

Q&A: Boeing Chief Rejects Cold War Mentality

By [Roland Oliphant](#)

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Kravchenko says scientists are like musicians in that they must practice. **Igor Tabakov**

Becoming one of the many taxi drivers with a Ph.D. was not what Sergei Kravchenko wanted to do 20 years ago.

Though he had highly educated colleagues from the Russian Academy of Sciences who did that, became programmers for banks, or took other jobs in order to feed their families when funding for science dried up at the end of the Soviet Union, Kravchenko joined the ranks of scientists who sought work abroad.

He left to consult at academic institutions in Sweden and other countries, but was lured back to Russia in 1992 by an offer to head Boeing's first research center in Moscow — primarily, he says, because he saw in it a glimmer of hope for Russia's hard-pressed scientific and engineering community.

Sergei Kravchenko

Education

Professor, two Ph.D.'s in applied mechanics and engineering. Holds more than 20 patents and has 30 science publications in the area of mechanical engineering.

Work Experience

Before 1992 – professor and senior researcher at the Academy of Sciences

1992-1994 – deputy director, the Boeing Scientific Research Center in Moscow, director of international technical cooperation in Russia and the CIS

1994-2002 – senior manager, then vice president of Boeing Civil Aircraft, responsible for international cooperation and business development in the CIS

2001-Present – regional president of Boeing Russia and the CIS

Favorite book: “Besy” (Devils) by Fyodor Dostoevsky

Recently read: “Steve Jobs” (2011) by Walter Isaacson and “The Prince” by Niccolo Machiavelli

Reading now: “The Quest – Energy, Security and the Remaking of the Modern World” (2011) by Daniel Yergin

Movie pick: “Andrei Rublev” (1971) directed by Andrei Tarkovsky

Best Moscow restaurant: Moskovsky Restaurant, National Hotel, 15/1 Mokhovaya Ulitsa

Weekend getaway destination: St. Petersburg

Today he is in charge of more than 2,000 scientists, programmers and engineers — Boeing's largest operation outside the United States. He is proud to say Russian engineers played a crucial role in developing some of Boeing's biggest projects, including the 787 Dreamliner — some components of which are only made at the company's plant in the Urals.

To have America's most advanced commercial aircraft dependent on something made in Russia is one of his proudest accomplishments, since Kravchenko views the remaining vestiges of Cold War thinking as one of the most frustrating inhibitions to advancing U.S.-Russian relations.

No less important, as one of the first Russians to become the general manager of a major American company, he is a role model to young local managers. He became president of Boeing Russia in 2002 and was named person of the year in 2009 by the American Chamber of Commerce in Russia.

But while he is obviously dedicated to his work at the company — and speaks warmly both of Boeing and his U.S. colleagues — it is science, not business, that remains Kravchenko's first love.

He has science in his blood — he's the third generation of a family of scientists, part of a Russian and Soviet tradition in which science is passed down from parents to children.

Joining Boeing actually meant giving up a promising academic career. While at the Academy of Sciences, he earned two Ph.D.'s in 10 years and became the youngest doctor and professor

of sciences in Moscow. In 1988 he won the state youth prize for science and technology. His precociousness could be thanks to his mother's efforts — she made the "shrewd strategic investment" of making him study English from the age of 6.

The Moscow Times sat down with Kravchenko to discuss Russian science, the future of the high-tech economy and why a lingering "Cold War" mentality discourages other high-technology firms from following Boeing's unique lead.

This interview has been edited for length and clarity.

Q: How did you make the transition from academia to Boeing?

A: In 1992, I was working in Stockholm as a research professor, when I got a phone call from my former boss, a vice president of the Academy of Sciences. Boeing said they wanted to open a technology research center in Moscow and they were looking for a manager.

Probably the main reason I was interested in this was that at that time the fundamental sciences and the aerospace sector in Russia were in a very, very difficult situation. The funding was almost zero. And many of the best research teams that I knew and worked with were struggling to survive. In my own institute people who worked for me and with me in the lab became programmers for banks; some of them were taxi drivers; half of them emigrated. At that time I had more people in my phonebook from my Ph.D. and student years with area codes in Germany, Israel and the United States.

I was worried about this because we have a long heritage of science and engineering in my family — my son is the fourth generation of scientists and engineers in our family — so the history and tradition of Russian and Soviet science is very close to my heart.

I was thinking that if I joined Boeing, and if I could help to create this technology research center, maybe I could help a few dozen Russian scientists not to emigrate but to stay and continue to develop in their fields.

Q: What were the challenges in being one of the first Russian general managers of a Western company?

A: OK, so I don't know the history of baseball in as much depth as maybe a boy from Chicago, but that's not that important for growth at Boeing. At some point it became obvious that in order to grow the business here in Russia I needed to know the company from the inside. Boeing management asked me to go to Seattle and I lived and worked there for six years. And they rotated me like crazy, so I learned engineering, sales and marketing, business development, commercial aviation services, worked with suppliers. So when I came back to Moscow we developed a strategy to grow the intellectual services, including design, IT, and so on, and how to grow manufacturing of titanium parts and components here.

When I started, the office was many orders of magnitude smaller, and a huge number of our employees working here were Americans. Not anymore. And we have people who are fully integrated, fully trained, local employees in executive positions. The same is true for the engineering, technology, finance, sales and airline support managers and directors. So in 20 years we have been able to create a local Boeing and this is the key to our success in Russia.

Q: What are the challenges of running a high-tech, science-intensive company in Russia?

A: We've never had a problem finding talent in Russia. Talent, unique facilities, unique expertise — they do exist. The rumor that everyone emigrated, everything stagnated and all the scientists and schools aged and retired, is actually not true. We always had and still have more proposals and interesting opportunities in Russia than we can work on.

I have Russians in this office who came to Moscow to work with me from Canada, from the United States and from Australia. They had good careers in those countries, and they came back and helped us to create hundreds of high-tech jobs for Russian engineers and scientists here.

There were internal and external challenges. Internally, it was not easy to convince Boeing that the scale of the Russia project could be much bigger than originally planned. But we had a lot of executive support to our proposals to grow intellectual services in Russia.

The external challenge was to explain to some important people here in Moscow that Boeing wants to build a win-win, long-term project in Russia — not to steal ideas, not to poach the brightest people. There were times when I heard that people used the term "internal emigration" — meaning I'd invented a new way to "steal" Russia's talent because scientists and engineers who might have moved to Seattle to work for, say, Microsoft, did not have to leave the country if Boeing built a center here in Moscow. There were people who said this project was a spy center.

It was difficult, but our strategy was to be absolutely transparent. To say straight what we were doing and who were to our partners. We never talked about the technology specifics or the money that was spent. But we talked about why we were doing this. And the idea was not only to help the company but also to help Russia because at that time there was a clear problem with underutilized intellectual capacity.

Scientists are like musicians. If musicians do not have a piano or a violin to practice on every day, it doesn't matter how good they are, they will lose their skill, and it will take a very long time, if it's possible at all, to regain it. At that time the best research teams in Russia were not very busy. So what we did was bring new interesting and challenging projects to these organizations. We never paid scientists or engineers as individuals, and we never implemented a grants system.

I think the government began to realize that it was a very good model: People stay in Russia; they continue to be employed by Russian institutes or engineering services companies; they pay taxes in Russia. Our projects supported universities and helped to maintain the Russian educational tradition in aerospace. Experts working for us are still Russian citizens, they don't emigrate, they enjoy working on really big technology challenges, and in doing this they develop new knowledge, which they can apply to Russian programs as well.

Q: What should Russia's role model be for engineering services?

A: Russia needs to learn from India. India jumped from an undeveloped country to one of the leading high-tech countries in the world in 20 to 25 years because Rajiv Gandhi had a vision that India could become the destination for IT services work for the whole world. This became

the engine for Indian economic growth. So if you think about what we've done in Russia, we've prototyped the same thing in engineering and research and development.

We manage a design center in Moscow that is the largest engineering presence outside of the United States for Boeing. We have developed partnerships with almost 400 scientists, and we have here the second-largest IT presence for the company, after India. All together that serves as a prototype for the future opportunity for Russia's economy — to export intellect in addition to the export of raw materials. I call it "intellectual services export."

Russia's economy relies very heavily on the export of gas, oil and metals. And it's like an addiction. It's like the economy is on drugs. And the only antidote to this drug addiction is intellect.

I'm a big believer in Skolkovo. If you go through our building in which you are now sitting there are 12 floors — and each floor is an engineering or technology floor. We have a mini Skolkovo 300 meters from the Kremlin.

Medvedev thinks about something a little different — he also wants the best of these people to create absolutely new technologies and new businesses. He dreams about a Russian Steve Jobs. But for that you need to have the environment, the infrastructure.

What we have done at Boeing in developing the export of intellectual services from Russia is a standalone case, but I would like to see way more companies, way more American and European companies, doing what we've done.

Q: How do the challenges of the business environment affect your efforts?

A: Sometimes people blame Russia — they say it's very corrupt, it's not transparent and it's difficult to do business. I read about this, but I don't feel it. People ask me "how do you work in a corrupted country" and I ask "what corruption?"

Maybe it's because my business is a high-technology business or maybe because it's so visible, large scale and we work with the government all the time, but for 20 years we have never faced the problems that people sometimes say are a show-stopper to do business here. Again, maybe that's because of my domain. It's a business based on the Internet, based on people working on very complex, virtual statements to work. It's a people-intensive business, not a capital-intensive business.

Q: What are the management nuances to building and running such a business?

A: I think the management secret is very simple: We try to attract the best local people. Of course there are lots of people who are well educated and talented. But we're looking for people eager to learn.

I started to build a team when I was in my early 30s, and I always felt like I was the youngest person in the office. Well, I don't have that feeling anymore. Now we also have a responsibility to attract people who are half my age and make sure that they see the very best growth opportunities, and not only here in Russia — maybe they can work for Boeing in other countries. But eventually they can come back and do the work here at a high level. Career opportunities are really important for young people.

A Russian paper came to me and said: "Sergei, tell us your three secrets" to build such a team and unite people.

I said: the first thing is you need to speak English. Boeing is the largest U.S. exporter and English is the language we use. It doesn't have to be perfect; we'll improve it on the job. Two — you need to have a driving license. Because everybody is expected to travel but the company doesn't provide personal drivers in Seattle and elsewhere. Third — you need to have a sense of humor.

If you have these three skills, then come and we can find an interesting job for you. Everything else you can learn from us.

Q: What keeps you up at night?

A: The Cold War ended almost 25 years ago, but there are still people in both countries who have very little trust and understanding of each other. But more importantly, they have very little desire to learn and to appreciate that the world actually needs strong ties between the United States and Russia.

My business is very much dependent on how fast this mentality will evaporate. I'll probably retire and it'll still be there, but I hope that it will be much less when than it was when I started.

We would certainly never have thought in the early 1990s that there could be thousands of Russian scientists, engineers, and software programmers working for us and developing the most advanced American commercial airplanes. We never thought that there would be a sole-source producer of the critical titanium parts for the Boeing Commercial Airplane group in the Urals. I think that the trust and interdependence between countries is actually much better than it used to be.

So why don't some people see the clear benefits of this cooperation and try really hard to build the necessary trust faster and leave these old fears behind us?

I think that there are still way more projects that Russia and the United States can cooperate on, to improve global security, to develop new technologies, to grow both economies and give people new opportunities to learn.

But they don't yet happen because there are still a lot of people in both countries who need to overcome this Cold War mentality.

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