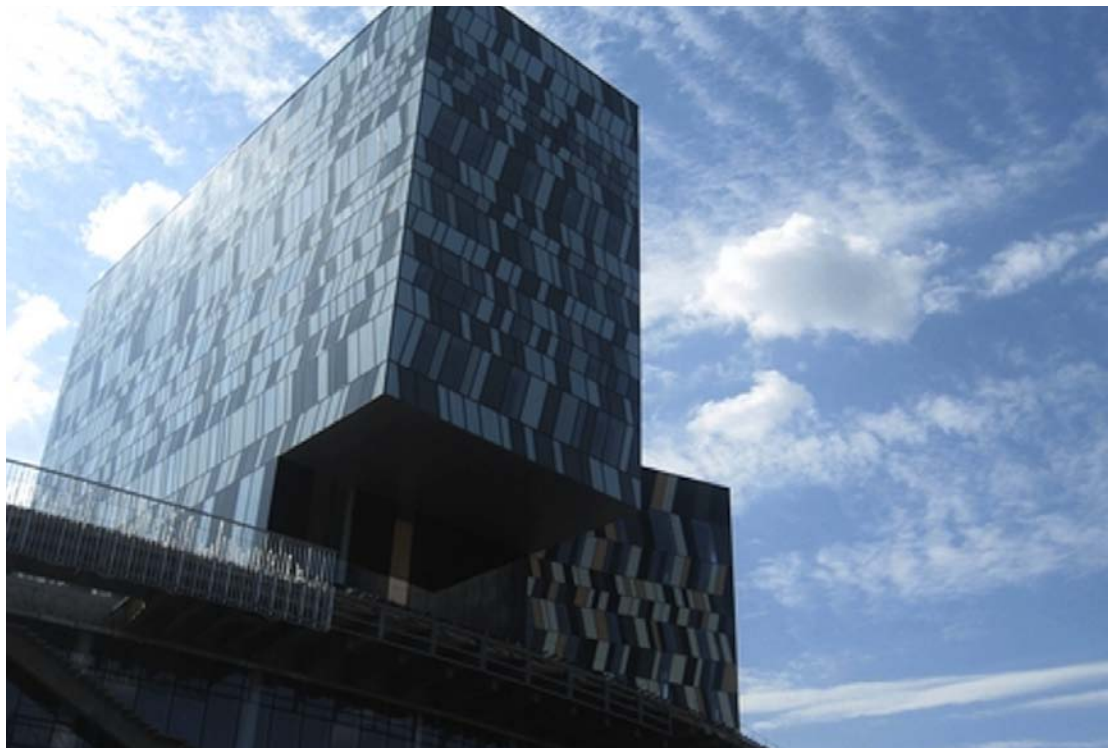


# The Skolkovo Project: From the Mire of Corruption to the Freedom of Technology

by Alexandra Cox

*The global financial crisis of the past two years exposed Russia's economy as dependent on oil, gas, and metallurgy, and devoid of the innovative advances that have come to define successful western nations. To promote research and development in the spheres of alternative energy sources and technology, Russia is attempting to create a "Silicon Valley" in Skolkovo, a city west of Moscow. However, the legacy of corruption and bribery remains an impediment to Russia's reemergence as a superpower in the modern business world. Only by combating corruption and cultivating an open political and business environment can Russia hope to develop an atmosphere in which a Skolkovo project can succeed.*

The newly built Skolkovo-Moscow School of Management



Russia knows that it needs business. If it wishes to remain competitive in the international economy Russia must develop business in the sectors of technology and innovation (Laquer 155). However, it must first address a legacy of corruption. As Robert K. Massie notes in his biography of Peter the Great, “Bribery and embezzlement were traditional in Russian public life, and public service was routinely looked upon as a means of gaining private profit” (Massie 781). Although Massie’s statement describes the country as it was three centuries ago, it could just as easily portray the Russia of today. In October 2010, the current President of Russia, Dmitri Medvedev, announced that one trillion rubles, or roughly thirty-three billion U.S. dollars, disappear annually on government contracts (Andersen par. 5). This sum amounts to three percent of Russia’s GDP (Iofee par. 2). Despite the great fluctuations in Russia’s history since the days of Peter the Great, the legacy of bribery and corruption remains a powerful impediment to Russia’s reemergence as a superpower in the modern business world. Russia’s latest initiative to create a “Silicon Valley” of sorts in Skolkovo, a city twelve miles west of Moscow, has the potential to provide the impetus for Russia to transition into the digital age.

The global financial crisis of the past two years exposed Russia’s dependence on oil, gas, and metallurgy, and its lack of innovative advancements when compared to successful western nations (155). In a world increasingly looking toward “green” initiatives, Russia’s dependence on its limited natural resources places its economy in a precarious situation (Thornock and Whitaker par. 13). By acknowledging his country’s need to promote research in technology and alternative energy sources in order to keep up with other nations, President Dmitri Medvedev hopes to fundamentally alter the foundation of the Russian economy. He stated, “During the next decade, Russia should become a country in which the welfare and the good quality of life is ensured by its intellectual rather than natural resources, its innovative economy” (Medvedev, Solash

par. 16). Initiated by the government, the Skolkovo project attempts to diversify Russia’s homogenous economy and launch Russia into the modern business world. Nonetheless, questions remain as to the legitimacy of such an endeavor within the Russian political system.

When Mikhail Gorbachev became General Secretary of the Communist Party of the Soviet Union in March 1985, he brought with him a plea for a restructuring of the Soviet system, called *perestroika* (Gorbachev 1). “Perestroika is an urgent necessity arising from the profound processes of development in our socialist society” (1). For nearly a century leading up to Gorbachev’s perestroika reforms, all private enterprise within Russia was banned or centralized under state ownership (Thornock and Whitaker par. 9). Entrepreneurship and private enterprise were virtually nonexistent in Soviet Russia. Though the Soviet Union had attained superpower status as a military force, become the foremost producer of steel and oil, and led the world in space exploration, its economy was stagnant as a result of Communist collectivization efforts (Jones and Moskoff 1).

With *perestroika*, Russia witnessed a loosening of its strict communistic practices. One of the foundations of the perestroika reforms was a legalized private economy, which Gorbachev introduced through cooperatives, permitting private ownership of businesses for the first time in nearly half a century. Gorbachev recognized that private enterprise could meet needs not being met by the state (Jones and Moskoff 12). Yet private enterprise meant private gain, and private gain was directly related to capitalism and exploitation (12).

After the fall of the Soviet Union in 1991, the Russian government began to pass legislation to transition from the centralized Soviet economy to a free-market system. The 1995 law entitled “On State Support for Small Business in the Russian Federation” called for government “assistance with modern equipment and technologies including the creation of a network of business technoparks and business incubators” to stimulate the newly formed small-business sector of the economy. Though corruption in the early years of the Russian Federation and the financial crisis of 1998 prevented these reforms from inducing significant change, the reforms laid the foundation for the concept of Skolkovo (Thornock and Whitaker par. 9).

Following the election of President Vladimir Putin in 1999, Russia continued an ideological movement

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Russian President Medvedev, the driving force behind the Skolkovo project, speaking at Stanford University about the need for more technological innovation in Russia.

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away from its Soviet system. In his introductory speech, Putin stated, “It needs to be recognized that without the development of [the small business] sector in the country, there will neither be a steady improvement in economic growth, nor an improvement in people’s lives. The more people are involved in small business, the more stable and healthy is the Russian economy.” In adherence to Putin’s emphasis on the necessity of small business development, current President Dmitri Medvedev states that he hopes the Skolkovo project will foster an environment of technological innovation and imagination in Russia that will promote research in the spheres of alternative energy sources, information technology, communication, biomedical research, and nuclear technology (Razumovskaya par. 22). Skolkovo, President Medvedev says, will try to replicate Silicon Valley’s success while “paving its own way to completion” (Thornock and Whitaker par. 20).

Currently, two major projects are underway in Skolkovo. The first is Innograd, or “innovation city,” which will be composed of various technological companies assembled in one geographic area. The second is the Skolkovo-Moscow School of Management, which is already open and training a new generation of Russian innovators (Thornock and Whitaker par. 8). In order to determine whether Russia will be able to cultivate the right environment for the success of the Skolkovo project, it is important to analyze the major factors that have led to the growth of Silicon Valley from

its beginnings in the 1930s to its current prominence in the worldwide innovation industry.

“It seems remarkable to me,” reflected William Eitel, one of the first radio hobbyists to come to the Silicon Valley, “that on the San Francisco Peninsula, off the beaten paths of commerce, grew so many independent new industries, all now of national and international importance.” From just a small group of firms employing a few hundred radio amateurs, Silicon Valley has become the main center for electronic component manufacturing in the United States and serves as the headquarters for major technological firms such as Apple and Cisco (Lecuyer 295). Silicon Valley rose to its current prominence in the international economy due to a combination of skilled graduates from nearby Stanford University and the University of California, Berkeley and patronage from the US Department of Defense. Recognizing the significance of university ties and government sponsorship, Russia is attempting to draw from the history of the development of Silicon Valley as it fashions Skolkovo and Innograd.

Former Stanford University Provost Frederick Terman is largely credited with establishing the long-standing relationship between Stanford University and Silicon Valley (“The Rise of Silicon Valley” par. 1). In 1925, he returned from his graduate career to pursue his doctorate at Stanford University (Leslie 76). At Stanford, he launched a commercially-oriented program in radio electronics and encouraged collaboration between his students and local electronics companies (Leslie 76). Under Terman’s guidance, Stanford students David Packard and William Hewlett established an electronics company in their Palo Alto garage that would grow into today’s Hewlett-Packard Company thus forming the long-standing relationship between Stanford University and Silicon Valley (“The Rise of Silicon Valley” par. 1). The partnership between Stanford and Silicon Valley continues today with strong ties between university affiliates and companies such as Google, Cisco Systems, Intuit, Silicon Graphics, and Sun Microsystems (par. 6).

In a similar vein, President Medvedev hopes to foster a relationship between Innograd and the Skolkovo-Moscow School of Management. For Innograd to succeed, Russia will need motivated entrepreneurs and engineers knowledgeable about trends in emerging markets (Yana). In a speech at Stanford University during his June 2010 visit to Silicon Valley, President Medvedev addressed the “brain drain”

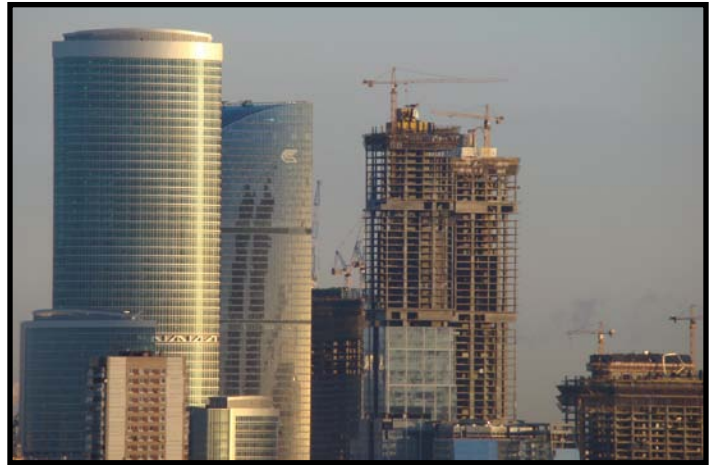
that has affected Russia since the days of the Cold War. He stated, “We want our talented people, and Russia has always had a reputation for its talented people, to have every opportunity to fulfill their potential. In order to achieve that we need to reform our education system and create an opportunity for each talented individual to be reached by the people who support his or her ideas” (Medvedev). President Medvedev hopes that the Skolkovo-Moscow School of Management will attract future business leaders who wish to remain in Russia and pioneer new technology-based businesses, just as Stanford University graduates continue to pioneer the growth of Silicon Valley (Kamyshev par. 8).

In the spirit of embracing innovation, the Moscow-Skolko School of Management offers students a novel approach to graduate business programs. Students spend only four out of the twenty-month program on campus in Skolkovo. The remainder of the program is spent working off-campus on consulting jobs located in China, India, and the US (“Skolkovo MBA” par. 1). Should the school succeed in attracting potential students, Russian officials hope it will become the new standard for business education and succeed in training “leaders who will set up and run their own businesses and lead the development of the Russian economy” (Thornock and Whitaker par. 26, “Mission” par. 2).

The global approach of the Moscow-Skolko School of Management MBA program may, however, have an opposite effect on the “brain drain” than that which President Medvedev desires. With students spending over three-fourths of their education abroad and as a result establishing connections in countries outside of Russia, they may find greater opportunities during their terms overseas (Kamyshev par. 15). Russian trade union officials estimate that more than one-half million scientists and computer programmers have left the country since 1991 to find well-paying jobs elsewhere in Europe and in the US (“Building a Silicon Valley in Russia” 3, Yana par. 4). As Vladimir Babkin, an advisor to the Russian State Duma’s Committee for Science and Technology noted, “Those who are successful overseas will not return” (“Building a Silicon Valley in Russia” 3).

While the interactions between local universities and innovation centers like Silicon Valley provide the thought power to sustain continued growth, the history of Silicon Valley reveals the importance of military and government patronage that may be key to Russia’s development of Innograd. In a sense, the US

government was Silicon Valley’s first venture capitalist (O’Mara 5); it promoted innovation through research grants and defense contracts (Heinrich 251, O’Mara



The recent rapid growth of Russia's economy has depended largely on natural resource wealth, although projects like Skolkovo are attempting to diversify the economy

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par. 7). During World War II, the Korean War, and the Cold War, Silicon Valley companies were able to capitalize on the military’s demand for microprocessors, vacuum tubes, and semiconductors, which were crucial in the manufacture of intercontinental ballistic missiles, reconnaissance satellites, and other high-tech weapons and weapon systems (Heinrich 247, Lecuyer 7). With the launch of Sputnik in 1957, fears regarding Russia’s scientific prowess abounded and the US government “kicked investment into a higher gear” (O’Mara par. 7). By the end of the Cold War, the nine largest contractors in Santa Clara County, California, which included Lockheed Missile and Space, Ford Aerospace, Westinghouse, and United Technologies, among others, reported more than \$11 billion in military defense contracts (U.S. Department of Defense). Stuart W. Leslie reflects on the importance of “the assumptions and priorities of Cold War defense policy” to the development of Silicon Valley. He states that Silicon Valley was “created and sustained in the name of national security” (Leslie 75).

While the military and the Department of Defense sustained the formation and growth of Silicon Valley, it also forced local firms to open up new markets for their products in the civilian sector (O’Mara par. 7). The Department of Defense sought access to the manufacturing and accounting processes of the Silicon Valley firms in order to reduce their bargaining powers (Lecuyer 207). Additionally, the military’s inconsistent volume requirements made it an unreliable customer for innovative firms. Because of this, many firms

moved into commercial markets by expanding their businesses into the public sector (Lecuyer 207). This not only spurred business growth, but also inspired the invention of new technology as capitalism and supply and demand generated competition.

The Russian government's close involvement in the Skolkovo project emulates the US government's participation in Silicon Valley's history, with one crucial difference. Though the US government was largely responsible for the creation of Silicon Valley, America's free market economy promoted growth outside of the governmental sector (O'Mara par. 9). The Russian economy, however, remains unstable even twenty years after the fall of Communism. Investors hold reservations about the bureaucracy, red tape, and expensive capital that still plague the Russian economic system (Andersen par. 19, "Building a Silicon Valley in Russia" 1). As President Medvedev himself noted, "Everything in Russia is a scheme; everything eventually turns into massive, legalized theft" (Thornock and Whitaker par. 19). The commonplace corruption that pervades every sector of public life, all the way to the Kremlin, could prevent the Skolkovo project from achieving successes on par with those that President Medvedev sees in Silicon Valley.

Russia's reputation for corruption has become a cliché. In Transparency International's annual rankings, Russia is one of the few countries to consistently fall in the rankings year after year. The 2010 survey ranks Russia 154th out of the 179 countries surveyed, a position it shares with Cambodia, Guinea-Bissau, and the Central African Republic (Transparency International). Corruption has reached such an extreme level that corporations involved in preparing for the 2014 Winter Olympics in Sochi have reported paying kickbacks of more than fifty percent (Ioffe par. 2). One road in Sochi cost so much that it could have been paved in three and one-half inches of Louis Vuitton handbags (par. 2).

In an effort to dispel negative views of Russia and encourage venture capitalists to invest in Skolkovo, President Medvedev declared a war on corruption (Andersen par. 5). During his visit to Silicon Valley in June 2010, he stated, "Russia is committed to becoming an open country, open to cooperation with everyone who is interested in working with us, open to investments, to trade, to joint projects in any area of public life and, of course, in the economy" (Medvedev). Nevertheless, Russia has a long way to go before its corruption falls to an acceptable level and creates an

ease of entrepreneurship on par with that of its western counterparts.

Since President Medvedev's election, the size of the average bribe has quadrupled, according to estimates from the Interior Ministry's Department of Economic Security (Ioffe par.11). Many state projects are undertaken for the sole purpose of creating a pool of money that can be siphoned off by interested parties. Corruption is so entrenched in the Russian public life that the government's efforts have actually had a reverse effect on bribery. When bribery becomes more risky, prices go up, making the bribes larger and more detrimental to society. An extreme example of the escalating extent of Russia's corruption took place in August 2004, when two passenger planes fell out of the sky within three minutes of each other (Dougherty par. 3). Eighty-nine people were killed (par. 1). Two suicide bombers had hijacked the planes after bribing an airport security officer with five thousand rubles, the equivalent of one hundred seventy dollars (Ioffe par. 10). These instances of corruption taint the world's perception of Russia and call into question the future success of the Skolkovo project.

Nevertheless, Russia is trying to escape the seemingly unremitting cycle of corruption. Both the Russian people and the government are making efforts to end endemic corruption in their country. In 2008, President Medvedev began an initiative to make all government requests for tender available online. From this initiative emerged Alexey Navalny's website entitled RosPil. In 2008, Alexey Navalny read that the Ministry of Health and Social Development was inviting bids to construct a two million dollar network that would connect doctors with their patients (Ioffe par. 32). The sixteen-day period that was designated for the development of the site tipped Navalny off to the potential corruption within the project (par. 32). He wrote that "without a doubt" the site had already been developed for a much lower sum. After igniting a campaign that resulted in two thousand complaint letters to the Federal Anti-Monopoly Agency, the Health Ministry annulled the contract (par. 32). Navalny's success with the campaign led to an influx of email messages with links to similar contracts. But, Navalny realized, "I can't, by myself, replace the Anti-Monopoly Agency and the state prosecutor's office. And so the idea was born to make a site where the people could do it themselves" (par. 33). Any visitor to the RosPil website can submit a government request for tender to public scrutiny (RosPil). If the document

is deemed suspicious, it is posted to the main page, where registered members discuss the complaint. Experts associated with the site evaluate the price of the project, the parameters, and the schedule to determine if it is reasonable (Ioffe par. 33). If not, Navalny declares the project a fraud on his blog, which often causes the agency who submitted the request for tender to be inundated with hostile messages, enough so that in many cases the agency annuls its contracts or shuts the project down completely (Ioffe par. 33). In a tally maintained on the site, RosPil has caused requests for tender worth \$337,540,000 to be annulled (“Results”).

If President Medvedev’s efforts and the crusades of the Russian people against corruption prove to be more than unattainable examples of idealism, the Skolkovo project could establish Russia as a participant in the international innovation economy. Innograd offers investors a chance to establish a foothold in an emerging BRIC country. In the past decade, the BRIC countries accounted for 27.8 percent of global GDP growth in US dollars (Ahmed, Kelston, and Wilson par. 5). Prominent investment banks such as Goldman Sachs anticipate that these countries will be wealthier than most current economic powers by the year 2050 (par. 1). Whether or not these countries represent the future of the business world will ultimately be determined by investors themselves and their willingness to take a risk in a developing economy.

Capitalizing on the world’s current interest in emerging markets, the Russian government is offering investors and foreign companies access to tax breaks and lessened regulations if they invest in Skolkovo (“Building a Silicon Valley in Russia 2). Already, Russia offers a corporate tax rate of 20 percent, nearly 15 percent lower than the rates found in the US (Thornock and Whitaker par. 17). “... Special tax rules for Skolkovo, as well as preferential treatment and special registration procedures, special oversight and even special jurisdiction regime,” will, President Medvedev hopes, protect investors from “officials, from criminals, from some obstacles on their way... If all these rules are introduced,” he said to a crowd assembled in Stanford University’s Dinkelspiel Auditorium, “I am sure the project will succeed” (Medvedev).

Despite President Medvedev’s optimistic rhetoric, history points towards a decidedly less

triumphant future for the Skolkovo project (Laquer 160). As Russian politician Victor Chernomyrdin famously quipped in 1993, “We intended for something better, but it turned out just as it always does” (“Building a Silicon Valley in Russia 3). This quote has become a catchphrase in post-Soviet Russia and one that has the potential to define the Skolkovo project.

Despite its comparisons to Silicon Valley, Skolkovo will never enjoy the unparalleled success of its



Pervasive corruption has become a major problem for the Russian people  
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US archetype. The perfect storm of elements that led to the development of Silicon Valley, including the radio entrepreneurs, government wartime spending, and university relationships, is nearly impossible to recreate. But, more so than the impossibility of imitating in perfect proportion these elements, the Russian government’s approach and involvement with the Skolkovo

project will destabilize and perhaps destroy the grand dream of a “Russian Silicon Valley” (Kamyshev par. 20). The Skolkovo project is a top-down approach to business development, one driven by the government to the extent that it excludes the Russian people (Kamyshev par. 13, Yana). The Russian government hopes to, in a sense, command a technology center into existence. Though government involvement was an essential component of the development of Silicon Valley, the innovation sector in California was largely driven by the excitement and entrepreneurial spirit of the Bay Area residents (O’Mara par. 16).

The Skolkovo project, however, will be a place apart for scientists. During the Cold War era, the Soviet Union isolated scientists in scientific centers located in Siberia (Hoffman 13). There, scientists were immune from the problems of starvation that plagued the general population of the Soviet Union and were able to focus exclusively on developing the Soviet nuclear weapons and space programs (15). The Skolkovo project poses alarming similarities to these Siberian scientific enclaves. “[Scientists] should be isolated from our reality,” says Andrey Shtorkh, a former guard inside Sverdlovsk-45, one of the Soviet Union’s secret scientific cities. Skolkovo will be made up of five villages, each corresponding to one of five areas of innovative development of the Russian economy (Razumovskaya par. 22). Combined with the corruption already present in the country, the isolation of scientists in technology

centers does not embody the openness that President Medvedev has said is essential to advancing Russian society. For business to succeed, the people must be excited and involved in the technology development process, not isolated from it. Silicon Valley was not commanded into existence; rather the innovation sector developed in California from the bottom up and was ensured continued growth by the American economic system, which values entrepreneurship and its protection (O'Mara par. 17).

President Medvedev's words, his declarations of openness, his promises of an end to Russian corruption, need to become reality rather than slogans that mask the stagnation and corruption of Russia's democratic progress (Laquer 157, Yana). Before investing in a project like Skolkovo, Russia needs to cultivate an environment in which it can succeed; it needs a better business climate ("Building a Silicon Valley in Russia" 1). A better business climate is created by enforcing stronger rule of law, by supporting entrepreneurship, and by making investors feel secure in their investments (Laquer 158). If Russia can truly open itself to competition in a free market system, then perhaps a project like Skolkovo would be a feasible endeavor. For now, however, Russia should focus on creating the open society President Medvedev so earnestly proclaims. Otherwise, investing in the Skolkovo project would merely be another disappointment, reminiscent of the numerous fully-funded yet abandoned endeavors that litter the expanse of Russian history.

The Skolkovo project was forced into existence by the government in an attempt to stimulate growth. Two decades have passed since the fall of communism, yet Russia still does not embrace the competition that makes Silicon Valley successful or the transparency that creates a stable business environment. Though the Skolkovo project is developing at a time in which the reality of Russia cannot sustain the grandeur of Skolkovo's idealism, the efforts of those striving to end the corruption point towards a future in which Russia may be able to cultivate an open political and business environment. As a result of the Skolkovo project, Russia has taken great strides towards ending the corruption that has been entrenched in Russian society for so long. Websites such as Alexey Navalny's RosPil ensure the continued empowerment of the Russian public as they confront questionable government and business practices. Technology, the foundation of the Skolkovo project, offers the people of Russia a means to

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