a lot of demand for value added services (much like the Services vertical)

In the last five years or so, many classifieds platforms that have traditionally been strong in the General categories have been under heavy attack by mobile first challengers. In some countries – like Spain – the challengers have been very successful and been able to replace the incumbent. Avito has also been under attack by Youla, which has managed to reach impressive traction. The focus on a location based user experience paired with the possibilities of targeted marketing of private users through social media has allowed this type of platforms to gain liquidity in micro-segments quickly, such as mothers in Moscow. This is a playbook that is very different from the more traditional classifieds approach of broad scale TV advertising and a sales force to go after professional sellers. The emergence of these players has had quite limited impact on the incumbent's revenues, though. Despite the huge share of items, we estimate that Personal belongings, Children's goods, etc. only make up a couple of percent of the largest horizontal classifieds platforms' revenue.

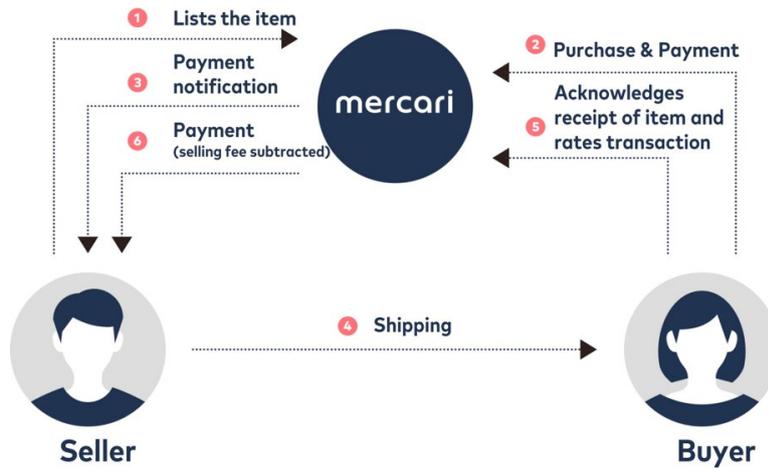
This is why the best-in-class C2C trading platforms focusing on low value categories have found other ways to monetize. Mercari of Japan is one good example, where the platform acts as an intermediary to handle payments and deliveries, and then take a cut on each transaction. In order to prevent leakage (buyers and sellers circumventing the platform to avoid paying the fee) consumers aren't allowed to communicate directly, but do so through the platform.

Avito has implemented both payments and deliveries on the platform, allowing users to buy and sell goods all over the country. Although this e-commerce type of experience is exciting and shows promising signs for many classifieds players, it still doesn't generate substantial net revenues for any of the major platforms we know of. In Russia, there is also the added complexity of a logistics infrastructure that is of very low quality (the World Bank ranks Russia's infrastructure 75th in the world, after Paraguay but just before Benin).

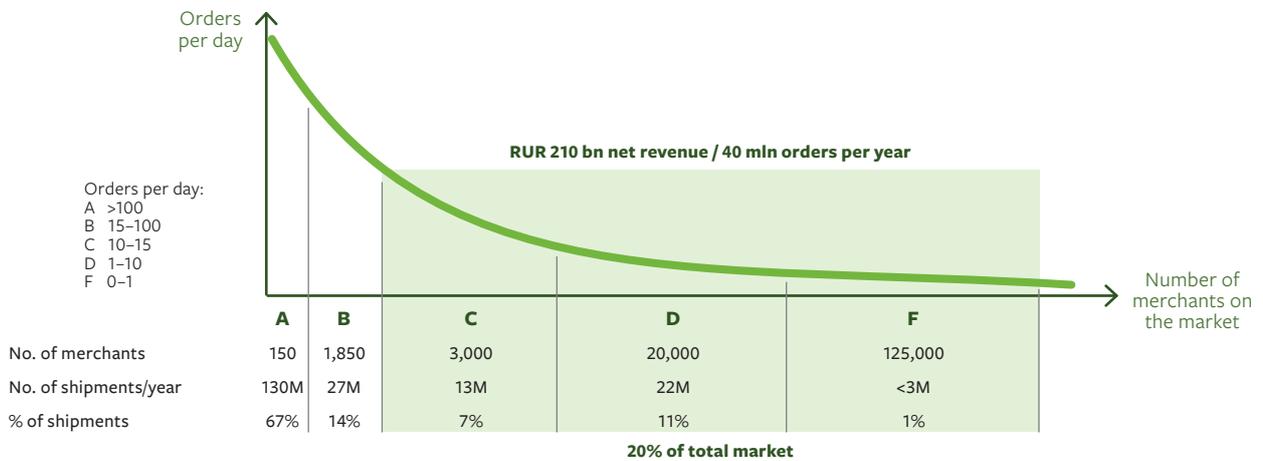
A poor logistics infrastructure is not only bad news for Avito General, though. It has resulted in a quite fragmented landscape in the General categories, with a large number of merchants in the long tail who serve local regions since it is hard to send good over long distances. The fragmentation is illustrated in the graph above, which is based on data from the Association of Internet Trade Companies. Small merchants with 15 or fewer e-commerce orders per day represent a large majority of total users, and 20% of total shipments. In addition, they sell many items without shipping (e.g. pick-up in store), which is not captured in this data. For them, Avito is an excellent marketplace for advertising and Avito has a sales organization and a product offering that suits this type of clients very well.

Avito also has a very strong position among consumers in most General categories, and according to our data more people have used Avito to purchase electronics than the largest electronics e-commerce player. The same is true for a large number of other categories as well, such as Personal belongings, For hobby and leisure and For home and dacha – also in these categories Avito is more widely used than the market leading e-com player.

Example of Mercari's flow of listing, payment and shipping



Distribution of number of Russian e-commerce merchants by size (measured as number of shipments)



VO
ST
OK

NE
W

VE
NT
UR
ES

Registered office

Vostok New Ventures Ltd
Clarendon House
2 Church Street
Hamilton HM 11
Bermuda

Vostok New Ventures AB
Mäster Samuelsgatan 1, 1st floor
SE-111 44 Stockholm
Sweden
Phone +46 8 545 015 50
Fax +46 8 545 015 54

www.vostoknewventures.com
info@vostoknewventures.com