A Russian Tragedy

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Traveling through the global computing community, we tend to see fundamental uniformity and superficial variation. Our international colleagues solve the same kinds of problems that we do. Our devices can link to the local Wi-Fi network, even though some people pronounce it “wee-fee.” Our data and programs slip into distant countries without even slowing for a customs inspection at the border. We can become so accustomed to this uniformity that we can be surprised when someone from the computing community questions its value.

A Russian acquaintance once told me that global uniformity was “a grave mistake.” He worked for a Russian-language software magazine and was trying to give me some insight into his country’s software industry on a cold Moscow night. He argued that Russia had constrained its software industry by adopting American computer architectures in the 1960s and 1970s instead of developing indigenous Russian designs. Most commentators said that the Russian government, then the government of the Soviet Union, had made wise choices in copying the architectures of the IBM 360, the PDP-11, and the Apple II. However, my acquaintance rejected this idea, saying that the Soviet Union had not been able to use these machines efficiently. He added, “it tied us to America.”

Yet, this experience with Western architectures must have helped establish the Russian software industry during the 1990s. At that point, new Russian firms could claim few advantages over the legacy software companies. None had experience in a competitive market, and none could finance their growth with income from a profitable database or operating system. However, these companies now represent about 2.5 percent of the global software market. Combined, they earn about $10 billion in annual revenue with $6.5 billion coming from export sales and $3.5 from the domestic market.

Though Russia doesn’t have a dominant brand such as Google or Alibaba, it does have some prominent international firms such as AABYY, Luxoft, and Kaspersky Lab—the latter “dominates the markets of many economically developed countries,” including the US and Germany, according to the Russian trade association Russoft. Several companies, such as the search engine Yandex or the communications platform Mail.ru, dominate the Russian market. Moscow and St. Petersburg have become international centers of software development, and are home to about half the Russian software industry.

Despite its success, there seems to be a gap between the Russian software industry and its Western counterparts. The most recent Russsoft industry report reads like a Russian tragedy: the estate has been lost; the family is unable to cope with changes in society; the children cannot find roles for themselves in the world.

“The situation in the world and within Russia for Russian software companies has somewhat changed for the worse,” the report begins. It cites the weakening of the ruble and a decline in exports due to “anti-Russian sanctions” and negative reports in the global media. These problems, it claims, come from forces that lie outside the technological industries, notably foreign governments that disagree with the Russian approach to Ukraine and Edward Snowden plus the foreign media, which criticizes Russian technology. “It is as if this media fulfill[ed] an order to drive out Russian business from the major markets of geopolitical competitors of Russia,” the report concludes. “One cannot help but compare this campaign with squeezing Russian sportsmen out the Olympic Games in Brazil.”

The Russsoft report is a tragedy of context. It argues that the Russian software industry is a good industry with honorable people, but it’s unable to fulfill its potential. Here’s where it reveals its true unity with the software industries of other nations. We’ve all been told that software is an innovative technology that creates wealth, improves health, and expands knowledge. Yet, software will not protect its practitioners from the intrigue of nations, from attacks on political institutions, or from failures of economies. That, perhaps, is the key lesson of this Russian tragedy.