Impact of the war in Ukraine
on the Eastern European IT labor market

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It's a well-known fact that over the last decade, Eastern European countries have become one of the primary software development talent sources and IT outsourcing destinations.

According to BlueOptima's **global benchmark** report, **software developers in Eastern Europe have consistently shown the highest levels of productivity, code quality and maintainability** compared to other global regions. Labor costs might not be the lowest —

EE countries are considered mid-cost locations by most financial services companies — but the region is still seen as attractive. This is not only due to their mix of outstanding quality and productivity, but also their:

Time zone convenience

Large resource pool (1.8 million or 8% from global population, according to BlueOptima)

Volume of fresh talent pouring into the market every year

English speaking capabilities

Goal-oriented and "get it done" culture

Specific domain knowledge

Unprecedented events

Back in 2018, before the COVID pandemic played havoc with the world's economies, the Eastern European IT labor markets were already overheated and their popularity showed no signs of weakening. Although COVID forced companies to adapt new standards and ways of working, it didn't stop the market from booming. If anything, it increased the demand for resources in the region as many companies accepted full- or part-remote working as the new normal. And **if employees are working remotely, it doesn't matter whether they're in London, Warsaw or Kyiv (except Eastern Europe would be much cheaper for the company, even factoring in occasional trips to their main hubs).**

This year's geopolitical events are making an impact, the like of which has not been seen for decades. As you might expect, the exported IT services of Ukraine and Russia are suffering most. However, Poland and Romania, who offer the largest IT resource pools in

the EE region, are experiencing significant changes also. Moreover, the entire global IT market is affected because they have to support the rebalance in supply.

This article focuses on **changes the Ukrainian IT labor market is living through**, and **what it means for companies** who are considering setting up, or have already established IT teams in the country.

What the IT sector means to Ukraine's economy

The IT industry and the IT services export drive in particular, are of massive importance for both Ukraine's government and their labor market.

Ukraine's ICT specialist resource pool is around 300,000 strong. **This is the second largest (after Poland) and the fastest growing IT labor market in Eastern Europe.** The Ukrainian government provides a good deal

of support for IT companies and the industry as a whole, with a very favorable tax system — companies pay insignificant social contributions only. IT specialists enjoy a flat 5% income tax on the most popular employment mechanism, plus additional incentives are expected in future.

The export of IT services was estimated at around **$6.8 billion** in 2021, or more than 4% of the country's GDP (second highest share in Europe after Belarus where the IT market size is significantly smaller). For comparison, this is double the revenue generated by Ukraine's natural gas transmission system, which is one of the largest systems in the world. The Ukraine government is aiming to increase the IT industry's share of GDP to 10% over the next 2 to 3 years.

A dream career

In the Ukrainian labor market, a software development career is recognized as a prestigious and very desirable line of work. Generally, it offers a **prime working environment**, international setups in **world-leading companies**, the convenience of **remote working with**

flexible working hours, the potential for **travel and foreign mobility, great benefits** and a very competitive **compensation package.**

Usually, for IT firms servicing foreign businesses in Ukraine, salaries are paid in the local currency, but are nominated in USD which makes them almost invincible to high local inflation and volatility. As shown in the table below, an average Ukrainian senior developer's salary compares as follows:

- It's more than **six-times higher** than what an **average worker would earn** in Kyiv over the same period

- This IT professional's net **annual income** is about the **same as the cost of a one-bedroom apartment in Kyiv**

- The same type of **apartment** in Warsaw would cost **over three** annual net **salaries** of a similar senior developer in Poland

- In London, the **apartment** would cost **more than five** net annual **salaries** of a similar specialist working there

Tax, salary and apartment comparisons

	Income tax (approximate)	Price of 35m2 1-bed apartment compared to an average, net, annual senior dev income	Average, gross, senior dev salary compared to an average gross salary on the market for the same period
Kyiv, Ukraine	5%	1.1	6.1
Warsaw, Poland	32%-40%*	3.3	2.8
London, UK	~30%	5.2	1.8

* deviation can be very significant depending on personal circumstances

These factors sparked the rapid growth of IT companies and startups in Ukraine, primarily oriented on serving foreign clients and markets. **The export of Ukrainian IT services rose by a massive 36% in 2021 alone**

(the fastest growth spurt in Europe). Potentially, exports could grow even faster, but there are local supply and demand limitations.

Labor market supply and demand

Demand is significant and continues unabated. However, it's skewed toward senior engineers with several years' experience, capable of solving complex engineering problems. International companies open development centers in Ukraine or use IT services firms, aiming to recruit **exceptional, experienced talent who can suggest and build modern solutions or maintain critical systems to justify the mid-cost price tag.** Junior or less-skilled employees can be found in other IT outsourcing countries at a much lower price.

From a supply perspective, Ukraine's seemingly bottomless senior talent pool has become finite and cannot be restocked easily. Therefore, it cannot support the full scale of market growth, even though the industry is attractive and thousands of young people and non-IT specialists want to become a part of it and enjoy a dream career.

The number of information and communication technology students in Ukraine (105,000) is twice that of Poland (50,000) where the ICT market pool is Eastern Europe's largest and creates a massive inflow of graduates each year. As mentioned above, demand for juniors is not high and leads to dozens of applications for entry-level positions. **Companies can pick and choose, set the bar high and select only the brightest and most talented individuals.** Providing they offer a good level of English, they have the chance to carve out an exceptional IT career, rising to senior/experienced specialist in a few years. The tough selection process helps maintain quality and performance levels, and explains why developers in Ukraine achieve top scores in BlueOptima reports. Unofficially, this process is known as the **"voytee v IT" (enter the IT) challenge** among the industry specialists... and not everyone passes.

What impeded Ukraine's IT exports

Besides supply and demand limitations, there are distinct reasons why Ukraine is not the first destination for receiving IT services in Eastern Europe, why some major companies and institutions refrain from opening IT centers in Ukraine, and why some Ukrainian IT professionals relocate.

Geopolitical risks and ongoing tensions with Russia have been bubbling under for the last 8 years, keeping Ukraine in the high-risk category. As the country is not part of the European Union, **it's less accessible for European and American businesses**. So, opening a full-scale local branch for IT teams is not always worth the time, effort and scrutiny.

Between 2014 and 2016, those selfsame reasons became primary drivers for many Ukrainians to move, permanently, to Poland, Romania, Bulgaria, UK, U.S. and elsewhere. Consequently, international IT service providers with a large footprint in Ukraine started to offer relocation on scale to retain talent and reduce their location exposure. Many software and IT professionals sacrificed a part of their net income (new increased gross compensation in a foreign country often became a lower net figure due to much higher taxation in Western countries) and general life affordability in return for living in a safer, more stable environment. This relocation trend has continued but on a much smaller scale.

Another reason often quoted is that there's **less English language capability** in the local IT market compared to the European Union competition. **This issue still exists although its impact is getting less each year** and has not significantly hampered IT export growth for quite a while. The IT Ukraine Association's 2021 report reflected this improvement stating that **80% of local IT talent had intermediate or higher command of English.**

The impact of war

Since February 24, 2022, when the Russian army began its military offensive, millions of Ukrainians escaped to other countries to wait out the war. Yet, the vast majority of IT professionals remained because men, who comprise 75% of the IT industry population, are not allowed to leave.

Despite some disruption of IT services foreign businesses might have experienced in the first week of the war when people were transferring their families abroad or to safer areas, **IT is one of the very few sectors still functioning in Ukraine**. There's been virtually no internet disruption stopping people working remotely from new accommodation. Moreover, at Luxoft, we're seeing most client teams delivering full pre-war capacity with no loss of quality. In some teams, the level of output even increased because, not being able to go out, people focused more intently on their work.

This picture is likely to represent most large IT service providers withstanding significant turbulence, retaining staff and providing support in the form of transportation, accommodation and coordination for IT industry professionals and their families. Still, many startups and small IT companies didn't survive the first weeks of the war.

Although some foreign companies wrapped up their IT teams as soon as the war started, most existing foreign clients and users of Ukrainian IT did not ramp down their teams or terminate supplier contracts. Understandably, there has been limited IT export business growth over the last few months, as many new and existing clients did not want to increase their risk exposure, biding their time until the war ends.

Business as unusual

Currently the IT market has stabilized and adjusted to operating in war conditions. Companies and clients that decided to exit the market have done so, as did professionals who wanted, and were able, to leave the country.

In some respects, the IT export services and labor market have become even more attractive for potential buyers.

Companies continue hiring and candidates attend online interviews in the hope of joining new teams. Supply is now catching up with demand in Ukraine following an upswing of between 40% and 50% of active candidates across most software development specializations, compared to pre-war months. It's cooling down, but the market is still far from balanced — **there are "just" 5,000 open software development vacancies in Ukraine now compared to 9,000-10,000 vacancies pre-war**.

Last year, companies and clients struggled to establish new teams and fulfill resource expansion demands. But **now is a good time for more flexible companies to recruit, as many professionals who were unavailable before are now having to look for new openings**.

What next?

While the Russian offensive continues, and current risks and restrictions in Ukraine remain, demand will flatline or gradually decrease as IT companies and their clients de-risk existing teams, backfilling Ukraine roles elsewhere. Supply (the number of available experienced professionals) will likely remain the same due to the closure of borders, and fewer opportunities for regular level specialists to grow. This will cool the market further. However, we're unlikely to reach a point where experienced senior specialists are unable to find a job.

Clearly, the hoped-for scenario is that Ukraine's defense of their freedom wins through. Knock-on effects of the war, geopolitical risks and all the restrictions are unlikely to disappear overnight, but it would be a strong signal for market participants and, potentially, **there could be a great deal of movement**.

Quoting **President Zelenskyy**, Ukraine has become a brand in recent months. The entire world has learnt a lot about Ukraine and has been trying to support Ukrainians in their fight. This brand and the world's desire to help will doubtless continue after the war ends. **Companies will look more favorably upon investing in Ukraine, and increasing imports to support the country.** The Ukraine government has been considering introduction of further incentives for IT export companies and professionals, and the new brand is an opportunity to boost foreign investment further.

Another new normal

On the other hand, the labor market pool is unlikely to get back to pre-war size very quickly because:

- Some IT professionals who left Ukraine will have settled in other countries and will not want to return immediately

- Opening borders will encourage more professionals to relocate to avoid further conflicts and risks (like happened after events in 2014)

This could heat up the IT labor market again very quickly, possibly to a higher degree than before the war. The fact that the Russian IT services market will remain closed and Belorussian IT exports restricted for foreign clients, may boost demand even more. This is because services from the three countries are thought to have similar risk, quality and price levels. **Luxoft and most big IT players are forecasting headcount growth of around 10% for 2022 in Ukraine alone.**

Should you locate, retain or expand IT teams in Ukraine?

Obviously, it depends on where you stand now and whether you have an IT footprint in Ukraine already, either through your own teams or vendor teams. The many standard considerations include:

- **The nature and flexibility of your business** (are you a fast-growing start-up with remote teams or a large regulated international bank?)

- **The location strategy, type and criticality of IT services** you consider or already run from Ukraine and so on

However, there is one more relatively new aspect that may influence your decision:

- Establishing or expanding your consumption of Ukrainian IT services is additional support for the country which can help boost your **global image and the "S" element of your ESG position**. As mentioned earlier, the vast majority of large businesses have not terminated or reduced their footprint. On the contrary,

they've retained them and provided all possible support. This can be seen as the socially responsible position and "the right thing to do"

Firms with teams in Ukraine, or companies considering locating teams there, have two approaches to choose from:

1. **Ramp down teams and grow/set up teams elsewhere** — in case firms need to reduce their risk to maintain a stable software-development environment and support for their business. However, this can introduce other risks like the loss of knowledge during transition and lower service quality. If firms target maintaining the same level of quality and productivity, the new team's price will be higher (Ukraine currently offers an unbeatable price, quality, productivity balance). Also, the speed of recruitment will be questionable as all other markets remain overheated.

2. **Start or continue growing in Ukraine**. Despite high uncertainty due to the ongoing conflict, some firms still want to consider expanding in Ukraine now (Luxoft has supported three new clients from Ukraine since the war started). Although compensation expectations haven't really been affected, since there are more available resources on the market now, there's a distinct possibility of hiring teams faster in Ukraine than in other EE countries. No doubt, the situation will return to an "employee's market" as war nears its end.

Also, there are a couple of compromises for companies with already functioning teams in the country, if they're critically dependent on their Ukrainian teams.

1. They could **retain the teams now, but backfill and hire new resources elsewhere**. It reduces risk (geopolitical exposure, knowledge loss during transition and quality dilution) but introduces some complexity in managing a team spread between several locations.

2. Or they can **help willing staff to relocate when the borders reopen**. Although it would require employing special expertise and could be a lengthy process, relocation shouldn't be an issue if you get Ukrainian IT services from a vendor (more on that below).

Use your own or a vendor's resources?

There are fresh considerations to do with the current situation in Ukraine, and reasons why it might be worth using a vendor now.

Although it can be a good time for companies to set up IT services in Ukraine, it can also be difficult — impossible even — if the firms don't already have a legal entity, offices, connectivity, local staff and other elements they'll need for the ramp up. Of course, vendors will come to their aid as they have always done. In fact, that might be the only option for many potential users of Ukrainian IT.

Sometimes, only a vendor will do. You pay a premium for the convenience of having predictable caliber resources, teams or deliverables on demand, without the need to fund recruitment and severance costs.

The vendor option also offers **limited exposure to Ukraine and the chance of benefitting from the current market situation (while rates remain unchanged)**. Clients can reduce the risk even more by letting the vendor run teams and assume the responsibility for deliverables — so-called managed service and managed capacity engagements.

Relocation, relocation, relocation

Most large software development vendors offer interested professionals the chance to relocate to another country, as long as there's a client demand. Companies like Luxoft have relocated thousands of professionals over the years, establishing frameworks and processes to oil the wheels of international mobility. They know the regional market well and have the required know-how for operating in the environment and mitigating region-specific risks. **Clients can benefit from this experience, de-risking their location strategy and retaining staff** who might express a preference for relocation once the borders are open again. This undertaking would be difficult without prior experience and detailed knowledge of the process.
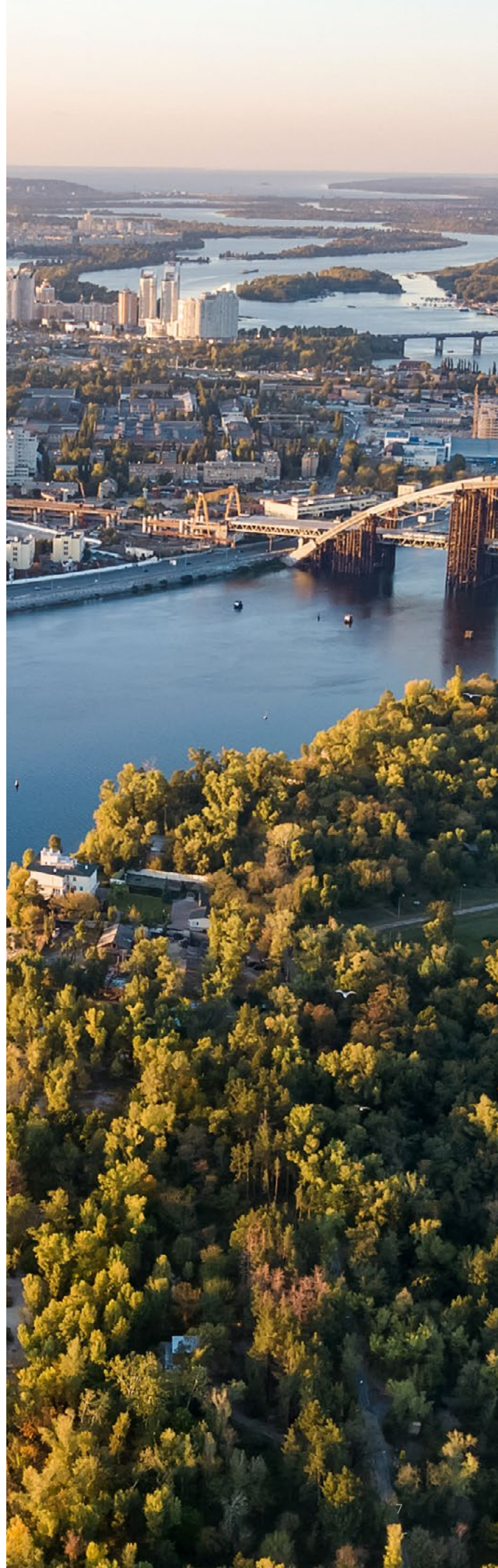
How Luxoft is helping clients

Ukraine remains one of Luxoft's key bespoke software development and support locations. However, **most of our clients** who have used IT services from Ukraine **are now reviewing their location strategy**. They're not only deciding whether to stay in Ukraine, but also whether they should address the bigger question of single country, or even single region dependency.

Luxoft helped a couple of existing clients to ramp down their Ukrainian teams in a controllable manner, while redeploying staff to other client engagements. **One client informed us of their decision to cease involvement in Ukraine, but as their researchers couldn't find any other suitable locations, they changed their minds and stayed put.**

The vast majority of clients are continuing to use services from Ukraine and Luxoft is helping them rebalance their teams globally, enabling clients to enjoy Ukraine IT's cost/quality balance while reducing their IT risk exposure. Several clients have already decided to continue expanding their teams in the country, because the fully functioning teams they have in other regions mitigate the risk. Notably, we've engaged with and built teams for several new clients who selected Ukraine as the best value for money despite the ongoing risks.

Flexible mobile location strategy

From an operational perspective, we've been focusing on the **minimization of client and employee risks** by enhancing the flexibility and mobility of our working environment. We analyzed all the towns in Ukraine from a safety and potential threats perspective, developed mitigation and contingency plans, and have been updating detailed business continuity plans (BCP) for each account, three times a week.

Although all employees are allowed to work from their preferred accommodation, over the last few months we've opened five new offices in Ukraine's safer locations as co-working spaces. In case the country's internet providers stop operating, all our Ukrainian offices are now equipped with **Starlink** connectivity technology which ensures that employees can continue to deliver for clients.

As we anticipate a new relocation wave after the borders reopen, Luxoft partners with leading research and consulting firms to identify and offer clients new locations that satisfy the following criteria:

- Need to fit client requirements and **offer an optimal balance of cost, quality and ability to hire** from local market

- Have to support **European time zone** coverage

- Got to be **attractive for staff willing to relocate from Ukraine**

This approach will allow us to continue supporting our colleagues and retain them within the Luxoft family whether they decide to stay or move away from Ukraine.

If you'd like to find out more about how Luxoft could inform and enable your organization's ambitions in the current situation, contact me **here**.

About **the author**

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Alex leads complex pre-sales initiatives and client engagements for tier-one financial firms, applying his depth of industry experience and hands-on knowledge of IT market specifics in different countries. Now based in London, Alex has an international background, having lived, worked and studied across Europe.

About Luxoft

Luxoft is the design, data and development arm of DXC Technology, providing bespoke, end-to-end technology solutions for mission-critical systems, products and services. We help create data-fueled organizations, solving complex operational, technological and strategic challenges. Our passion is building resilient businesses, while generating new business channels and revenue streams, exceptional user experiences and modernized operations at scale.

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