

A Report on the State of Education and Graphic Communication Industry in Russia and Ukraine

by Ken Macro, Ph.D. • California Polytechnic State University

A Five Week Educational Journey

During social settings in Russia, Ukraine, and the rest of Eastern Europe, it is customarily acceptable to toast to health, wealth, and prosperity with a gram of excellent vodka. Such an event is a mutually accepted cataclysmic stimulant to synergizing a relational bond between people both previously acquainted and strangers alike. To Russians and Ukrainians, however, the quality of the vodka has the ability to either enhance the experience or threaten it, thus contributing to the conversation and possibly furthering the bond. One particular brand of vodka, known as Russian Standard (Русский Стандарт), is an internationally recognized staple in the vodka market. It has evolved to become a national icon branded as a premium product purveyed with Russian ideals strategically marketed by its highly recognizable beautifully designed die-cut, foil-embossed silver label. The company, however, is exceptionally young. Started in 1998 by Roustam Tariko, a young and budding entrepreneur who arose after the fall of the former Soviet Union, Russian Standard was founded upon the premise that high-quality products, modernization, and a new Russia can co-exist harmoniously.

Representing a new economic order in Russia since the fall of the Soviet Union, Mr. Tariko and his contemporaries have created the standard for all of Russia and the Ukraine. Two cultures that have transformed over thousands of years of conflict, battle, political turmoil, upheaval, and change, have risen out from the rubble of a collapsing centrally planned economy into a republic (and independent in the case of Ukraine) destined for global expansion in the areas of advanced materials, nuclear power, aerospace, and software (Bengoa, Kaufmann, & Orange, 2009). Associated with the BRIC collective (Brazil, Russia, India, and China), Russia, in particular, has experienced spectacular growth over the past decade to evolve into the 8th largest economy in the world (Bengoa, Kaufmann, & Orange, 2009). According to Aslund, Guriev, & Kuchins (2010): “Contrary to widespread opinion, growth did trickle down to both the middle class and the poor, not just benefiting the rich or very rich parts of society. Real incomes in 1999–2008 increased by a factor of 2.5. Real wages more than tripled. Mobile phone penetration grew from virtually zero to

more than 100 percent. The Russian car market became the largest in Europe. Moscow real estate prices went up from about \$700 per square meter at the end of 1999 to \$6,000 per square meter in the summer of 2008. The financial system grew manifestly in terms of size and sophistication. For example, the credit to GDP ratio increased from about 10 percent to about 40 percent reflecting a boom in both retail and corporate lending” (Loc. 246–251).

This boom, however, was not without consequence. Upon the collapse of the communist regime, many State-owned manufacturing facilities were sold off to the highest bidder for pennies on the dollar. This provided major opportunities for entrepreneurs, such as Tariko, and venture capitalists alike. And, for the business-minded and strategically gifted, businesses were transformed, created, and started by men and women of all ages and ethnic backgrounds. As a result, and with great risk, many business owners were afforded great wealth and prosperity. Many businesses survived, and consequently, many did not. It is estimated that only 20% of the population have experienced increase in wealth as a result of the opening of a market-based society.

The Russian Standard, according to Tariko and many like him, is to challenge the status quo and take a seat in a friendly game of global capitalistic poker. This is a difficult proposition, however, considering the endless insecurity and lack of confidence that remains to be a foothold on the Russian psyche. Andresen (2007) wrote, “A thread running through their complex political history is the fear of and acceptance of an all-powerful and sometimes arbitrary central authority, the influence of constricting medieval orthodoxy, and the mystical unifying force call the ‘Russian soul’ ” (p. 6). As Russia and Ukraine attempt to “ante up,” although new to the game, they have had many years to study their opponents and think about strategy. Schrage (2010) suggests, “They (BRIC companies and entrepreneurs) know they lag so they’ll grasp any reasonable innovation edge they can. Measured by brain power and grit, there’s no reason why BRIC enterprises shouldn’t consistently out-innovate their richer rivals” (p. 2). Russia and Ukraine are new, in thought, vision, and action—and wrought with opportunity and advancement. Once viewed to be the quintessential master for setting standards—and at playing

poker—the United States has experienced great change with regard to global commerce. The time is right for burying past ideological and political indifferences and developing a friendship/partnership in an all-or-nothing game. More importantly, for the graphic communication industry, it is time to open up opportunistic windows for collaboration in production and education in order to bridge an industry in paradigmatic flux. Bengoa, Kaufmann and Orange (2009) posited, “The good news is that Russia still has substantial assets—natural resources and human capital—and huge potential for further change” (Loc. 3167–3169). This report is a call to stimulate change and engage in international endeavors with the Russian Soul. It is time to toast to the Standard.

The Adventure

The following pages are assembled as a condensed report on my five-week journey, adventure, and experience. I provide commentary and insight into the cultural liaisons and areas of opportunity that I feel the American graphic communication industry and academy should pursue. In addition, I intersperse references to research that has been conducted in the areas of Russian economy, business, and education to strengthen and support my argument. It is my desire to stimulate interest from both American print manufacturers and American graphic communication educational programs to extend relations with Russian and Ukrainian printing manufacturing organizations and educational programs. Again, it is time to recognize and establish a global standard rich with opportunity.

The Educational Institutions

Moscow State University of Printing Arts

Led by Dr. Alexander Maximovich Tysganenko, The Moscow State University of Printing Arts is Russia’s prominent and premier academy for printing arts, technology, and design. Moscow State University of Printing Arts trains students to become masters in printing engineering for publishing houses, print shops, book-selling organizations and other enterprises in Russia. The story of the University goes back to July 1930, when Moscow Graphic Arts College was established. Originally it consisted of three colleges: Technical Studies, Economics (management and finance), and Publishing. Several years later, the Engineering College was opened and began to instruct the whole scope of graphic arts and publishing curricula. With an 80-year history behind it, the

University has turned into a recognized educational and scientific center, attributed for its highly qualified teaching staff, traditions, and scientific rigor. The University is an alma mater for almost 50,000 graduates, with more than 500 Doctors of Science among them. Approximately one thousand of its graduates work in 37 countries of Europe, Asia, Africa, and Latin America. Their alumni run leading publishing houses, print shops, and book trade networks in the Russian Federation, the CIS and the Baltic countries. Today the university consists of:

- 6 colleges, 31 departments, Research Centre, Post-graduate Division, Continuous Education, Technical Training and Publishing Centers;
- 6,000 graduate students (specialists) and 150 post-graduate students, studying full-time, part-time.
- The annual enrollment is more than 1000 students. The duration of the whole training is 5–6 years (Bachelors and Masters Degrees);

410 lecturers, senior lecturers, and professors, including some academicians and corresponding members of a number of Russian Academies;

- Laboratories, equipped with modern computers and graphic arts machinery, demonstration and training centers;
- Library collection of about 1.4 million titles;
- 50,700 square meters of educational facilities;
- 2 hostels with 18,000 square meters of floor space

The Moscow State University is located 1.5 km northwest of central Moscow in an eight-story building that resides on a campus setting adjacent to a lake. All of the students commute to the campus via public transportation or live in one of the two hostels (housing facilities owned by the university) within close proximity to the campus.

The majority of students study engineering, however many are moving into economics in order to grasp further understanding and skills in the areas of finance, management, marketing, and accounting. The university has a large collection of older letterpress, stone-litho presses, and other assorted printing equipment that span hundreds of years of Russian history. Heidelberg has placed a Speedmaster CD74 on the premises in return for a sales office and demonstration lab. The press is not traditionally used by students, and only used for demonstrations for students and prospective buyers alike. There is also a KBA lithographic press placed on the premises under the same conditions as Heidelberg. DuPont has set

up a laboratory for research and development in the building for both collaborative research and sales. They have limited bindery and/or finishing equipment and are currently attempting to acquire some packaging equipment from an Italian manufacturer. I was not given an official tour of their facilities, but obtained this information from the students that we met during our lectures. I elaborate upon those experiences further in the sections below.

National Technical University of Ukraine (Kiev Polytechnic Institute)—

Institute for Publishing and Printing Industry

Under the leadership of Dr. Petro Kyrychok, the Institute for Publishing and Printing industry trains highly qualified engineers, technologists, systems engineers, specialists in production management and in marketing of the area of printed products and materials for the printing industry. In addition, they provide instruction in the areas of journalism, graphic design for the printing, packaging and publishing industries in Ukraine. IPPI alumni work at both government or privately owned enterprises, as well as, publishing houses and other organizations producing printed output by the traditional and specialized printing methods. They also work on applied research using scientific and technical rigor in the areas of printing production and mechanical engineering, design, and materials creation for main and auxiliary processes in the industry. The university currently consists of:

- 6 departments: Art; Journalism; Management; Engineering Mechanics; Publisher-Polygraphy Business; Reprography (IT and multimedia).
- 2650 students, 10 foreign students
- 17 faculty: 12 professors (D.Sc.); 4 professors (candidates of D. Sc.); 44 assistant professors (PhD and Candidates of D.Sc.); 38
- senior lecturers; 15 assistants.

The National Technical University of Ukraine (Kiev Polytechnic Institute) enrolls close to 40,000 students. These students come primarily from Ukraine. There are some foreign students from Russia and Belorussia. The campus is quite large, however, the Institute of Publishing and Printing is housed in two buildings; one on the campus and one located in downtown Kiev. The “economics” and “Design” departments are located in an older four-story building in central Kiev. All students commute to the campuses they are assigned to using public transpor-

tation or, they are housed in one of thirty different large hostel buildings.

Saint Petersburg State University of Technology and Design – North-west Institute of Printing.

Under the leadership of Director Natalia Lezinova, the North-West Institute of Printing (NWIP) enrolls over 300 students each year. Their alumni are employed with leading publishing houses, print shops, and book trade networks, as well as, advertising and design agencies in the Russian Federation, the CIS and the Baltic countries. Today the university has multiple concentrations: a) Journalism; b) Book Trade; c) Graphics; d) Advertising; e) Automation Systems and Information Technology; f) Information Technology and Design; g) Information Technology and Media; h) Book Design and Graphics; i) Economics and the Administration of the Printing Enterprise (management, accounting, finance, business, and marketing); j) Polygraphic Machines and Complex Automation; and, k) Quality Control.

The North-West Institute of Printing was originally affiliated with Moscow State University of Printing until 2000, when it was brought under the auspices of the Saint Petersburg State University of Technology and Design. Their facilities are scattered throughout two buildings in downtown St. Petersburg. All of the students commute to the institute using public transportation. The university does not provide housing for students, therefore they must reside with family or rent inexpensive flats with multiple roommates.

Their facilities hosted within two locations. They possessed a one-color Heidelberg (74mm) press placed in a small classroom and used for demonstrations during lectures. It was quite clean and organized. They had entry-level cutters, a folder, and desktop perfect binder system, and a digital multi-functional device in a small laboratory located near the press. In the other building, located several blocks from the center of the city, were up-to-date Macintosh labs, plate makers (CTP), and prepress facilities. In addition, there was some unique Soviet-era (Russian and Ukrainian) folders, die-cutters, and letterpresses.

The Educational System

The academy is highly subsidized in both Russia and Ukraine. Free higher education is provided to students on a competitive basis. Most students pay a modest fee each semester for tuition and/or lab instruction. Because of this benefit coupled with the prestige of attending univer-

city, many students seek higher education. According to Saginova and Belyansky (2008), “however with the spread of education (measured by the number of students per 1,000 of population) being one of the highest in the world, education sector accounts for only 2.9 per cent of GNP, which is considerably lower than in many European countries. Lack of government funding was partially compensated by the introduction of tuition fees in Russian universities, and these fees are increasing every year” (p. 345).

As a result of this phenomenon, universities in both Russia and Ukraine have had to revert to developing a two-tiered competitive edge; one to compete for resources; and another to compete for quality. Such competition has begun a filtering process making acceptance and admission to more prestigious universities much more difficult than in prior times. In addition, with an intrigue in foreign study and study abroad programs, universities are now having to compete against foreign schools that are soliciting students by entering in their local markets (Saginova & Belansky, 2008).

Currently, the educational model of Europe and, consequently Russia, is undergoing a series of changes with regard to standardization of curriculum through westernized accreditation protocols. Traditionally, universities in Europe and Russia granted diplomas to students who spent three or three and a half years studying a particular discipline. A diploma was equivalent to an American Bachelors degree. Then, upon completing their diploma, they were given the option to further their education in pursuit of a certificate (the equivalent to an American masters degree). A certificate generally required minimal coursework and an internship with a company doing applied research in the form of one particular scientific project. When the year has passed, the students are required to take exams to test their ability in applying the skills they learned from their diploma work and defend the outcomes of their applied research. Consequently, with a movement to standardize—western accreditation boards working with foreign universities interested in pursuing accreditation—have worked with governmental agencies to create a standard to eliminating inconsistencies in student exchange and transfers. Beginning in 2011 all degree granting institutions must rearrange curricula and adhere to new standards granting both baccalaureate and master degrees. Needless to say, not everyone is on board with the idea and there has been much debate and

anticipated anchor-dragging associated with the proposition of change.

In addition, students can begin doctoral programs with hopes of earning a PhD. This generally requires minimal coursework and three to four years of applied research along with the completion and defense of a written dissertation. Unlike the United States, however, a PhD is not a terminal degree in Russia or Ukraine. Students, upon obtaining their PhD, can engage in post-doctoral research with aspiration of receiving a Doctor of Science degree (D.Sc.) that, in essence, trumps a PhD degree. In all three universities that I attended, there were many lecturers holding PhD degrees, however, they were not as recognized as their fellow colleagues holding D.Sc. degrees. There were a few PhDs who were granted candidacy in their respective D.Sc. programs and were waiting to complete and defend their research proposals. This post-doctoral process is highly research intensive and must significantly contribute to scientific knowledge.

Our Program

Admittedly, the students were absolutely delightful. They were highly intelligent, completely engaged, and inquisitive, and the lectures that we conducted went extremely well. We learned from the students that they were hand selected by professors who felt that they had an advanced proficiency in their English speaking abilities. Many commanded an excellent vocabulary and were able to speak English almost flawlessly.

All of the students that were part of our program were engineering majors. This means that they are barraged with high levels of science and mathematics. They seemed starved for content surrounding business management and applications. In one of the lectures, my colleague asked if they received instruction in business. One of the students reported that it is covered with very minimal effort. We asked the students what they thought of this phenomenon. They responded—almost in unison, “we need to know this in order to survive.” Because of this philosophical stance (and obvious lack of instruction...or importance placed on it), they were highly engaged in the lectures pertaining to sales, marketing, production management, manufacturing techniques and controls, information technology trends, and issues surrounding sustainability.

One of the most frustrating issues for me was having absolutely no connectivity to the Internet. My first lecture was to provide them with a geography lesson using

Google Earth, panning into our residents and university in Washington D.C. and California. Many of the students had heard of Skype and Google Earth but only a few had ever actually used the applications. I had also planned on setting up a few Skype interviews with some of my students from Cal Poly. That did not take place, however.

Half of the students had laptop computers with them. Many explained that the technology is still too expensive for them. The laptops were entry-level Dells or ASUS eeePC netbooks (\$250 retail). None of the students had an iPhone nor an iPod Touch. Again, they informed us of the great expense. They did, however, all have various brands of MP3 players which they listened to profusely. The adaption of technology, i.e. computers and Internet access, has been less robust than compared with the United States and Western Europe. Over 25 million people (out of 145 million) in Russia use personal computers, and in 2005, 81.2% of all Russian residents who owned a PC were connected to the Internet (Widrick & Cost, 2007). On the contrary, in my experience, very few of the faculty members that I spoke with (and this includes Moscow, Kiev and St. Petersburg), owned a laptop, transported it home, and worked online during non-working hours. Most of the faculty did have desktop PCs at their workplaces that were connected to the Internet. Widrick and Cost (2007) wrote, "The relatively low number of PCs per 100 people suggests that the Russian population is less market ready for the Internet as the supplemental information, entertainment and commercial source that the other countries" (p. 96).

During week five, we reported back to the Moscow State University of Printing Arts building to deliver certificates of completion for the course we delivered at Sushnevo to each of the students who participated. We had not seen the students for over three weeks, however, I felt as close to these students as I do with my own students here at Cal Poly during graduation ceremonies: proud, elated, connected, and hopeful. It was a remarkable experience, one that I hope to foster into the development of furthered relationships between academic institutions and business opportunities in the graphic communication industry.

Kiev, Ukraine

On the third week we arrived in Kiev and were shuttled to our flats on the campus of Kiev Polytechnic Institute. After a day of sightseeing we met with the director of the Institute for Printing and Publishing, Dr. Kyrychok and his staff. We then proceeded to the campus library lecture hall where 120 students patiently awaited our arrival.

After spending 15 minutes assisting a staff member with hooking up a brand new projector, Regis began his lecture and afterwards, I began mine. I was informed that the faculty and administration of the Institute of Printing and Publishing marketed our arrival and asked faculty to cancel lectures in order to attend ours. Each day we lectured in different venues both on and off the campus. Each time, the rooms were filled and they had to bring extra chairs in to accommodate the interested students. Most all of the students had studied various amounts of English. Again, the director's wishes were for us to deliver the lectures in English without translation. I would throw in some Russian to gauge the pulse of their attention span and comprehension levels, and they would laugh and affirm their ability to understand. The constituency of students consisted primarily of engineering majors, intermixed with students from economics (those studying finance, management, accounting, and marketing), journalism, reprography (web design and information technology), and graphic design. There was a cohort of 20–22 engineering students who followed us to each lecture faithfully. We became dependent upon their smiling faces to assist us in delivering our lectures.

The classrooms at KPI were always chilly and many students would bring blankets to our lectures and cuddle to keep warm. There were few actual projector screens in any of the classrooms and the projector (which seemed to follow us around) was often projected onto an actual white sheet that would be tacked to the blackboard in the lecture rooms we were assigned to. Finding chalk for the chalkboards or markers for pads was extremely difficult and locating an electrical receptacle was nearly impossible (especially any that worked). Despite these conditions, the professors and administrative staff were overly accommodating and hospitable. For three different lunch breaks and our final dinner, the office staff and faculty prepared the food and brought it into the office each time. Our conversations and cultural exchange were highly rewarding and insightful. They also seemed to be overly receptive to our visit. We were informed by one of the professors in the accounting department that our visit was the first visit from American professors in the college of economics to deliver lectures in English. And, on our first day, I was befriended by a young man who teaches English at the university. He was excited to make my acquaintance, but in the conversation his eyes welled up and he said, "this is a remarkable opportunity for these students."

I took notice that the students from Kiev did not carry laptops with them into lecture. After surveying them quickly during one lecture, out of 70 students, only five admitted to owning a laptop (one was an ASUS eeePC). Only one student in the class had an iPod Touch. Many had never seen a Kindle e-Book Reader. Many, however, had heard of the Apple iPad but explained that they would never be able to afford one. I was humbled by the experience in Kiev. During a side conversation with a couple of students, I asked them about how technology affects their lives. Their responses were varied, however, they all unanimously agreed that contemporary technologies such as cell phones and laptops and the Internet will be instrumental in their future successes. However, they also informed me that it was not a prerequisite for their success within the academy.

Obviously, the academy in both Russia and Ukraine are founded upon older educational models. Russian educational curricula are still based upon the former Soviet Union's ideals surrounding a utopia of science and technology laden graduates who are barraged with staggering amounts of science, mathematics, and engineering. "Although the number of graduates with degrees in mathematics and natural sciences has stagnated," reports Aslund, Guriev, and Kuchins (2010), "those with engineering degrees has increased in recent years, from 146,000 in 1990 to 207,000 in 2007" (Loc. 3456). Consequently, Widrick and Cost (2007) wrote, "This theory-oriented education produces graduates who are extremely capable intellectually, but lack the sense of how the theory they have learned applies in the real world" (p. 48).

St. Petersburg, Russia

On our fourth week, we flew to St. Petersburg from Kiev. Upon arriving, we were greeted by Dr. Kuznetsov, a professor and head of the graphic technology program. A fascinating and kind man, we learned that he was quite involved with TAGA (Technical Association of the Graphic Arts) and had brought a student over to the States a few years back. He is proficient in English and assisted us in getting to our flat for the ten-day stay. We were housed in an old building in which the university acquired a floor and renovated into guest flats for visiting professors and administrators. It was comfortable and located in central St. Petersburg, close to all of the known and unknown attractions of this beautiful city.

On our first day we met the rector of the North-West Institute of Printing, Dr. Natalia Lezunova. In addition,

we met the Pro-rector (vice-chancellor) of The St. Petersburg State University of Technology and Design. They toured us around their facility and prepared us the program that we were scheduled to deliver for the next four days which took place in two different lecture halls/rooms. The first day of lectures, we were whisked to a small lecture room in an older five-story building (c. 1890s). The classroom was modernized, but exceptionally crowded. When I began my lectures, there were 70 students in the room (with extra chairs and benches that they had brought in) and a handful stood in the hallway. The students here did not have a strong command with the English language as did the other venues. We learned from a professor in the department that the planning of our arrival was not completed until just days before we arrived, so I suspect that they were unable to "market" the program as they did in Moscow and Kiev.

The students were comprised primarily of economics students (those studying management, accounting, marketing), mixed in with journalism and graphic design. They remained engaged and asked very interesting questions pertaining to American business practices and culture. Because our program was scheduled simultaneously over other existing classes, each period break, a cohort of students would exit the room and another would enter during the presentation of our lectures. This became rather frustrating in that we would have to review the content (speaking very slowly) and thus, shortened the entire presentation immensely. Regardless, after many of the lectures, we were accosted by a handful of students who were interested in gaining additional insight into the content we delivered. They were quite bright and inquisitive. However, I found them to be less receptive to our messages regarding enhancing productivity through Lean principles, launching sustainability initiatives, and certainly less receptive to the emergence of electronic books and the e-Reader market. They vehemently rejected that the rise of the Internet and the transformation of the book market would have any affect on the printing industry.

In a study surveying consumer behaviors of Russian citizens conducted by Salmi & Sharafutdinova (2008), "Russian traditional values deny over-consumption and favor modesty. Over-consumption, i.e. purchasing products that one does not really need, is traditionally considered to be a sin" (p. 389). Perhaps this explains why the electronic technology market that has swept the United States has taken longer to penetrate the Russian and

Ukrainian market. Their analyses reveal Russian values and culture have changed. Salmi and Sharafutdinova (2008) wrote, “In emerging markets such as Russia, it becomes interesting to analyze how the cultural ‘lenses’ change, what kind of symbols are related to consumer goods, what kind of information contemporary consumers want to transmit, and also, how culture is changing as a result of the general economic transition process. Dramatic changes are taking place: consumers have had to adapt to the change from a shortage economy to an abundance of products. More recently, not only possession of goods but also the kind of signals they are conveying has become important” (p. 390). As Russia and Ukraine expand their market society, wages will increase and consumerism will evolve. Unfortunately, much of the hesitation in the adaptation to technology is embedded in the national psyche and their apprehensive nature in corresponding with the United States and other western cultures. Andresen (2007) wrote, “It’s understandable why some Russians feel emasculated by the technological superiority of Western products and systems. After decades of delusion about superior Soviet products and the perfect Soviet man, anyone with the money now buys European, American, or Japanese products. This frustration is understandable since Russia is an educated nation capable of enormous creativity. It’s not the people, it’s the system. Many thousands of young Russians are supporting global technology ventures today. Russia has to team with the rest of the world to develop its full potential. They have to talk to strangers” (p. 40). The bottom line is that in this globally expansive market economy—challenged by diminished profit margins and a competitive play for efficient mechanization, creative innovation and sustainable output—it becomes more apparent that relations between the U.S. and Russia must be developed, enhanced, and nurtured in order to explore, at the minimum, areas of collaboration that are mutually beneficial.

The Graphic Communication Industry in Russia and Ukraine

For a complete overview of the Russian printing market, please refer to Stanley Widrick and Frank Cost’s Research Monograph (2007) entitled, *Emerging Global Print Markets: A Five Country Comparative Study* published by the Printing Industry Center at the Rochester Institute of Technology (see References). Although published in 2007, it is quite thorough and provides a comprehensive overview of the printing markets accessible in Russia (and

the rest of the BRIC countries as well). I will provide a generic and condensed overview for the purpose of this paper.

Russia is a country that reads. And, with a poor infrastructure for providing Internet (although it will improve), Russians and Ukrainians purchase and subscribe to over 550 newspaper titles, 4,500 magazines, and 4,000 newsletters, bulletins and almanacs (Widrick & Cost, 2007). There are estimated to be only 6,500 printing enterprises in all of Russia of which one-fifth are involved in specialized packaging which is evolving quickly. Most printed products are generated in the form of periodicals (\$680M), books (\$380M), commercial advertising (\$380M), labels (\$240M), and cardboard packaging (\$320M). The Russian printing market is primarily based upon offset lithography (60%), and flexography (25%). Digital printing and letterpress printing consist of seven and five percent respectively. Screen printing and rotogravure count for less than three percent of the market (Boutman, 2006).

According to Boutman (2006) and Widrick and Cost (2007), flexography is experiencing rapid growth, sheet-fed is stagnant, letterpress is diminishing and digital printing is “developing slowly” (Boutman, 2006, p. 9). As a result, Russia is highly dependent upon the outside world for much of their printing (Germany, China, and Kazakhstan). According to the a Russian print trade show organizer (Polygraphinter, 2010), “During last few years Russian printing industry suffered substantial modernization. 2,500 print houses using digital printing technology or combining it with offset were established. Print media sector went through considerable transformations. Technical print sector like labels, packaging, advertising was built up anew” (p. 20). With Russian’s need to assist in fulfilling market needs, in conjunction with the newly developing digital market, the time to create and enhance trade relationships could not be more apropos.

Areas of Opportunity for Graphic Communication Industry

Admittedly, there are many obstacles to overcome when considering the exploration of business opportunities in Russia and Ukraine. However, the proposed obstacles could prove to be opportunities pending upon one’s point of view:

- a) Russia’s labor productivity levels are low (36% of the US and 70% of China’s);

- b) corruption still significantly influences business development and transactions;
- c) social spending is excessive and burdensome especially with regards to pensions; and,
- d) Russia's has significant deficits in energy efficiency, considered to be the lowest in the world (Aslund, Guriev, & Kuchins, 2010).

Although corruption exists, the Russian government—relatively new to a free market society—is attempting to establish protocols that address methodologies for adequately administering tax collections processes more effectively and effectively. Widrick and Cost (2007) have suggested that many of these obstacles can be overcome, especially in the graphic communication industry, if several key factors are thoroughly understood by foreign businesses seeking opportunities in Russia. These factors include:

- a) having an understanding of how import tariffs are administered;
- b) having a thorough understanding on comparative labor and capital costs;
- c) being able to assess and analyze capacity and productivity levels;
- d) being able to assess the impact of the Internet on the print industry and act accordingly;
- e) understanding monetary and taxing policies;
- f) having insight into national industry trade strategies; and,
- g) having strategic alliance with educational institutions (p. 43).

There are many federal, state, and private programs that assist prospective businesses in preparing for acculturation and developing enterprise in Russia (see <http://www.buyusa.gov/russia/en/> and <http://www.amcham.ru/>). However, there remain few resources available that assist those representing the graphic communication industry. The Association for Suppliers of Printing, Publishing and Converting Technologies (NPES) is an international organization that has established international trade offices in China, India, and Russia, and had created a network of market representatives in Brazil, Europe, and Japan (see <http://npes.org/>). NPES provides demographic, trade, and regulatory information to manufacturers and suppliers of printing equipment. While they do not directly represent the print manufacturing industry, they are very closely aligned with global demographics

and statistics pertaining to printing, packaging, and converting.

Where do we begin? The first suggested step would be to learn as much about Russian and Ukrainian history and culture as possible. In a study conducted by Salmi and Sharafutdinova (2008), one of the primary reasons for hesitancy of Russian businesses to enter into trade agreements with western businesses is due to the lack of knowledge and interest foreign businesses have with regards to history and culture. This is often viewed as arrogance and can be offending. Also, Russian businesses often feel as though foreign business practices (production, accounting, marketing) are irrelevant to their needs due to the differences in culture. Putting cultural differences aside, it is obvious that in the current economic conditions, they will have to change their views and consider new and innovative practices. Having an insider who understands these practices can help.

American businesses desirous of establishing a relationship with a potential business partner in Russia and Ukraine would benefit heavily in having a local source or agency responsible for “opening the door” to a commercial bond. “Designers can be involved with these processes”, wrote Salmi and Sharafutdinova (2008). For a print organization, working with print procurement agencies, designers, and advertising firms could assist in achieving further relations with print providers in Russia and Ukraine. Regardless, a budding relationship requires open and cross-interactive communication strategies coupled with bi-lateral educational initiatives. Bengoa, Kaufmann, and Orange (2008) wrote, “[i]ntensive intercultural awareness training has to come to the fore as a priority for members of both companies involved in the process of transmitting and receiving knowledge. It must not be forgotten that in international co-operations the knowledge flows simultaneously occur in both directions. In addition, all the actors should be involved, from managers to shop floor employees, to avoid a fragmented co-operation but leading to an integrative and successful co-operation” (p. 364).

Acculturation processes will clear biases between the parties, open communicative channels for understanding how each party can help one another, and provide stimulating dialog. When in Sushnevo, the two weeks of immersion with the students was extremely beneficial.

Opportunity for graphic communication firms are plentiful in the areas of plant expansion, off-shoring, consultative services, education and training. Since the collapse of

the former Soviet Union, many companies and organizations are unfamiliar with existing in a competitive based market economy. Therefore, many do not know how to establish marketing initiatives to drive business. In addition, with the slow emergence of the Internet, a very limited number of printing establishments have an e-Commerce strategy or digital storefront for capturing Internet business. Similarly, as Russian printers facing fierce global competition consider implementing change into production practices in order to increase production, reduce expenses, and maintain healthy profit margins, Lean manufacturing practices will become more sought after. Aslund, Guriev, & Kuchins (2010) wrote, “Modernization-driven energy efficiency is rare in Russian industry. Most of the existing industrial capacity was installed several decades ago and is highly inefficient. Further, few attempts have been made to rectify this situation” (loc. 1708–12). American printing firms with valid and documented experience in establishing Lean initiatives with proven results could partner with a progressive Russian printing company to enhance efficiency and profits.

Although very slow to appear in the Russia and Ukraine, initiatives surrounding sustainability have tremendous possibilities. Russia, however, is not known for its’ ability to conserve energy. Considered to be the world’s third largest consumer of energy, developing environmental programs will prove to be a fundamental challenge to the future of Russia. “Russia’s energy intensity,” wrote Aslund, Guriev, & Kuchins (2010) “is two to three times higher than in any industrial country, higher than any of the other BRICs (Brazil, India, and China), and over two times higher than the world average” (Loc. 1700–1707

Areas of Opportunity for Education

The impetus to my adventure was to make initial contact with graphic communication programs in Russia and the Ukraine. From my perspective there seems to be a void in educational dialog between the United States and Eastern Europe and Russia. Additionally, an increased number of American students (especially at Cal Poly) have expressed interest in studying abroad for a quarter in the graphic arts. Unfortunately, opportunities for exchange, travel, and instruction at any foreign academic institution offering a graphic communication program are few and far between. Organizations such as the International Circle of Educational Institutes for Graphic Arts Technology and Management (see http://www.hdm-stuttgart.de/international_circle) provide publishing and networking

opportunities for faculty and research fellows from academic institutions across the globe. On my last leg of the journey, I attended the 42nd conference hosted by Moscow State University of Printing Arts (who was also celebrating their 80th anniversary).

I had four ulterior motives for completing the adventure:

- a) to visit and become acculturated with the three academic institutes in the program in order to develop a future faculty lead field trip with Cal Poly GrC students possibly in the Summer of 2012;
- b) to set up the foundation for creating an opportunity for student and faculty exchanges between Cal Poly and Moscow State University of Printing Arts, Kiev Polytechnic University, and St. Petersburg State University of Technology and Design;
- c) establish immediate rapport with faculty from all three institutions to engage in virtual collaborative instruction through joint class projects and Skype interviews; and,
- d) to present trends in modernization relevant to the graphic communication industry in the states (i.e. lean manufacturing, sustainability, information technology, e-Commerce, cross-channel marketing) for possible research initiatives and collaborative publication opportunities.

All three institutes have strong student exchange programs with a few German, Danish, and Chinese universities. Establishing a cohesive relationship with an American university would be a high profile feat. According to Saginova and Belyansky (2008), internationalization initiatives “should aim at creating mutually beneficial and self-sustainable partnerships adding value to the education programmes of all partners,” and, “faculty exchange and visiting professors can improve internationalisation of the university regular programmes only if coupled with efficient faculty development and motivation programmes” (p. 354). The value ensued by my visitation, delivery of lectures, and interaction with students (and faculty alike) was highly rewarding to everyone involved (most importantly to the students). To improve curricula and strategically align initiatives within the academy, programs like mine must continue to be developed and encouraged in order to continue the sustainable partnerships and an exploration for valid and applicable content that is relevant to both the academy and industry. I am hoping that over the next two to three years we can

affirm a series of successful student exchanges, some faculty exchanges (short-term and long-term), launch a faculty-led student field trip (in conjunction with Stuttgart's Hochschule der Medien and Moscow State University of Printing Arts), and virtual collaborative student projects.

To any academician from a graphic communication discipline looking to expand interests (for research, academic and cultural exchange, etc.) into a foreign market, I highly recommend joining the International Circle of Educational Institutes for Graphic Arts Technology and Management (http://www.hdm-stuttgart.de/international_circle); and the International Graphic Arts Education Association (<http://www.igaea.org>). Both of these organizations are reputable, revered, and publish peer reviewed journals for all types of research in the graphic communication industry. Additionally, they meet annually for conferences and paper presentations at respected universities in the United States and abroad. The acquisition of knowledge and opportunity for networking is tremendous and assured.

Final thoughts

The time to establish standards with way-faring countries of our political pasts is now. If not in the name of global collectivism, then in the name of graphic communication and the changing industry surrounding the perils of media. If we do not open the doors of opportunity, create, and define our own Standard, then someone else (or some other industry) will. Schrage (2010) suggested that changes currently awaiting all of the budding organizations priming in Russia and Ukraine will not be sparked by investments in technology, but rather by leadership inspired by motivation and innovation. Schrage (2010) wrote, "But the size, scale and scope of the growing BRIC economies virtually guarantee that there will be enough collaborative winners that the pace and rate of global innovation will increase. In that way, we'll all be hit by a ton of innovative BRICs" (p. 2). Additionally, higher education will also experience a period of synthesizing change as our industry morphs with cultural norms. Saginova and Belyansky (2008) posited, "Transformation in higher education should balance global market requirements against national needs and existing standards, be customer oriented, transparent and publicly accountable and include mechanisms to manage fast change. Education systems in transition economies are mandated with strengthening market-based economy, improving local universities competitiveness both locally

and internationally and generating additional income flows to support transformation" (p. 304).

But as higher education and industry stand as one and reach to out to the global collective hoping to be born anew, the dependency on culture will never be so significant. American businesses and higher education institutions will have to shed historical political ideologies and look to the future with great intent. This will be met with much difficulty, suggested Aslund, Guriev, and Kuchins (2010). They wrote, "Realizing this ambition will require the Russian people as a whole, including the country's elite, to go through a seminal transformation; economic, social, political, and cultural. This transformation will obviously take many years, even decades, but the next ten years are crucial. They will provide the answer to whether Russia is headed north or south" (loc. 2441–44).

A standard, as defined by Dictionary.com (2010), is "something considered by an authority or general consent as a basis of comparison; and approved model." In an industry that is experiencing unprecedented change, it is evident that the standard has yet to be defined or established. Through the collective whole, a consortium comprised of both industry leaders and academicians, the time to begin the process is now through communicative channels, exchange, and knowledge acquisition through one global initiative. It is time to raise the glass and toast to a future of collaboration...and the standard. Будем здоровы! (Boodem Zdoroveh!)

References:

- Andresen, F. (2007). *Walking on ice: An American businessman in Russia*. Denver, CO: Outskirts Press.
- Aslund, A., Guriev, S., & Kuchins, C. (2010). *Russia after the global economic crisis*. Washington, D.C.: Peterson Institute for International Economics; Center for Strategic and International Studies; New Economic School.
- Bartlett, D., & Trifilova, A. (2010). Green technology and eco-innovation: Seven case-studies from a Russian manufacturing context. *Journal of Manufacturing Technology Management* (21/8). Retrieved online from <http://emeraldinsight.com/1741-038X.htm>.
- Bengoa, D. S., Kaufmann, H., & Orange, G. (2009). Reflection on knowledge transfer methodologies in Eastern/Western European co-operations. *EuroMed Journal of Business* (4/2). pp 1450–2194. Retrieved

- online from <http://emeraldinsight.com/1450-2194.htm>.
- Boutman, E. (2006). Russian Printing Industry Review. Powerpoint. 2006 NPES International Seminar. Washington, DC: NPES.
- Polygraphinter. (2010). Polygraphinter'2011: A premium printing exhibition in Russia and Eastern Europe. Powerpoint Presentation. 20. Retrieved online from: <http://www.polygraphinter.ru/eng>
- Saginova, O., and Belyansky, V. (2008). Facilitating innovations in higher education in transition economies. *International Journal of Educational Management* (22/4). pp. 341-351. Retrieved online from <http://emeraldinsight.com/0951-354X.htm>.
- Salmi, A., & Sharafutdinova, E. (2008). Culture and design in emerging markets: The case of mobile phones in Russia. *Journal of Business & Industrial Marketing* (23/6). pp. 384-394. Retrieved online from <http://emeraldinsight.com/0885-8624.htm>.
- Schrage, M. (2010). How BRIC Innovators will defeat you. *Harvard Business Review Online*. Retrieved online from <http://blogs.hbr.org/schrage/2010/10/hit-by-a-ton-of-innovative-bri.html>
- Shirokova, G. & Shatalov, A. (2010). Factors of new venture performance in Russia. *Management Research Review* (33/5). Retrieved online from <http://emeraldinsight.com/2040-8269.htm>.
- Widrick, S., & Cost, F. (2007). Emerging global print markets: A five-country comparative study. Rochester, NY: RIT Printing Industry Center <http://print.rit.edu/research/show/98>

This is a juried article
