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Industry Breakfast
MADE IN RUSSIA: SOFTWARE DEVELOPMENT GOES GLOBAL
Building Russia's Creative Capital

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2011

June 2011 marks the ten-year anniversary of Russia's Software Developers Forum - the official birthday of the Russian software development industry. During the last decade the Russian software industry has evolved into a key sector of Russia's knowledge economy and become an independent and leading international player. For Russia's modernization efforts, the experience of the Russian IT industry can serve as an example of a successful integration in the global economy.

Moderators:

Andrey Levchenko, TV presenter of Dialogue programme, RBK TV channel

Valentin Makarov, President, RUSSOFT Association

Panelists:

Igor Agamirzyan, Chief Executive Officer and Chairman of Executive Committee, Russian Venture Company OJSC

Sergey Andreev, General Director and President, ABBYY Group of Companies

Serguei Belousov, Senior Founding Partner, Investment Advisor, RUNA

Arkady Dobkin, President, Chairman of the Board, EPAM Systems

Esther Dyson, Chairman, EDventure Holdings

Andrey Fyodorov, General Director, Digital Design

Dmitry Grishin, Chief Executive Officer, Co-Founder, Mail.ru Group

Natalya Kasperskaya, Chairwoman of the Board of Directors, Kaspersky Lab;
General Director, InfoWatch

Dmitry Loschinin, President, Chief Executive Officer, Luxoft

Nikolai Puntikov, President, MITEF Russia

Arkady Volozh, Chief Executive Officer, Yandex

V. Makarov:

As it happens, Igor Agamirzyan opened our very first summit some ten years ago, telling us about the state of the Russian software industry and what we could expect from it in the years to come. Now we have the chance to look back and see whether the predictions that were made then have proven to be accurate. Please.

I. Agamirzyan:

Thank you Valentin, and good morning everyone. I am happy to see so many familiar faces here today. It has been a long journey to this point and I personally think that, although the events of ten years ago were symbolic, the programming industry actually began twelve years earlier, on the day Esther first came to Russia in 1989. I remember the 19th April 1989 well, when many of those who later built up the Russian programming industry were introduced to each other and met Esther, who was our first business tutor in the early 1990s. Here today I can see the people who have continued to work in this market from the late 1980s and the very start of the 1990s. Even then there were lots of commercial software development companies, for example Auriga, 1C Company and Arcadia. Nevertheless, June 2001 was a truly important and symbolic time because this was the moment when it was possible to say that the industry had really established itself, being treated as a genuine part of the Russian economy. When Valentin and I began to discuss today's event almost 6 months ago, I realized that I still had a copy of the presentation that I gave at the 2001 Outsourcing Summit. When I looked at it, it was interesting to see what was said ten years ago. I cut down the presentation, getting rid of a few irrelevant slides. It is now up on the screen and I would suggest we reserve judgement as we go over what was discussed ten years ago and how the programming industry looked at the time, until we open up the floor to review what has changed over the last ten years.

Back then I said that we had potential, but that the reality was far from what we wanted (although the IT industry had developed at a great pace during the previous decade when compared to the economy as a whole). Also, the government had recently begun to appreciate the importance of ICT. Unfortunately, part of the slide has been cut off on this screen.

I would like to add just a few words on the past and present situations. Qualitatively speaking, we were catching up to the international IT markets even then. In reality, our IT industry back then had access to everything that our international peers did, and the quality of Russian software development was already world-class. Nevertheless, on a quantitative basis we were lagging far behind developed countries. I cited the latest figures at the time, and it is really interesting to see how they compare to the current numbers. For example, in 2001, less than 3% of the Russian population had access to the Internet. As far as I know, this figure has changed dramatically. Naturally enough, this stimulated the development of Internet companies, which are now market leaders. At the same time, even in 2001, productivity in the IT sector was absolutely record-breaking for the Russian economy and was near the United States' 38% productivity level, despite the then Russian average being only 16%. Based on Anatoly Chubais' speech about a year ago at a meeting of the Presidential Commission for Modernization, this figure has risen back to 29%, the level before the fall of the Soviet Union. So even then, the productivity of the IT and software development industries were significantly ahead of that of the economy as a whole.

I can clearly remember that ten years ago I showed this slide and started a debate about the figures it shows. I said that Russia had over one million programmers, adding the caveat that the actual number was in fact slightly smaller as the cited total did not refer to those who were employed in the industry, but rather to those whose studies had focused on programming-related areas during the entire Soviet period. Curiously enough, the first Russian

programming specialists graduated in 1954, so over one million experts received professional training over the course of 50 years. About 200 of the 1,000 higher educational institutes in Russia taught students majoring in IT.

There were already success stories by this point, and I mentioned the following companies. Some of the names are long forgotten, others proved to be failures but, nevertheless, I referred to Kaspersky and ABBYY, who are with us here today, and 1C Company.

In my view, it is very interesting to compare the problems the market then faced to today's personnel, financial and legal challenges, to name but a few. As for the personnel issues of the time, in 2000 about 7,000 programmers a year graduated with an IT-related degree. At the time, total national recruitment levels had reached approximately 25,000 per year. Once again, it would be intriguing to compare this with the current state of affairs, because it was already clear at the time that the human resources challenge would become considerable. I experienced this for myself in the middle of the last decade when I was General Manager of the Software Development Centre of EMC Corporation and the demand for professional programmers and software developers went through the roof.

Moving on to financial problems and taxation. Back then we were discussing the return of VAT for software exports. In the last couple of years there has been a lively debate regarding the Unified Social Tax and insurance premiums. The problem of import duties for software has partly been solved. The final topic was the investment case and capitalization of Russian companies. Today we can discuss the first successful IPOs of our leading Internet companies as evidence that this problem has been solved to some extent. Nevertheless, at this moment in time, commercial software developers still remain largely undercapitalized.

Many of the legal issues from ten years ago are still with us, whilst some have been resolved. Despite the release of Section IV of the Civil Code, we can hardly claim that intellectual property rights are fully regulated.

Other challenges included cultural problems; language barriers, inflexibility, and the obstacles posed by traditional organization of labour and business processes. This is an extremely slow process, and in ten years we could scarcely have expected to see significant changes.

I discussed possible growth models aimed at the domestic market and at outsourcing and manufacturing. Back then the global IT market totalled over USD 1 trillion per annum and the share of software in 2000-2001 amounted to approximately USD 150 billion. Since then these figures have not stopped growing and I do not doubt that this will continue to be case, although we have, most likely, reached saturation point. Nevertheless, the market is huge and it is continuing to grow.

What were seen as the necessary steps for the industry in 2001? The adoption of a legal framework, IT education reform, and a focus on programmes which came closer to international standards. At the time there was a very active debate about the introduction of ACM standards in Russian universities for the teaching of computer science and global engineering.

Back then I spoke of increasing domestic consumption. Incidentally, this has indeed gone up over the past years in Russia, from two million. It is difficult to say by how much. This was also influenced by government-led initiatives.

And finally, I discussed support for the export of products and services. There is no doubt that the export of products and services is going on and continuing to grow. It is tough for me to comment on this or on specific examples of support we have received. In the years leading up to 2001, the state generally ignored the industry, despite regulating telecoms and data protection, and paid little attention to such important issues as copyright protection.

What happened next? In the spring of 2001, the state's interest in information technology and software as a whole grew considerably. In April 2001 a meeting was held between the heads of Russian IT companies, some of whom are here today, and President Putin, during his first term of office. They met again in May,

two to three weeks before the conference where the Federal special-purpose programme Electronic Russia was announced. In my opinion, this programme has been an ignominious failure, but it did have a positive influence on the development of the domestic market and on demand for IT services and software in Russia.

I deliberately held on to the list of those who met with President Putin in April 2001. Among the attendees I can see Boris Nuraliev, Arkady Volozh, and Natalya Kasperskaya. This was the first meeting that proved that there was genuine interest, but perhaps those who were there can still recall what was said and discussed and how this impacted upon future developments.

That is the end. I removed a few slides that were irrelevant to what we will be discussing today. On that note I will wrap up. I hope that it will be interesting to remember and compare the situation years ago with what is going on now. Thank you.

V. Makarov:

Thank you, Igor. We have already mentioned the name Esther Dyson today. Esther actually began her career as an industry evangelist some 20 years ago in Russia. I remember that she took part in our 2001 summit. In 2002, we gave a joint presentation at the World Russian Forum in the US Senate in Washington, D.C. and also promoted the Russian software industry. At the time I was astonished by how effectively and well she was able to do it. She is a true evangelist. Esther, please let us know: in your opinion, how has the industry grown over the last ten years and how will it develop in the next decade? Please.

E. Dyson:

Thank you. I will speak in English. As Igor mentioned we did have language difficulties, but I know that almost everyone now speaks English and understands it fluently, whereas I still speak Russian badly.

It is indeed fascinating to think back 10 years or even 20 years. And to me, there have been many disappointments, let us be candid about that. But at the same time, sitting here, overlooking the port, an amazing amount has happened not just in the last 10 years, but 20 years.

I am on the board of Yandex, so permit me to mention that in particular; but also LinkedIn is going public. Mail.ru is also publicly traded now. The emergence of the Russian software industry from something that was done by technical people for a foreign market, into something that is becoming an engine of the Russian economy, not simply an engine of efficiency but also an engine of openness and transparency, is perhaps even more important than what it has done economically.

Every time somebody goes to Yandex and enters a question about a company or a government official or a government law and finds out something, every time somebody can order something electronically, life in Russia is being improved by what the people in this room do.

But when you look forward to the next 10 years, there is still an awful lot to do. I would say this as one who worked at Microsoft for many years. One thing the software industry has brought into the economy as well is better business habits; not rules, not regulations, but simply habits of responding to your customers, habits of listening to other people, communication, collaboration, all these other things.

So to me, the effect of software is far more on the users than it is even on the providers, which is all of you.

One further thing to say, then I will pass on. It is interesting that we yesterday spoke about corruption as we frequently do. I will, too. And as we all know, it is very possible, if you are selling something for USD 20 million, to spend half a million dollars on making sure that you secure your contract.

And that is a horrible thing for business because it means that the best company does not always win. But when you are selling software to the end user, you cannot bribe them because it is not cost-effective.

And so the software industry is a model for Russia, not just of efficiency, but of good business practice. The best companies here do win.

If you look around here in this room, I think that the leaders of a business are well-known for being the best businesses, not just the biggest or the richest or the ones that somehow acquired the most assets. And I am delighted to be here at this celebration not just of the last 10 or 20 years but of the next 10. Thank you very much.

A. Levchenko:

Many thanks Esther. Esther is our angel investor, so her financial well-being is of great concern to us. Why am I saying all this? In 2002, as many of you here in the hall probably know, Esther bet USD 10,000 that ten years later, in 2012, the Wall Street Journal and New York Times would be writing about Russia, saying that it was a leader in the software development industry. So I would really be interested to know, will you receive USD 10,000 in a year's time or will you have to hand the sum over?

E. Dyson:

Well, it's not clear that the *New York Times* and *The Wall Street Journal* will still be around. But I think Russia is, I forget my exact wording, but Russia is indeed recognized as a leader of software programming and Yandex's listing on the New York Stock Exchange is proof of that. But Yandex is not alone and you know that Russian programmers are in fact leaders both inside and outside Russia.

A. Levchenko:

What are the chances that Russia will become number one?

E. Dyson:

Honestly, the world is getting so global that I don't think there is any number one. I wouldn't say the US is number one, say Russia is number one, and there is no one else around. So it's become global, whatever.

V Makarov:

Of course our participants hold a range of views. Now we will do a quick poll of our participants. I should say that we have, of course, not invited two people from each segment, but rather a whole host of people.

In particular, moving towards the customer services table, here is Aleksei Sukharev, probably our oldest and wisest guru, who was one of the first to found an outsourcing company. He was a professor at Moscow state University and now lives in America. Here is Alexander Semenov of Korus Consulting, a company that is increasing its service offering in Russia. And here is Pavel Adylin, head of the new company Artezio, which, despite its youth, already ranks among the hundred leading companies in the world. Here are the two main protagonists, between whom I have witnessed a contest to be the true leader of Central and Eastern Europe. Any others were competitors to start with, but ended up lagging far behind. We happen to have two leaders in Central and Eastern Europe: the first is Dmitry Loschinin of Luxoft and the second is Arkady Dobkin of EPAM Systems.

Dmitry, can we begin with you? How do you think the industry has developed as a whole in the last decade and what are the needs of your company and of the service industry as a whole?

D. Loschinin:

Good morning. It is always interesting to look back at the situation ten years ago and see what we planned and what actually happened. It goes without saying that, ten years ago, our business knowledge, capabilities and plans were vastly

different to the situation today. We have achieved many of the things to which we aspired. I can certainly say that the industry has established itself globally. It has not just developed in Russia: it is a global phenomenon. Others know us, pay attention to what we say, and are fearful of us. This is characterized by the fact that we now have global companies, as well as serious international players and customers. These are accompanied by a whole new level of challenge that we nowadays have to overcome.

If we look back at the situation five and ten years ago compared to the current position, we can see that they are completely different stories. By this I mean that, for me, we used to be focused on survival: we searched for clients, trying to prove to everyone that it was worth talking to us, and each time we came across an opportunity or a new customer we tried to persuade them to take the unusual step of starting to work with a Russian company.

Today's situation is completely different. The clients are chasing us and there is even a kind of waiting list for our services. It is not so much a question of whom we should work with as how: where we should grow, how we should develop and how we can find the talent that we urgently need. At the moment we need to hire around 700-800 programmers and I am sure that it is the same story for Arkady and EPAM. If we recruit them today, they can start work tomorrow and will generate value and benefit our customers. The key strategic question is currently how far we can develop and upsize in this sector, and to what extent we have the ability to train young specialists, reward them and grow.

In terms of our outlook, the challenge of specialization can be added to the task of establishing ourselves, which we have already achieved. The Indian model, where companies are all things to all men is not best suited to Russia, at least in my view. In Russia it is important to set your sights on a target and have industry knowledge as well as technical expertise. With these two elements you can create platform solutions, which will enable you to increase productivity and to

compete, as well as to make a reasonable profit, survive, develop and then invest in new, promising areas.

The second and probably equally important challenge is that of globalization, the expansion of borders and horizons, entry into new markets and the creation of new concepts. In any case I hope that, when we meet in years' time, we will be able to call far more companies 'world leaders'. I am confident that there will be about five to ten companies who will go public and that people will talk of as established international players. I am sure that new manufacturing and service companies will emerge that will surprise us all. Thank you.

V. Makarov:

Many thanks, Dmitry. Arkady, it is probably still early to talk about an IPO. Could you tell us how your business developed and what your plans are for the upcoming decade?

A. Dobkin:

Good morning everyone. To be the fourth to speak, when we only have 20 minutes left, is quite a challenge, even more so because Igor, Esther and Dmitry have covered virtually everything. If time allowed, I could speak at great length.

If you start something, you can definitely appreciate the difference. In short, it is just as Dmitry said. Ten years ago we were organizing conferences in search of clients. Now we are organizing conferences in an attempt to educate others. This is a significant and crucial difference. Ten years ago we were willing to do any work, whereas now we get to pick and choose and, in some sectors, we can genuinely compete with the best companies.

Today Esther almost put Russia in joint first place with America and that sounds fantastic, but instead of talking about how wonderful the current position is, I would rather focus on what we still have left to achieve. Typically there are two

problems that tend to unite the service and manufacturing industries. One of them is, undoubtedly, education. This will probably be discussed today.

The second, to a certain degree, is state assistance. For if we looked to India for guidance ten years ago, we can continue to do so today. Their service industry has been a serious catalyst for the industry as a whole, including both their manufacturing industry, which is undergoing rapid development, and other economic sectors. Furthermore, no one in the CIS, with the exception of Belarus, has come close to what was achieved in India 20 years ago. This remains a problem to this day. Even the conversations that have been had, in the last 18 months to two years, regarding social assistance and tax relief are now yet again going round in circles, with the distinct possibility that they will take up the rest of the year too. This is all very serious.

I appreciate that the manufacturing industry has its part to play in this too, and that we ought to speak to them about this too. But in general, IT infrastructure and the appropriate atmosphere are created by the large number of people who are part of the service industry. It undoubtedly plays the key role as this is how people join the industry. I am sure that all of our manufacturing companies began as service companies at some point. This is how they develop the roots and understanding. The same applies if we look at all the large international software producers: from enterprise software to those who are now making the boxes.

We have to appreciate that what people need is a service. For the service industry to be competitive, we still need to look at what India and China are doing, as their governments are far more active than their Russian counterpart, whose perspective, looking ten years ahead, can still be called into doubt. There is no doubt that there will be tens, if not hundreds, of public companies, but this does not at all mean that we will be able to compete or overtake them in terms of volume. I understand Esther's comments with regard to globalization, because all our companies are going global. We all have offices in Silicon Valley, England, and many other locations.

So I am not in such a celebratory mood today, but I am optimistic enough and there is plenty of room for optimism. I would not like us to be in such a celebratory mood that we forget about the global competition. If we want to continue to be serious players, then there is lots to do, including on the state level. And education is the number one problem.

V. Makarov:

We will return to matters of problems and solutions. Many thanks, Arkady.

A. Levchenko:

We have leading software programmers here with us today. Represented here today are 1C Company, Sergey Andreev, President of ABBYY Group of Companies, and Natalya Kasperskaya, Chair of the Board of Directors of Kaspersky Lab. Shall we begin with Natalya? Natalya, could you say just a few words about your thoughts on the last decade. We can move on to predictions a bit later.

N. Kasperskaya:

To be honest with you, I can't understand why we are celebrating the tenth anniversary. I asked Boris, and his company has existed since 1991.

A Levchenko:

Yours started in 1997, I believe.

N. Kasperskaya:

Yes, in 1997. We should pick the date of foundation of the oldest of the current companies and start counting from then. Which is the oldest company here?

V. Makarov:

Probably Alexander Filippov's company, which started up in 1989.

N. Kasperskaya:

So let's count from 1989. That was 22 years ago.

V. Makarov:

When I said today that we have an industry, I did not simply mean individual companies, but rather an organized and professional industry. Maybe we should leave it at that.

N. Kasperskaya:

So we are celebrating the anniversary of the industry's maturation? Okay, fair enough.

It is difficult for me to give a summary. In my view, the industry has clearly established itself and has experienced huge growth over the last 20 years. From small and, most importantly, unprofessional companies (where people did not know how to sell, and knew neither what software was nor what to do with it) we have reached the point where we have practically become world-class market players. ABBYY, 1C Company and others are now on a par with their international peers and produce very high quality software.

For me, this is the main breakthrough. You have to understand that the former Soviet Union had to overcome a huge obstacle, which wasn't the case for other countries in Western Europe or America. For they have been in this business for a long time, whereas we had to start from scratch and get to grips with the basics of marketing. I believe that the industry has still not dealt fully with this issue, because there is simply a huge lack of marketing personnel, especially in the software sector. There is no understanding of how to make a product, what it is and that a product is far more than just a box. This was something we had to learn from personal experience.

If we are focusing on problems, then the industry undoubtedly lacks commercialization expertise and product marketing. In particular, in the programming industry, product marketing is a disaster. I always have a vacancy for a product marketing expert and if I come across a good one, I hire them straight away. But this does not happen too often. I do not know if my counterparts have more success than me, but I see this as the essential problem because there is no appreciation of what the product is. Either a person is deeply absorbed in technical issues and does not understand the consumer, or the reverse is true and they are focused on the consumer but have no technical understanding and are unable to come to an elementary conclusion. It might possibly be worth developing specialized personnel for the industry, including specialists in promotion, because this is a highly specific role in its own way. We continually talk of technical specialists and programmers but there are already quite a lot of programmers on the market. This is not Germany, where they just do not have these specialists.

We have just discussed Igor Agamirzyan's presentation. It is quite a downbeat presentation, because with respect to the problems, practically nothing has changed. As Alexander Golikov said, if we had not been reminded it was ten years old, we would most likely not have noticed. I should mention export VAT. However much we talk about this problem, wherever we go, whoever we explain this to, it stays in place and is met with a wall of confusion. It is nevertheless highly embarrassing that we are exporting intellectual property and cannot offset VAT, whereas for the export of the same 'box' VAT is taken into account. Why? It is utterly illogical. But for the time being we have not succeeded in proving this to our governing bodies.

I would be delighted if, in years' time, when Igor came up to give his presentation from twenty years previously it differed significantly from the present situation. I hope that we will no longer have these problems and that we will be talking about something different: our spectacular breakthroughs. It seems that, in principle,

everything is moving in the right direction. Progress is a bit slower than we wanted, but we are getting there.

A. Levchenko:

On the whole it maybe does not look so good, but if we focus on particular companies, then is it not the case that we can see breathtaking success?

V. Makarov:

At Kaspersky Lab for example.

N. Kasperskaya:

There has been some success.

A. Levchenko:

Thank you Natalya. Sergey Andreev, please.

S. Andreev:

I honestly do not fully understand the conversation. For we seemed to begin by saying that we need to blow our own trumpet, yet the introductory speech went in an entirely different direction: what do we mean by 'industry' or 'the domestic market'?

V. Makarov:

Feel free to blow our trumpet.

S. Andreev:

Opinions are divided. Since opinions are split and we do not like to boast, I will try not to blow our trumpet too loudly.

In principle, if you ask yourself what has happened in the last decade, then the answer is that a lot has occurred. If we take a look at the number of staff employed by IT companies, it is quite clear that the figure, I believe, has increased at least twentyfold in the past ten years. In turn, what does this tell us? That, as many of those present have already noticed, our key interests and main hopes lie with the human resources that we desperately need. So it is worth mentioning that in the past ten years there have been major changes in the knowledge base of a lot of IT companies. Companies have begun to take an active interest in education. This is a very sensible move. We can see that Russia is trying to join the business community, but not everyone is successful in this. We know that growth in the IT industry is higher than in the country as a whole. This is the major achievement of our businessmen.

V. Makarov:

And of our leaders.

S. Andreev:

And also of our leaders.

V. Makarov:

What is the average?

S Andreev:

I think that the average is around one and a half for Russia as a whole and exactly two in the IT industry. So we understand 'party politics' and are making progress.

If we move back to the events of the last decade, I can tell you a bit about our experiences. We have grown tenfold over the course of the decade. The majority of our business is now international. Over 70% of our income comes from

abroad. We now have over 1,000 staff, but this is still not that many when compared to our distinguished colleagues, who are also doing a very important job. We appreciate that there are certain restrictions that we always observe in our work. Dmitry was completely correct when he said that the Russian IT industry is not trying to copy its Indian counterpart, for example. I would expand this point to explain the principle we have always used in our company.

We always only fight for the jobs in which we think we can be the best in the world. This decision has led us to the point where we are engaged in a very serious, complicated, and interesting area, where we compete not on price, but on skills.

For me, this is a crucial theme for the Russian industry: competing on skills, and not just pricing terms. This is typical for all the successful market players I know of. So we can say that we have made great strides in this area. I am thinking of Parallels, Inc, which is now working actively in a wonderful new market that developed relatively recently. Notwithstanding this, the company is very large and successful and was founded a long time ago. I should also mention Kaspersky Lab, which has shown extremely positive results. Not forgetting Yandex, which has recently soared to dizzying new heights. These are obviously all extremely good signs. And EPAM, which is currently planning an IPO, is also a fantastic story. So, on the whole, the industry is on the up and is developing wonderfully well.

If we look ahead and think about what the future holds, then, of course, as Igor so rightly said, there are some problems that we would still like to solve. I think that we need to deal with two key issues. Firstly, education and bolstering our human resources. Secondly, the low level of state regulation, at least as far as taxation is concerned. With regard to educational programmes, 5 years ago we set up a university department and we are working actively with it to improve computer science teaching. We are now faced with a situation where universities

do not have enough prospective students and so they have consequently begun to be involved in IT in schools.

V. Makarov:

And then there will be more professionals.

S Andreev:

And then there will be more professionals. We are working on it.

V Makarov:

Thank you, Sergey. I would just like to introduce our colleagues who are sitting here and have not been mentioned yet. Svetlana Sokolova of PROMT – the world’s leading provider of machine translation technologies. Andrey Sviridenko of Spirit, which is also the leader in its sector. Alexander Golikov of Ascon. Boris Nuraliev of 1C Company

So, ladies and gentlemen, we will move on to the next table. We are now doing business with people who are engaged in the development of completely new things. Their mentality prevents them from sitting quietly and they are constantly coming up with new and original ideas. We have invited two representatives of this notable sector who, generally speaking, have always been doing this and, over the last few years, seem to have laid the groundwork for potentially revolutionary changes to the market. I would like to ask Andrey Fyodorov and Andrey Terekhov the following question: where can we expect to see the next technical breakthrough by Russian software developers? Will it be cloud computing, mobile applications, smart solutions, for example data warehouses (upon which, as I understand it, the entire American film industry depends), or motion control? Mr Terekhov, tell us, where are we heading next?

A. Terekhov:

I would first of all like to start off by mentioning what we are celebrating. My company, Terkom, was founded on February 14, 1991, so this is clearly over 10 years ago. But the first decade was very difficult. We were conned many times and we did not know how to organize a business, how to set prices or how to stand up for our rights. Therefore, when Esther said that an industry had developed, it really was a genuine landmark step. We grew up and now we are not conned so easily. I believe that RUSSOFT, which I cofounded, played a major role in the establishment of the industry. In 1990, or even in 1989, I went to see Valentin Makarov, who was then the Deputy Chairman of the International Relations Committee of the St. Petersburg City Administration. I planned to discuss a technical matter, but we ending up discussing the fact that, in his words, foreigners were complaining that they were often being deceived by Russian programmers. I said that I would complain about the foreigners and that our former Soviet comrades had already cheated me several times. We chatted and decided that it is a sink or swim situation and that we needed to organize an association that would represent us abroad and defend our interests within Russia. No sooner said than done. We later travelled to San Francisco as part of a delegation and reached an agreement there with a group of our peers. This was how the RUSSOFT association began. I believe that it plays a significant role as a representative of the industry.

Moving on now to the question that Valentin asked. You know, my main job is as Head of the department of Software Engineering at St. Petersburg State University. So for me, personnel training is the be all and end all. I noticed that even the best universities in the country were producing students who knew nothing about the industry, planning, record-keeping, team work, or dozens of other matters that are extremely important for the IT industry and about which university graduates knew nothing. So, many years ago, we began to provide additional, on-the-job personnel training. Now, when I spoke for the first time, even within my company, I was shouted down and people said, "We are all tax-

payers, let the state, which receives our taxes, train personnel – that is not the industry's job.” Now almost every company does this.

It is similar with development plans. Six years ago at a RUSSOFT board meeting, I said that we needed to focus on the Russian IT industry, on high-tech business services and develop the positioning of our business. I was shouted down again and people disagreed, saying that we needed to work on a broad range of projects, on everything that paid money. Today, in my view, it is obvious that, as has already been mentioned, we need to find niches where we are stronger. I have read lots of books on marketing and you have to be first to a market. If you cannot be first, you need to think up a market where you will be first. That is what we need to do. I believe that high-tech technologies are a good candidate for this. Russian academia is not extinct and scientists are busy generating ideas that are just as good as they ever were. There is no shortage of ideas.

For example, we have worked on reengineering for many years. Gartner Group has named us the global leader three times in the legacy understanding and legacy transformation markets. But this was always at the request of American companies. I would say that, when a company is founded, you have to create your own products based on experience gained over many years. This is what we are doing now.

I will keep my self-congratulation to a minimum. We have already gone through two assessments in relation to stereo vision. I hope that the result will be a world-class product and that we will receive support from Skolkovo. We have at least completed all the formalities so I now have nothing to ask on this matter. I believe that there are now quite a lot of areas where Russian scientists can prove their worth. I think that we need to visit universities and since I have a post there, it is very easy for me to look for researchers who are generating ideas and then help to bring these ideas to life. Again, on the one hand, I am head of a department, and on the other, I am CEO of a company. I am well aware that there is a huge

amount of ground to cover between an idea, even an academic study, and a product; and Russians are still not the best at making this journey. I call on every one of us to deal with this issue.

V. Makarov:

Thank you, Andrey.

Andrey, by the way, was one of the founding fathers of the summit ten years ago that is under discussion.

A. Fyodorov:

We also started out in 1992 with offshore software development. You have to appreciate that back then, the crucial issue for market entry was lower labour costs. Nowadays there is no such difference. We are right in what we are saying: our history and development process makes us focus on certain areas, not so much to select areas where we can do anything for a small fee, as to find specific skills and, with their help, attempt to win over the international consumer.

As a result of this approach, we sometimes develop products like DocsVision, which appeared six years ago. This is an electronic document management system that is one of the Russian market leaders. Many state departments and major corporations like Sberbank are now using it. We have a major total integration project; it is already an established product.

Ten years ago the people who came here discussed investments, looked for business, and generally consisted of either our former compatriots or the type of roguish businessmen who offered deals akin to share swaps. They claimed that we would form a joint company and that we would exchange our shares to grow a large business, which we would then sell to strike it rich. It is good to note that nowadays an entirely different group of people are coming: genuinely serious people who are world business leaders. It is simply interesting to talk to them,

even if nothing concrete comes out of it. It is intriguing to learn from them and the conversations are of an entirely different character.

It is a Russian trait to sugar-coat the truth because it is true that our reality has been harsh for the past thousand years. In fairness I must note that, in terms of the atmosphere for doing business, the situation years ago and the one today are chalk and cheese.

We are now growing new business, driven by the fact that we are faster at calculations than anyone else in the world. We are comfortable with algebra that is beyond everyone else and we can quickly organize data in RAID level 6 and above with data security and recovery. This enables us to use standard components to build redundant arrays that work at the speed of an interface. No-one else can do this, but it is a highly sought-after skill. This is especially the case in the film industry, where data volumes are constantly growing as a result of the growth in HD and 3D video. Of course, this all grew from our offshore software development, before we parted ways with our American partner, and now we have our own intellectual property.

I am telling you this not because I want to go into detail, but to back up what Andrey said. We do have immense potential in Russia, linked to the culture that still exists in our universities and even schools. My son is now studying at MIT and at parties he is introduced as “the guy who studied mathematics in Russia.” In the West this is an excellent recommendation. We can look for utterly distinctive things that will become products with the potential for market domination, owing to their uniqueness, the qualifications of our staff and our superior understanding of areas that our potential competitors do not cover.

Although, I obviously agree that almost anyone present here today, who works in our industry, will say that the main issue at hand relates to human resources. Yes, there is a lack of qualified staff to meet our need for a large number of individuals with advanced technological knowledge, superior understanding of

quality and, of course, marketing expertise. They just do not exist. We will remain optimistic.

V. Makarov:

Many thanks, Andrey. As is customary, let us introduce the people sitting at the 'supernova technologies' table. Here is Mikhail Dibrov from the Centre for Speech Technology. This year they made a colossal breakthrough, implementing the world's most developed voice recognition system. Vyacheslav Nesterov from EMS and Dmitry Semyonov, Managing Director of Transas Technologies, which will be familiar to you all, are also with us. Thank you all for coming.

A. Levchenko:

I will move on to table number four, the table of 'breathtaking success' that we mentioned earlier. It was said that there was a lack of success but, in my opinion, it was difficult to imagine years ago that Russia would have Internet companies that would be worth billions of dollars. Nevertheless, this is indeed the case. In 2010 we saw the stunningly successful floatation of Mail.ru Group. Dmitry Grishin, CEO of the company, is here with us today. In 2011 Arkady Volozh and Yandex listed with great fanfare in New York, again for billions. I would like to ask you a question, to which you can then respond and discuss what you think is appropriate. Dmitry, could you ever have imagined years ago, or would you have set yourself the goal, of listing your company for billions?

D. Grishin:

Thank you. Looking back ten years, it was a very interesting time, as this was when the dot-com bubble burst. If you remember, in 2000-2001, there was a degree of euphoria and people felt that the Internet was something big and wonderful and that this remarkable invention was here to stay. And then there was a crash and the investors who originally invested in the Internet lost faith.

Many companies folded and, generally speaking, it seems to me that 2000-2001 was a crucial period. Those who genuinely believed that it was something big and interesting, would go on to be major companies. At the time no one could possibly have known that it would be billions. There was just a feeling that it was interesting, big and new. I am trying to remember but I think that, in 2001-2002, we had about 100 people working for the company. The main question of the time was how actually to make money.

V. Makarov:

How many employees are there today?

D. Grishin:

There are now about 2,500 people. The main challenge was to make money, so we could purchase servers and pay our staff. For us the turning point was 2003, when we first began to turn a profit. What was pleasing was the support we received from the software industry, specifically from the first online advertisers. By this I mean Intel and Microsoft. You could say that e-commerce initially began to earn money because of the funds of the major software companies.

The Russian Internet business now has in the region of 45-50 million users. Russia is now ranked second in Europe and I think that it will soon be the leading user. In 2012, if not slightly earlier. There have been lots of significant changes.

For me, another crucial point is that the Internet has become an excellent place to found a startup company. There are now numerous platforms, applications and systems that make it easy enough to set up your own business. In my view this is important, and the way it should be.

If we look at the problems we face, then they are very similar: human resources, human resources, and human resources. We are also trying to do some things on our side. We recently launched the Russian Code Cup, a competition for Russian programmers. We have already held the elimination round, with about

5,000 people still in the running. We hope that this event will further help to popularize the view that the Internet is the right place for young programmers to develop.

Turning now to the future. For me the main thing that can be said about the future is that it is already clear that Russian Internet companies and the Russian market are here to stay. Looking ahead, I hope that the next decade will be a time when Russian companies try to expand successfully abroad. Everyone knows that there most likely will not be a localized Internet market, but rather that there will be global competition and a global scramble for business. To make an analogy with war, then you could say that our defence has now begun and we will continue to hold the line. Western companies are trying to advance and we are attempting to hold our ground. It seems to me that the time will soon come when we will try to push into their territory and control their minorities, as well as launching our own global companies.

A. Levchenko:

Thank you, Dmitry. Congratulations on the successful IPO!

Arkady, please. Again I would like to know, what were your thoughts years ago and what did you imagine Yandex would become?

A. Volozh:

A decade ago we naturally were not thinking about anything. We were just quietly going about our business and no one knew what the end result would be.

I would like to join those opposed to celebrating the ten year anniversary today. There is no need for false modesty: we are all here because the Russian software industry is not ten years old, but at least 50. Newton said that in science we are like dwarves, but that we are making progress because we are standing on the shoulders of giants. Remember that we were all taught by other people.

There was already an industry in place. Many interesting things had already occurred in the programming industry in the Soviet Union and in Russia.

Over the past 20 years we have faced two serious problems. First of all, the industry suffered from the fact that all the pressure had been released from the system: people left and our critical mass was almost completely lost. This was a real problem that I tend to see in a positive light because the people left to learn something and now, especially in this part of the hall, there are lots of companies operating on international markets.

This is connected to the second problem. We learned how to speak this new language. We spent 40 years in this industry of ours and made our own products, just for us. Now we speak in global terms, partly because the system, unfortunately, was severely weakened. We now speak in this new language and the challenges we have been overcoming, over the past five to ten years, are the reestablishment of critical mass to the system.

And it is recovering. We re-established it, about five years ago, asking ourselves the following questions: where are the personnel, do they exist or not; is the infrastructure intact and is it producing programmers and scientists? It seems to be producing them. Every company can now see this. Yes, there is a lack of personnel, but they are continually being added to. The longer we go on, the more there will be. So there is no need to feign poverty, for we are serious global players.

A. Levchenko:

I would still like to hear a few words about the outlook. What awaits the online sector and how will all these programming products develop?

A. Volozh:

The outlook is positive. I cannot really talk about the industry as a whole, but with regard to our narrow sector Dmitry was right: we have learned how to stand up

for ourselves. Now those of us in this half of the hall need to learn how to do what we have done elsewhere. In reality this is not so much a technological challenge as a cultural issue. It is about people, ideas, and corporate culture. When you set out you do not have to conquer a territory as in war, instead you have to draw people in and gain their trust so that they come to you. This is an entirely different culture.

A. Levchenko:

Thank you, Arkady. Congratulations once again on the success of your IPO.

V. Makarov:

Thank you very much. We have heard from representatives of many sectors of our industry. There is another entire section of people who went from being software developers to becoming investors. There is a whole host of such individuals at this table. These are people whose programming career ended a long time ago, like Alexander Galitsky for example. The company that he founded is still operating today and is going strong. Alexander seemed to me to be a sort of evangelist in the promotion of ideas in the expanding programming sector and in the creation of new products; yet he also started out as a software developer. Not to mention Serguei Belousov and his well-known company SWsoft, as well as his new fund Runa Capital. We also have Ratmir Timashev, Andrei Baronov and Alexander Andreev here with us, all of whom began their careers as software developers and now invest in other companies. What does this mean? That any programmer can become an investor and that the dream of every programmer is to accumulate capital and switch to an investing role? Is there the flexibility for anyone to do this? Alexander, please tell us what you think awaits an investor and how you see the outlook for growth on the Russian market.

A. Galitsky:

I would just like to return to what Arkady said. I believe that we should work from the principles that we were taught because I, for example, can still remember writing my first programme for the identification of spy-satellite photographs in 1981. I learned from others, who themselves had extensive knowledge and lengthy experience in writing code, and thanks to them we reached the level we are at today.

I would say that, thanks to Esther, people in Russia recognized that we have commercial software. This is important. Because Esther showed people who worked in that industry that they could earn money commercially. The Russian government realized that this industry existed at the 2001 summit, so in this period I had personally built up a few companies, experiencing both success and failure. That is the past.

As for the present, I do not want to say what we have and what we lack. We have one problem on which a lot of work still needs to be done by both those who are earning the money and those who are investing the funds. We should be attentive to the fact that we still have very few companies in the software industry which deal with infrastructure and advanced software systems. There are virtually none left. For we have lived off the research base that already existed. As it happens, the startup companies which are planning to raise money are, on the whole, working in what I call browser utilization. This is in contrast to Arkady, who based his company on the thorough analysis of data and tasks performed a long time ago, when we were still young. This is the part we should focus on.

Even if we say that Russia is giving people a good education, this education is still basic. I cannot see the industry training and understanding that are today needed to bring about genuine change in the world and create new protocols. I do not come across companies that come and say that they want to make some changes to network protocols. You can count on one hand the number of companies that work at this nuts-and-bolts level. Generally speaking, it is very

healthy that we have started to be more aware of our industry and that we have already been referring to ourselves as an industry for a decade now, with a completely united voice. Congratulations to everyone on the anniversary that we are celebrating. I wish you all every success.

V. Makarov:

Thank you. Serguei.

S. Belousov:

Yes, I am now an investor. You asked us what we think. Arkady Volozh already said that, years ago, we were not thinking at all. I would include myself in that. It seems that we now need to think. And once again we have no ideas at all. We simply need to do something. As you said, we have stopped being programmers and now make investments and still have no ideas.

Besides this I wanted to say that investors and entrepreneurs have a remarkable saying: all you have to do is send Esther Dyson to a country and after a short time an industry will start up there. And if there is a meeting between the industry and the President, then there will be room for investors and suddenly Yury Milner will appear. A short time later you need to invest in a company like Mail.ru or Yandex.

If we are discussing why this industry sprang up in Russia, then we know why. It was because the Soviet Union invested huge amounts of capital in fundamental development in a variety of sectors: in fundamental science and in education. When we established this industry with you, we gained access to cheap personnel who were well educated and also fairly good scientists.

At the current time the situation has got considerably worse. I do not share Arkady's optimism. The education system is indeed being redeveloped. There really are trained programmers and trained personnel who know how to do something. Unique developments and fundamental science in Russia have still

not fully recovered as far as I can see. At least in areas that are not just mathematics. Mathematics is the only science that has suffered no damage. Personnel became very expensive and, generally speaking, they are in no way cheaper than in other countries. It is cheaper than in Silicon Valley, but just as expensive as in Europe. And this is perhaps the major challenge for the coming years: to continue to be competitive whilst taking into account that such things as fundamental science and developments cannot be restored overnight, with education still not at the level it was in the Soviet Union and with human resources becoming more and more expensive.

A. Levchenko:

Thank you. Moving on to Alexandra Johnson, the fascinating investor who did not work in software development. Alexandra is called a true long-term investor. Alexandra, I would like to ask you: how has the investment climate changed, has it become easier for you to work in Russia? What needs to be done to create an ideal situation?

A. Johnson:

First of all, I agree with all those who have spoken that the industry dates back a long time. In my personal view, I am delighted that we are celebrating a tenth anniversary because it has been exactly ten years since I first laid eyes on the industry. I would like to present the view of an onlooker from Silicon Valley.

Firstly, venture capitalists appear when all the elements of the innovation ecosystem are already there. They go and handpick deals for themselves. You created the foundations without which there would probably be no innovation ecosystem in Russia – because these key elements are the environment from which entrepreneurs develop. There would be no investors without entrepreneurs. Yesterday I went around the Forum with my partner Tim Draper and he occasionally listened to some of the speeches, before coming up to me to

ask: “Alexandra, why did we not invest in Yandex?” I responded by saying: “Tim, we showed you Yandex and Mail.ru – and even Parallels came. You said that, based on the companies you see in the Valley and those from around the world, something did not seem quite right here: the entrepreneur did not present themselves in the right way, spoke bad English and had a poorly structured company.”

What are we talking about now? About the fact that all the constituent parts are already there and we now even have what we lacked a mere six months ago: success stories. What does the world need to know at this point? That Russia has companies that operate on the international market. For a Western investor it is crucial for a company to have been accepted by the international community.

Everyone is congratulating Arkady and Natalya and other entrepreneurs, and huge thanks to you because it will now be a lot easier for us investors in the Russian market, because we can name these companies that have already made history. This is fantastic.

Now I recall how we also worked from the very start with Valentin and Alexander Andreev. I know a lot of the people here. I remember how you explained to businessmen the technological basics; how difficult it was, and how every step was a struggle, including as a result of legislation that failed to understand how a service company could sell a manufacturing company. So I appreciate that you, the industry insiders, can explain in your own terms what the problems are and where things are not quite right. From the perspective of a Silicon Valley investor, I can tell you that the success you have achieved and the base you have built up over the last decade are incredible. In other countries your achievements would probably take 30 or 40 years. So our sincere thanks. Thank you for what you are doing.

A. Levchenko:

Are you optimistic about the future? Do you expect there to be a breakthrough?

A. Johnson:

As investors, we are obviously interested in product-driven companies and not service companies. But, on the other hand, if we look at the Indian IT industry, then we can see that, with time, service companies have started to turn into new product-focused entities. I believe that this is a good platform for new companies to develop. EPAM is truly innovative. In it, I would pick out five...

A. Levchenko:

Are you expecting an IPO? Will you regret missing out on the chance to invest now?

A. Johnson:

Absolutely right. We already have six companies in mind, but I will not say which ones.

A. Levchenko:

Are representatives of these companies here today?

A. Johnson:

Three are here.

A. Levchenko:

Excellent.

A. Johnson:

As a result we forecast a large number for IPOs of Russian companies. Another three companies and all the Silicon Valley investors will stand in line to invest money in Russian companies.

A. Levchenko:

Thank you Alexandra, that's intriguing. We will see if we can find the remaining three companies.

V. Makarov:

We made the right decision in letting Alexandra speak precisely at this point, to make this segue.

Colleagues, over the many years our industry has existed, we have of course gained many friends and partners overseas. We invited at least two partners whom we know well and who have worked with us for a long, long time. I should mention Intel because two days ago the company celebrated the twentieth anniversary of its operations in Russia. It was closely associated with RUSSOFT, we organized joint events in America and a joint press conference in Russia. We have worked in close partnership. Intel has been a part of RUSSOFT for a number of years. Allow me to introduce Craig Barrett, a very famous face and a member of the Skolkovo foundation. You began to work in Russia and saw the events set against the backdrop of our crises and constant problems. In your view, how has the industry developed and what can we expect in the next years?

C. Barrett:

Well, first of all, I do not work for Intel. I retired a couple of years ago. But let me make a few comments. Intel came here 20 years ago really with two ideas in mind. One was to sell products as a company that has products to sell. The computer industry was very underdeveloped in Russia at that time and there was no proliferation of VCs and the Internet, etc.

The second idea in coming to Russia was to make use of the education talent, which we have done, and have over a thousand or so developers working, and we have found the software engineers, the algorithm writers, the library writers to

be exceptional in capability and applied math is an area in Russia that is excellent compared to the rest of the world.

So Intel has had a great experience. And not only do we sell products and hire people but, as you saw last week, I think they made two investments in Russian companies going forward, also in the venture capital field.

Let me make about three or four comments after sitting here for an hour and listening to you as a group talk about yourself.

First comment is, this type of meeting is going on probably in about 50 countries around the world today where everyone is worried about their future. They all say exactly the same thing, that the government is the enemy or the education system is no longer working, we lack marketing and products, skills, etc. So you are not unique in any respect. You are like everybody else around the world.

The second thing is, if you look at the future, and I am involved with Skolkovo, and if you look at the areas that Skolkovo has invested in, information technology that covers both the hardware and software side, biotech which is the marriage of engineering and biology and engineering and software, alternative energy which is the marriage of biology, chemistry, physics and engineering, space and nuclear, every one of those five key areas that Skolkovo has invested in has a huge, huge, huge software content.

So, I mean, even if you were not worried about starting a company, the great capabilities and the key industries for the 21st century are going to be very, very software-intensive.

The other observation that many of you made is that software is an international industry today, built on international standards so you do not service your own market, you serve every other market.

And the fourth observation is, please, please, please do not all turn into venture capitalists. We probably have enough venture capitalists in the world. We need more engineers, more people with ideas to start companies. A few venture capitalists, OK, but we do not need you to all be venture capitalists.

And the last thing is, I will just leave you with one word of advice, which I think you are following, because everyone who talked today tended to talk about problems and not successes. My own boss, Andy Grove, coined a phrase many, many years ago which is very appropriate for this group, and that phrase was, 'Only the paranoid survive'. So stay paranoid and you will be very successful if you go forward.

V. Makarov:

Thank you very much. We have one further guest with us today – KPMG. We got to know the company about three years ago in India at the NASSCOM Congress and since then, it has been a partner of RUSSOFT. Two years ago KPMG, together with Intel, backed a declaration signed by three associations from Brazil, Russia and China appealing for the governments of the BRIC countries to show support for the IT industry and help in the search for a way out of the financial crisis. Since then we have been working very closely together. Andrew Cranston, would you share your opinion on how the Russian industry is developing and what it needs to do to improve its development?

A. Cranston:

Thank you very much. It's a real pleasure to be in an audience of such distinguished experts, and again I'm a real outsider here, you're the real experts in this area and in fact to comment on venture capital I really can say is a very, very boring occupation compared with software. So, I'll keep my comments very limited. You know, what I would say again is, as you look at these 10 years, these have been years of incredible success, and what they've shown is the potential, the huge DNA that exists. It's not just DNA in terms of technical intellect. It's also DNA in terms of business acumen. So it's there, but on the other hand I think what we here is that the potential is not sufficiently realized. And so the question is 'why?'. When I look at it from my point of view. From my

company's point of view. We look at the markets and we look at how many software companies we're dealing with today. We look also at how many our competitors are dealing with, and it's not very big as a percentage of our business. And that makes me a little worried about the pipeline. There is a pipeline, there are companies coming through, but from my point of view it's still not big enough. So that for me is the real challenge—when is the pipeline going to grow? Again, one of the issues is to realize the potential even more. You are the experts in terms of making sure you are technically relevant. But I think the other point is business climate. To be an entrepreneur in Russia, especially a small to middle sized business can be very challenging, and I think this is a key point—about red tape, about corruption, about tax burden, etc, and that is defiantly something that in my view holds back further development in the sector. But overall I'm very positive. I think the next 10 years will exceed expectations. I think that the DNA is there and as we see incremental improvements in investment climate we'll see more of the potential realized. Thank you.

V. Makarov:

Many thanks Andrew. Many thanks to you all, but our time is running out. Now there will be a small ceremony. Please come over here. It is a shame that Igor Agamirzyan has already left. He has to take part in another event. But I want to tell you that today's discussion about the age of the industry is slightly misleading. For we of course could only have organized a ceremony like this and invited you all here as part of the Forum if we had a good pretext and we thought it up, or rather we made it happen. So we should not argue about how old the industry is. Obviously it is based on the very engineers who taught us. I myself developed software for special systems when I was still at university. The industry has roots and is growing and developing. Today's event has demonstrated that it truly does have a bright future. So Esther Dyson, years ago

you gave the industry words of encouragement, affirming that it existed. What do you think now? With that, we will cut the cake.

E. Dyson:

I just want to say briefly that I agree with Andrew Grove that “only the paranoid survive”, but the personnel issue can be solved by having young people throughout Russia know about us. Not just those in this hall, but we want every child to want to grow up to be Arkady Volozh, Arkady Dobkin, Serguei Belousov, Dmitry Grishin, or Natalya Kasperskaya. It is essential that we parade our success to the entire world. We need to discuss the problems amongst ourselves, but ensure that everyone knows that we are in a good condition and that we have an even better future because of good new staff and young people. Thanks to you all and congratulations on the anniversary and so on. Happy Birthday!

V. Makarov:

Well then, let's cut the cake and everyone can come up and receive their slice and take away a souvenir from this breakfast.

A. Levchenko:

Thank you all. Best of luck and every success in your difficult work.