



***Technology Entrepreneurship---Where the U.S.
and Ukraine Can Help One Another***

April 2, 2022

Jerry Haar

The unspeakable tragedy of Russia’s unprovoked, barbaric invasion of Ukraine is producing massive impacts socially, economically and politically both within and outside that valiant nation.

The impact of the economic devastation to date will be with Ukraine for the foreseeable future. A diversified economy (agriculture, industry, and services), Ukraine is the breadbasket of Europe and Ukraine is one of the world’s top 10 producers of cereals.¹ With the heavy damage inflicted on its agricultural sector, we can expect inflation in food prices to skyrocket.

Far less known by the public is Ukraine’s prowess in information technology and tech entrepreneurship—one that gives the nation a competitive advantage not only regionally but worldwide. The World Economic Forum ranks Ukraine among the top 5 locales worldwide for tech talent.² Not surprisingly, information technology is the nation’s fastest growing segment of the economy. Ukraine possesses 110 R&D centers with the presence of firms such as Oracle, Siemens, Samsung, Ericsson, and Microsoft.³ Investment in IT and start-ups exceed half a billion dollars, and firms such as Grammarly (Ukraine’s first unicorn), Elitex, SoftServe, and GlobalLogic have garnered the attention of venture capitalists and angel investors alike.⁴

Now juxtapose this “technology talent surplus” with our own nation’s “technology talent *deficit*”.

¹ <https://www.investmentmonitor.ai/special-focus/ukraine-crisis/countries-exposed-ukrainian-food-exports>

² [https://www.globalization-partners.com/blog/5-new-places-to-look-for-tech-talent/?utm_source=Adwords&utm_medium=cpc&utm_campaign=Search_US_Dynamic_fen\]&utm_term=&gclid=CjwKCAjwopWSBhB6EiwAjxmqDQ5kDOlp7ak4YI1JJJldXoJQX6bWwOvur070xyl8ka0SP2xKcpSsHRoC6SQQAvD_BwE](https://www.globalization-partners.com/blog/5-new-places-to-look-for-tech-talent/?utm_source=Adwords&utm_medium=cpc&utm_campaign=Search_US_Dynamic_fen]&utm_term=&gclid=CjwKCAjwopWSBhB6EiwAjxmqDQ5kDOlp7ak4YI1JJJldXoJQX6bWwOvur070xyl8ka0SP2xKcpSsHRoC6SQQAvD_BwE)

³ <https://agilefuel.com/blog/why-google-samsung-boeing-as-well-as-so-many-startups-have-opened-their-r-d-offices-in-ukraine>; <https://www.digitaljournal.com/pr/iot-market-growing-at-a-cagr-16-7-key-player-siemens-microsoft-aws-oracle-cisco>

⁴ <https://www.flyerone.vc/post/why-are-we-investing-in-ukrainian-startups-and-what-are-we-looking-at#:~:text=As%20per%20UVCa%20and%20Deloitte,after%20the%20latest%20investment%20round.>

The most visible sign of America's deficit in science, technology, engineering and math (STEM) is 2.4 million unfilled jobs in those fields.⁵ A Korn Ferry study concludes that unless we attract more high-tech workers by 2030, the U.S. could lose over \$160 billion of annual revenues.⁶ Another report argues that in addition to supply challenges, attrition is a big factor. Among U.S. IT workers, 72% are considering quitting their jobs during the next 12 months due to limited career progression, lack of flexibility, or a toxic work environment.⁷ It is no wonder then that STEM-related industries have been encouraging the federal government to expand the H-1B program for high-skilled foreign labor.

However, the root of the shortage of technology workers is a combination of educational capability and vocational choice. Among OECD countries, American students perform below average in math.⁸ It is not surprising then that not enough college students choose STEM majors; and of those who do only 14% wind up working in a STEM occupation, according to a Census Bureau 2019 report.⁹

Undoubtedly there are many technology workers among the approximately 3.6 million Ukrainians who have fled their homeland. The EU has activated its Temporary Protection Directive and on March 24 President Biden announced plans to admit 100,000 Ukrainian refugees.

But more needs to be done. How do we assist Ukrainian tech workers and further American technological competitiveness at the same time? In addition to expanding the H1-B program, in general, Congress and the Biden Administration should fast track a special initiative to admit Ukrainian STEM workers. In the non-governmental domain, there are four initiatives that could help:

1. Establish a Ukrainian Technology Professionals Placement Center (UTPPC), a one-stop shop where Ukrainian technology professionals such as programmers, software developers, and coders can access employment opportunities at companies listed on this exchange.
2. Secure a commitment from the largest U.S. tech companies, which includes Apple, Microsoft, Amazon, Alphabet, Meta, and NVIDIA, to seek out, identify, screen and recruit Ukrainian technology talent among post-invasion arrivals in the U.S.
3. Launch a technology job site similar to what German entrepreneurs have done with JobAidUkraine--posting available jobs aimed at Ukrainian refugees with a technology background. At the same time work with technology organizations and affinity groups in start-up hubs throughout the U.S.

⁵ <https://www.alreporter.com/2019/09/24/robby-2-4-million-stem-jobs-went-unfilled-last-year/>

⁶ <https://www.forbes.com/sites/larryenglish/2021/06/01/the-tech-talent-war-has-no-end-in-sight-heres-what-you-need-to-know/?sh=5df9dc0b5f2d>

⁷ <https://www.talentlms.com/tech-employees-great-resignation-statistics#:~:text=A%20new%20survey%20by%20TalentLMS,of%20the%20overall%20U.S.%20workforce.>

⁸ <https://www.oecd.org/unitedstates/PISA-2012-results-US.pdf>

⁹ <https://www.census.gov/library/stories/2021/06/does-majoring-in-stem-lead-to-stem-job-after-graduation.html#:~:text=Among%20the%2050%20million%20employed,Community%20Survey%201%20Year%20estimates.>

4. Set up a similar technology job site but drawing upon for U.S. outsourcing firms including those that may have subcontracted work to Ukrainian companies or had operations in Ukraine prior to the conflict.

The global impact of the Russian-Ukraine war on energy, metals, agriculture, and supply chains will be very severe. For Ukraine, a deep recession and large reconstruction expenditures will hamper the economy for some time. Annual output contraction could exceed 35%. As for Russia, that nation will experience a drop in foreign investment, capital outflows and a decline in long-term potential growth.

By helping Ukrainian IT talent, including entrepreneurs, to come to the United States we are not only exhibiting a humanitarian commitment but contributing to the economic strength of the United States along the lines of the Senate-passed United States Innovation and Competition Act of 2021

War on the battlefield has a beginning and an end. The war for talent and economic competitiveness is perpetual.

Jerry Haar is a business professor at Florida International University, a global fellow of the Woodrow Wilson International Center for Scholars in Washington, D.C., and a working group member of the Council on Competitiveness. He is also a board member of the World Trade Center Miami.