

ANALYSIS

Russian Emigrants in the Corporate Culture of American High-Tech Firms

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Abstract

The Russian Federation's scientific community has suffered a new wave of brain drain in recent years, which is distinguished from the exodus at the beginning of the 1990s by the relative youth of the migrants, the spread of new forms of brain drain, and a change in the main reasons for the migrants to leave. Russian citizens generally are successful in adapting to American universities and high-tech companies, though there are differences in professional strategies across generations. Russians praise the corporate and managerial culture and the organization of work in American high-tech firms, particularly in contrast with Russian scientific organizations. At the same time, Russians bring to American culture not only professional expertise, but also the specific features of their "national character," which is largely the product of their socialization in the Soviet and post-Soviet environment. Most of the migrants are not interested in returning to Russia, which holds relatively little attraction for them.

Waves of Migration and the Brain Drain Problem

The US was, and remains, one of the main recipient countries for Russian immigrant scientists. Other popular destinations include Canada, Germany, and Japan. In recent years, Asian countries are also starting to become key destinations as well. American high-tech firms have traditionally welcomed Russian IT specialists, biologists, chemists, physicists, and mathematicians. According to Scopus, more than 50 percent of the publications of the Russian scientific diaspora come from the US; the US-based scholars account for 44 percent of the citations of Russians' work, while Russians working in the Russian Federation account for only 10 percent of the citations.

The first wave of brain drain began immediately after the opening of the Iron Curtain. Although it is clear that the scale of the migration was great, precisely determining the number of scholars who left Russia is practically impossible since they used all possible channels to leave. Even defining who is a "scientist" is open to considerable debate. As a result, estimates vary widely and the very problem has become an object of considerable contention. According to the Ministry of Internal Affairs, from 1992 to 2001, 43,000 Russian citizens working in the sphere of science and education received permission to leave for permanent residence abroad. But these figures are not universally accepted. According to the Russian State Statistics Agency, the number of scientists leaving for the West was 100,000 individuals; while the Carnegie Endowment for International Peace cites the figure of 300,000. At the high end of the scale, the Union of Scientific Workers of Russia claims one million. The experts agree that the exodus mostly affected representatives of the natural sciences, which in the 1990s included the departure of entire laboratories, and affected humanities specialists much less.

In recent years there has been a new brain drain which differs from the flight of the 1990s with respect to the following characteristics:

- The younger age of the scientists leaving, including college and graduate students studying in various programs abroad, and young scholars seeking a more challenging environment for their education and professional experience;
- Wider use of new forms of brain drain supplementing the traditional emigration, such as through "contract migration," when scholars go abroad for 1–3 years of contract work with a high probability of staying for a permanent position and "pendulum migration"—work on temporary contracts leading to scientists continually going abroad and returning; "outsourcing", when specialists work for foreign companies and organizations without actually leaving Russian territory (we do not discuss outsourcing here);
- A change in the motivation for emigrating. There is a consensus among experts that the main reason for the migration of scientists and scholars in the 1990s was economic, particularly the desire for a more comfortable life and greater material well-being. Today the most common reason for migration is a desire to fulfill one's professional goals and a sense that Russia does not offer the conditions necessary to achieve professional satisfaction. These reasons encourage young people to migrate.

The new wave of brain drain worsens the already poor situation in Russian science, leads to a rift between older and younger generations of scientists, a destruction of scientific schools and the stripping of priority fields. The share of scientists in Russia today between the ages of 50 and 70 is more than 50 percent (Fokichev 2009). Additionally, brain drain is causing significant economic losses for the country, which includes the preparation of specialists who leave after graduation, the unrealized

contribution to the country's economy, and the losses of outsourcing and the outflow of know-how (according to some estimates, from \$600–\$700 million to \$3–4 billion) (Faranosov 2008).

How Do Russians End Up in American High-Tech Firms?¹

Today it is possible to find Russian scientists and specialists in state and private companies, big companies and small, in all links of the “innovation chain” from universities and research organizations to R&D and the industrial production of high tech products. However, not all emigrants who had science-based jobs in Russia find work appropriate for their experience and knowledge in America, and those who do generally go through a long and difficult period of adaptation. The professional trajectories of the Russians vary. The “classical” route is when a scientist comes to work on a contract basis and ends up staying permanently. This path is the least painful and is characteristic for famous scholars who have publications in international journals, extensive international contacts, and fluent command of foreign languages. However, in the general flow of migrants, there are relatively few of these high level figures in comparison with those who left through other channels and do not have a similarly strong reputation. These problems particularly affected emigrants of the first wave, who often had to start their working career in the West performing jobs far from the scientific sphere (working as gardeners, custodians, or night watchmen). If they nevertheless were able to join a science-focused company, it was typically in a low-level, poorly-paid position with a narrow range of relatively simple functions (programmers, production line workers, etc.) Often in looking for a job, they had to hide the real level of their education and experience so that they would not be rejected as “overqualified.” The very process of looking for a job for older generation Russians, who grew up in conditions of full employment during the Soviet era and are not used to selling themselves on the labor market, from the beginning was a stressful exercise, which was exacerbated by the need to shine in an interview conducted in English, a language that they usually had not mastered.

The younger emigrants of the new wave move in different circles since many of them received degrees or stipends from American universities (a typical strategy is to earn a PhD in Russia, where the procedure is simpler and quicker, and then go to the US for a post doc) or come to work in the US by invitation, often orga-

nized by another Russian who has already established himself in the US. In either case, the young scientists quickly end up in professional positions without having to travel through the “rings of hell,” which awaited emigrants of the first wave. The new generation is distinguished from the old by its better knowledge of English, extensive international experience, and different reasons for leaving. In contrast to emigrants from the first wave, who left because of their poverty, the newer generations are focused on professional self-realization which is not possible in the current conditions of Russian science. Such emigrants typically say that “Earning money is not a problem, it is just that the work is not interesting.” In other words, for this generation, working in one's field and professional growth are the main reasons for emigrating. Despite their differences, representatives of the first and the second waves in general are similar in their evaluation of the specific corporate culture and organization of work in American companies.

American Companies through the Eyes of Russians

The corporate culture and organization of work in American companies is superior to that of Russian scientific organizations in the eyes of Russian emigrants. Above all the Russians are surprised by the atmosphere of respect and trust in the scientist, which is unusual for Russian organizations. Russians often have trouble understanding this at first (“In Russia, we assume that they are deceiving you and they do not trust you,” one respondent told us.) This respect and trust stimulates creative initiative and the desire to work. The opportunities for self-realization to a significant degree are provided by the beneficial conditions for working, the effectiveness of the organization, and the provision of resources necessary for conducting experiments and research. These conditions make it possible for the scientist to focus on scientific work and not on solving some organizational problems, a situation that is particularly welcomed by Russian scientists.

They also praise the managerial culture, which Russians consider one of the key conditions for the effectiveness of high-tech companies. They especially emphasize the division of scientific work (the scientific leadership) and the technical management. In American companies, the task of the manager is not to generate ideas, but to organize the process, resources and people for implementing the given tasks. By contrast, the scientific leader in a Russian scientific institute must himself organize both the material and financial side of his project, resolve all the logistics and other problems which inevitably arise, and prepare all reports. In contrast to Russia, where servility and subordination are characteristic,

¹ This section is based on data gathered in interviews with Russian emigrants in American high-tech companies conducted by the authors between January and May 2011.

American corporations cultivate democracy. American managers, as a rule, are open to discussion and accessible to their subordinates, and not only in small companies (of course, there are always exceptions in both Russian and American companies). This situation generates feelings of surprise and approval among Russians.

Another quality that American companies have that is significant for effective work, in Russians' view, is the ability for long-term planning, which provides for greater stability. In the conditions of the unstable Russian economy, a scientific manager must develop "multiple financial schemes" in order to assure project funding. It is noteworthy that the possibility of long-term planning has an impact on the motivation of employees. The Americans are "more honest," they care about their professional reputation because they have a sense of their professional future, which they need to protect and invest in today.

Although the contrasts between American and Russian companies dominate, there are also similarities. As in Russia, academic organizations in the US are more informal than industrial concerns, where technical discipline is crucial. The demands for labor discipline also are significantly softer in academic scientific organizations, which make them closer to their Russian counterparts. There are also analogous differences in the organizational culture between big and small businesses, above all, in the relationship between formal and informal rules. The bigger companies that work on government contracts remind our informants of large Soviet scientific organizations in terms of their bulkiness and bureaucratization.

"Russian National Character" in the Context of American High Tech

Russians "export" to American high-tech companies not only professional expertise, but also specific types of corporate behavior, which is largely a result of their socialization in the Soviet and post-Soviet environment. The specifics of the "Russian national character" are both an advantage and insufficiency from the point of view of American companies.

On one hand, Russian workers are characterized by their creativity, desire for perfection, and ability to innovate. The source of this creativity is above all the fundamental general scientific preparation of Russian specialists (particularly the older generation) that is characteristic of Russian education. The Soviet Union's universal shortages also facilitated the development of this creativity by forcing scientists to turn their ideas into actual products through the drive of their own ingenuity. Accordingly, they had to develop a variety of skills in a wide range of practical fields. Additionally, with the

Russians, the American companies often get a person who not only thinks in non-standard ways, but is totally immersed in his or her work, which the Russians think distinguishes them from their American colleagues. A characteristic example is that Russians are shocked when their American colleagues in private conversations say that for the money the high-tech firms pay them, they would "sweep the streets." For a former Soviet citizen, the opportunity to work in one's profession is a fundamental life goal.

However, on the other hand, the Soviet-Russian reality formed characteristics which poorly fit into American corporate culture and prevent Russian employees from "playing by the general rules." One such characteristic is the traditional Soviet and Russian distrust in the official authorities. This personality feature manifests itself in that Russian employees, as a rule, rarely or never "rat out" their colleagues, a practice that is widely practiced in American corporations. The basis of this behavior began in childhood: Soviet schools and subsequent socialization taught Russians to independently solve their own conflicts and problems within groups. At the same time, the American educational system from the early ages teaches students to tell the teacher about the dishonest or problematic behavior of the other children. As a result, in case of conflict with their colleagues, the Russian does not provide enough information to his or her manager and often ends up in a losing situation since the manager receives information from the other side of the conflict. Thus, there is a cultural paradox: what Russian employees value (not snitching on their colleagues) is interpreted as incomprehensible, and therefore disrespectful, behavior by American managers.

Another typical Russian characteristic that does not fit into the work style of American corporations is Russian-style individualism, which appears as excessive self-confidence and a lack of desire to share resources. What American managers call the "independent thinking" of Russian specialists often causes them problems. It manifests itself as a fixation that their opinion is correct to the point of open confrontation with the leadership, and a lack of desire and inability to work as part of a group. The explanation is again found in the previous socialization experiences of Russian specialists, who since their childhoods were taught to fight for individual success in conditions of harsh, at times, even aggressive competition despite the declared Soviet value of collectivism. Russians have difficulty understanding the value of group work because Russian science traditionally is not focused on producing commercial products. A Russian specialist is able to make individual innovative products with his own hands, but he is not able to carry his work to the point of creating a product for serial pro-

duction. The linear innovation model, typical for the organization of science during Soviet times, allowed scientific organizations not to worry much about the practical outcome of their research. American corporate culture, by contrast, has been oriented toward producing a final product from the beginning of the previous century, and then developed under the influence of Henry Ford's principles of the division of labor and cooperation. Contemporary high tech companies value the methods of group projects and open communications with cult-like intensity. It is interesting to note that while the individualism of Russian specialists grates in the culture of high-tech production companies, it is welcomed in academic circles. Possibly that is why Russian specialists feel comfortable in American universities; while in big companies that cover the full innovation cycle—from product development to industrial production—Russians are much more likely to work in R&D than in production divisions.

Do Russians Want to Return?

Emigration was, and remains, a traumatic experience for Russian specialists, especially for those who leave for the US in the latter years of their life or held a high position in their homeland. Nevertheless, Russian specialists remain in demand by American high-tech firms. They are attractive not only because for the employer the high professionalism of the Russians is more important than cultural differences. The Russian specialists themselves are changing as they adapt to a new corporate culture and become used to the formal and informal demands which American corporations strictly require.

Recently Russia has been trying to stop the “brain drain,” or at least transform it into a global “brain circulation.” The authorities are developing programs that

envision various incentives for bringing talented citizens currently working abroad back to their homeland. These include market-level salaries, cost-free housing, and the most recent technology in the office. But do the Russian specialists who are successful in the US and left Russia even though they had plenty of opportunities to make money there want to return?

To answer this question, one must understand that during their time abroad Russian specialists became accustomed not only to higher salaries, but different organizational cultures. They are not prepared to return to organizations with incompetent managers, an atmosphere of mistrust at work, bureaucratism, and the need to invest working time in emotional relations with the bosses or “semi-scientific activity.” As one Russian scientist who worked in an American biotech company pointed out “If you just pay me, I will not return to Russia. Because it is not just about salary, it is impossible to work there.” But even if in a particular Russian company it were possible to create a Western-style work environment, it would be more difficult to give Russian repatriates a sense of political and economic stability, especially if they became used to long-term planning of their career and life while abroad. According to a Russian physicist who has set up a small American high-tech firm, “A person should believe in his future, but in Russia, it is only the ‘here and now.’”

It is possible that material concerns may play a bigger role in deciding about whether to return if the economic crisis deepens and Russian scientists in the West face the threat of unemployment. However, currently, the majority of successful Russian specialists think that working in the West represents for them the best and most predictable prospect for their professional and lifetime development.

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Recommended Reading

- Faranosov A. Problema utechki mozgov iz Rossii. *International Journal of Russian Studies*. No. 1. 2008.
- Fokichev Yu. N. Dinamika chislennosti kadrov nauchno-issledovatel'skikh uchrezhdenii Sankt-Peterburgskogo nauchnogo tsentra RAN. In Kugel' S.A., ed., *Problemy deyatel'nosti uchenogo i nauchnykh kolektivov*. St. Petersburg: Nauka 2009, pp. 197–204.