

TRUSTING THE MYTH?

Are Ukraine, Romania, and Serbia Europe's largest suppliers of workers on global digital platforms?

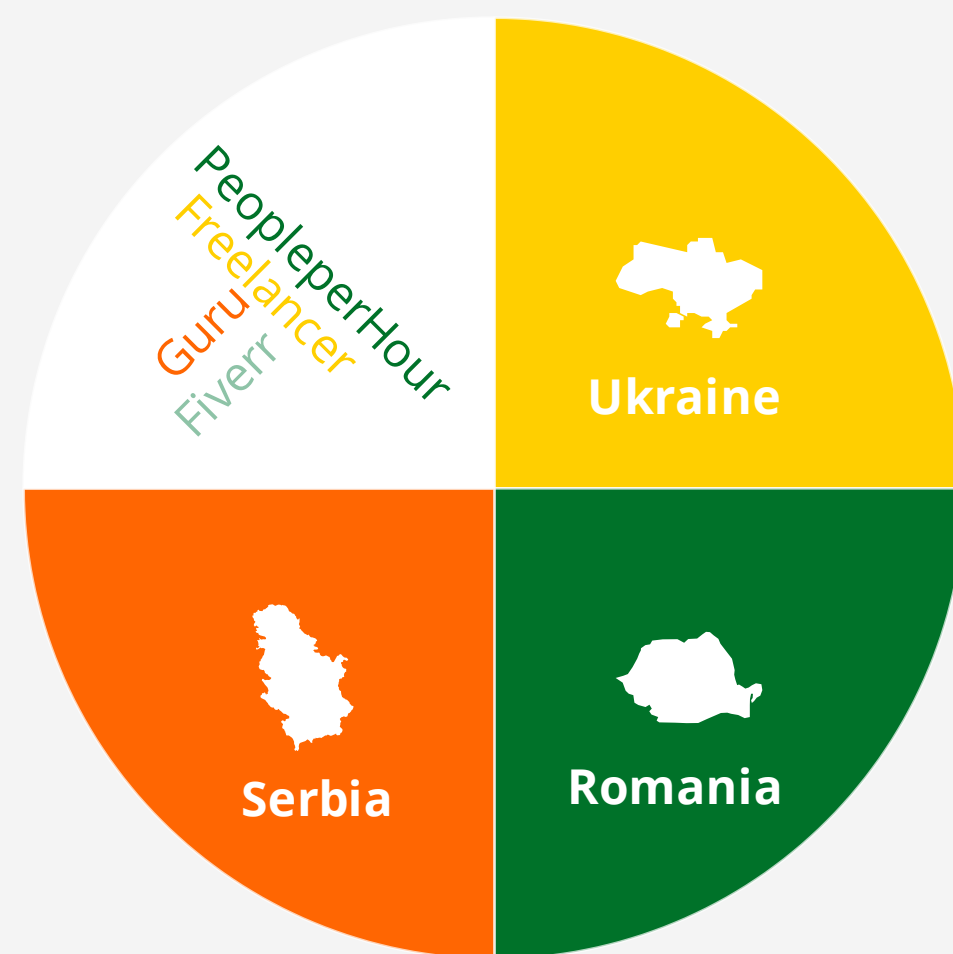


The myth emerges

In a seminal World Bank assessment (Kuek et al, 2015), Ukraine, Romania, and Serbia were for the first time highlighted as the largest per capita contributors of digital platform workers worldwide. These three countries were also captured by data compiled by the Online Labour Index (OLI), the first economic instrument that collects supply and demand data for available online workers in real time, but the time series was initially too short for any long-term conclusions to be made. Ad hoc studies (AnalyticsHelp, 2018) and analyses by financial service providers (Payoneer, 2019) have intermittently recognised these three countries as star performers in the online gig economy, but their criteria have remained vague.

First created in 2016, the OLI tracker of projects or tasks posted on four global digital platforms (Freelancer, Fiverr, Guru, and PeoplePerHour) turned four this year, and its worker supplement, which has been observing workers active on the four major platforms since June 2017, celebrated its third anniversary.

Sufficient data have now been collected over time to answer the question of whether Ukraine, Romania, and Serbia are indeed Europe's largest suppliers of workers on global online platforms.



4

Number of global online labour platforms measured by OLI



3,5 million

Approximate number of users registered on the four platforms



100,000

Estimated number of gig workers working on one or multiple platforms at least once weekly

Methodology

01

Dataset

The analysis uses secondary data collected by the OLI showing the number of digital workers disaggregated into the six OLI occupation categories.

02

Data

The data show the daily number of gig workers by occupation. The dataset covers the period from 16 June 2017 to 11 October 2020.

03

Visualisation

Daily data were processed so as to visualise the average weekly number of gig workers. The workforce was disaggregated by occupation based on the average shares of each occupation in the totals over the entire observation period. Both dimensions, the total numbers of workers and the shares of the OLI occupations, were assessed 1) through a comparison between Ukraine, Romania, and Serbia, and 2) by comparing these three countries with global trends and characteristics.

What the OLI dataset reveals and what it does not?

The Online Labour Index collects data on the number of gig workers from four major digital platforms (Freelancer, Fiverr, Guru i PeoplePerHour), permitting open access to a dataset that shows the numbers of online workers by country of origin and is updated daily.

These numbers are initially disaggregated into the six OLI occupation categories:

1) Clerical and data entry; 2) Professional services; 3) Creative and multimedia, 4) Sales and marketing support, 5) Software development, and 6) Writing and translation.

However informative this dataset may be in terms of the total number of workers and percentage shares of the various OLI occupations, it does not account for the gender dimension of online work.

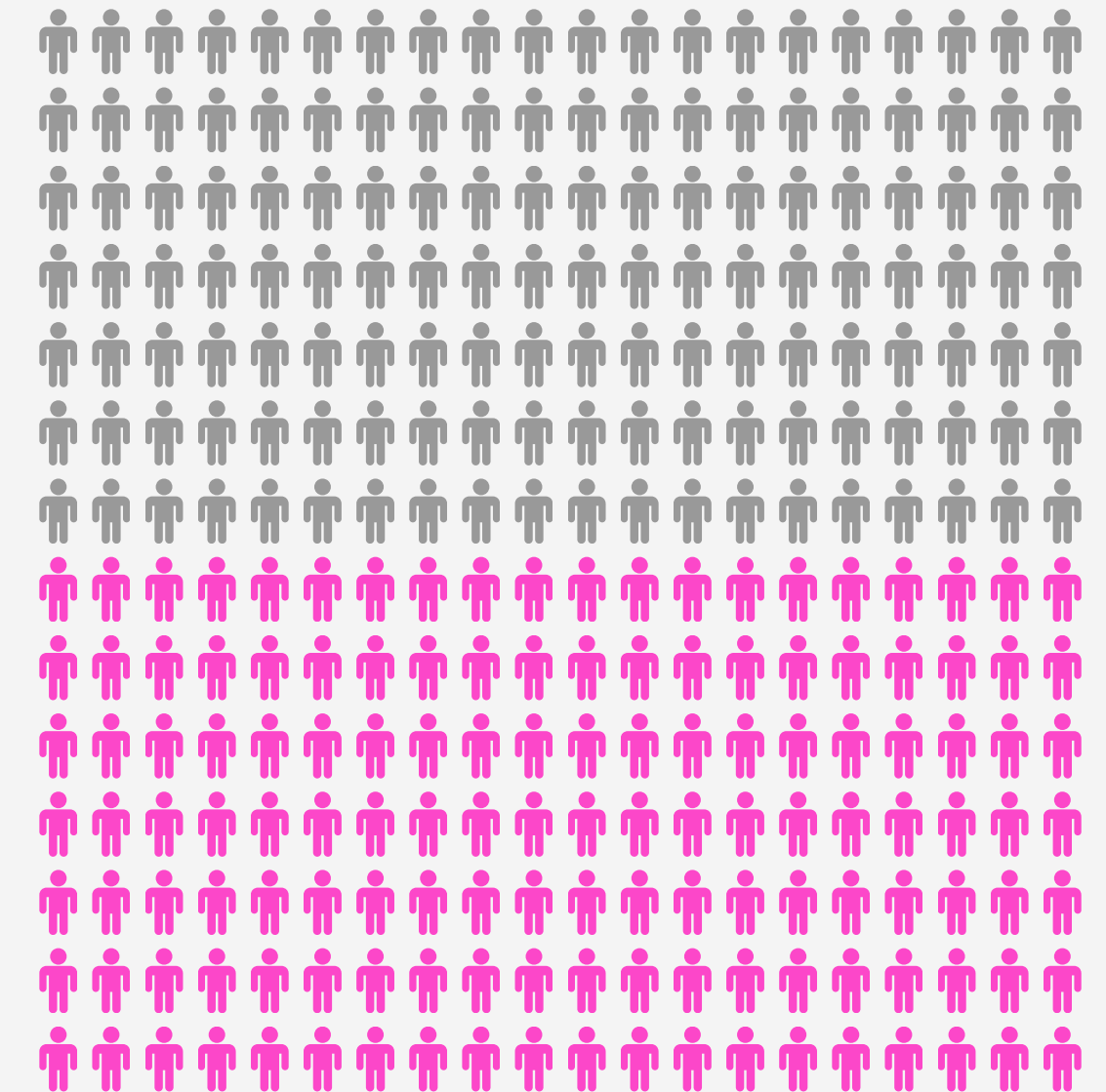
In this analysis, CENTAR aims at providing a more accurate assessment of the global position, key trends, and other hallmarks of the supply of digital workers in Ukraine, Romania, and Serbia.

As is made clear in the description of its methodology, the OLI approach does not capture all digital platforms on which gig workers from the three countries are registered and where they offer their skills, do work, and earn incomes. As such, it ought to be emphasised that the OLI dataset is able to identify only a part of these countries' actual digital workforce.

Freelancer may be Romania's most popular platform, but a large share of gig workers in the country are (also) active on Upwork, an employment marketplace not included in the OLI dataset. Upwork is also highly favoured by freelancers in Serbia, 11.000 of which are registered there (Upwork, 2020).

The supply of digital labour in Ukraine is even more difficult to assess, as the country's gig worker community is spread out across not only international and domestic online platforms (such as freelancehunt.com and freelance.ua), but is also active on Russian ones (freelance.ru, fl.ru, and weblancer.net) (ILO, 2018). One additional obstacle to obtaining a precise count of gig workers is the widespread practice of one person registering and working on multiple marketplaces. There are no means as yet to even approximately measure the presence of the same individuals on more than one platform.

It is estimated that there are about 3.5 million registered users on the four global platforms that are part of the OLI database, with about 100,000 gig workers working on the platform(s) at least once a week (OLI, 2020). However, as the database does not cover all platforms, it is assumed that the total number of online workers is probably twice the number represented by this analysis.



● Not captured by OLI ● Captured by OLI

Evolution of online work in Ukraine, Romania, and Serbia

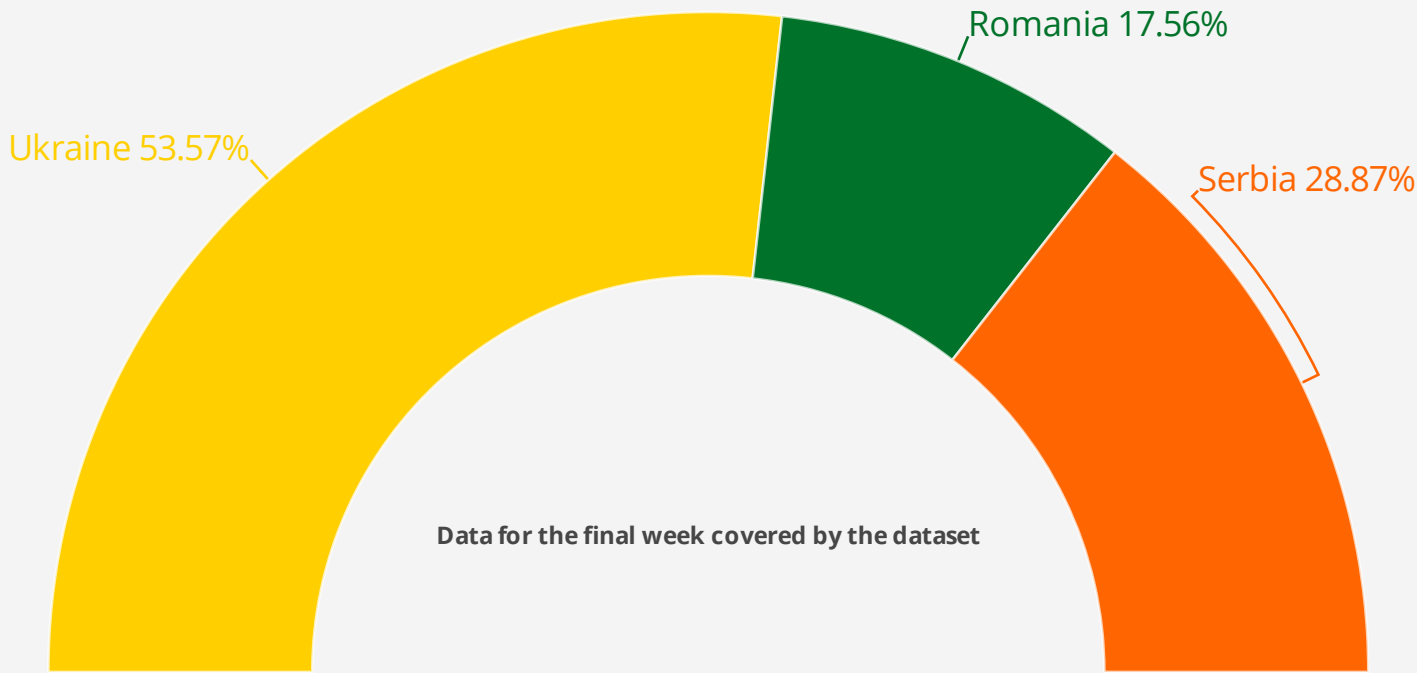


FIGURE 1 Average weekly numbers of digital workers

This section focuses on comparing key trends and characteristics of Ukrainian, Romanian, and Serbian digital gig workers. Estimating the digital gig workforce in these countries is particularly interesting given their small and relatively underdeveloped economies and much smaller populations than the leading global suppliers of gig work. In spite of having spent years in the top 20 rankings, Ukraine, Romania, and Serbia seem incongruous amongst the world's largest contributors to the global digital workforce.

The sequence of the three countries by their average numbers of gig workers has not altered appreciably throughout the reporting period. Ukraine has generally held on to first place, with Romania and Serbia at times trading positions as the runner-up. Romania has led Serbia by its online worker count for most of this period. July 2019 saw the tables temporarily turned, but Romania had regained its second place by the end of the same month. A similar shift took place in early 2020, and the visualisations show the pandemic accelerating the growth of the Serbian gig workforce and propelling it into second place ahead of Romania.

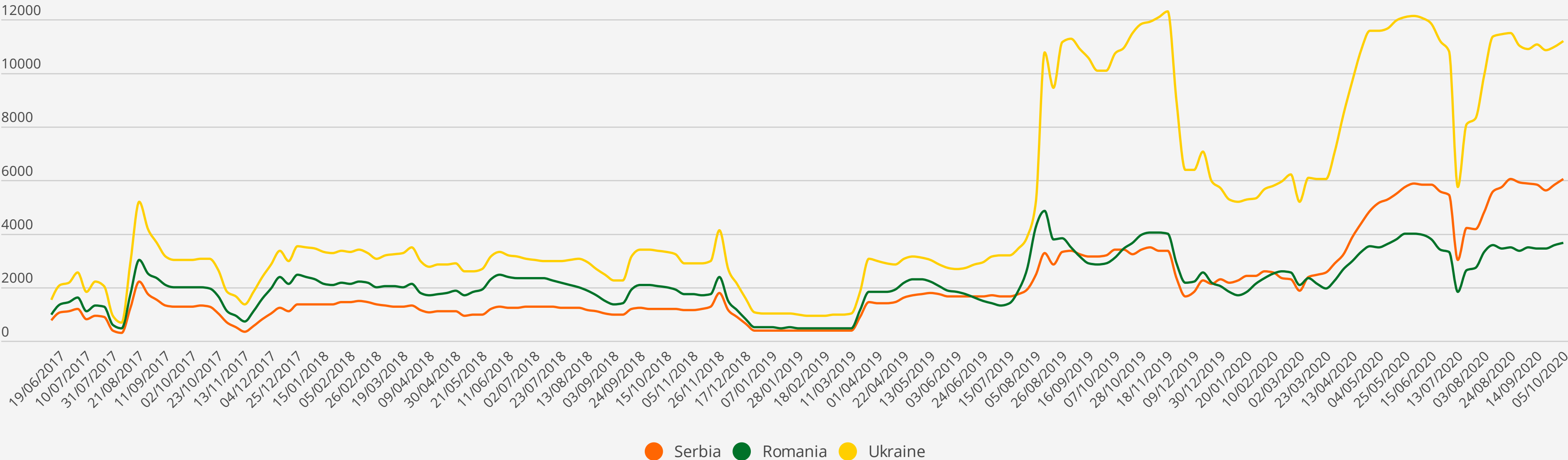


FIGURE 2 Weekly trends in the numbers of digital workers

Structure of supply in the digital market: what are the main skills offered by Ukrainian, Romanian, and Serbian gig workers?

- PROFESSIONAL SERVICES
- CLERICAL AND DATA ENTRY
- CREATIVE AND MULTIMEDIA
- SALES AND MARKETING SUPPORT
- SOFTWARE DEVELOPMENT AND TECHNOLOGY
- WRITING AND TRANSLATION

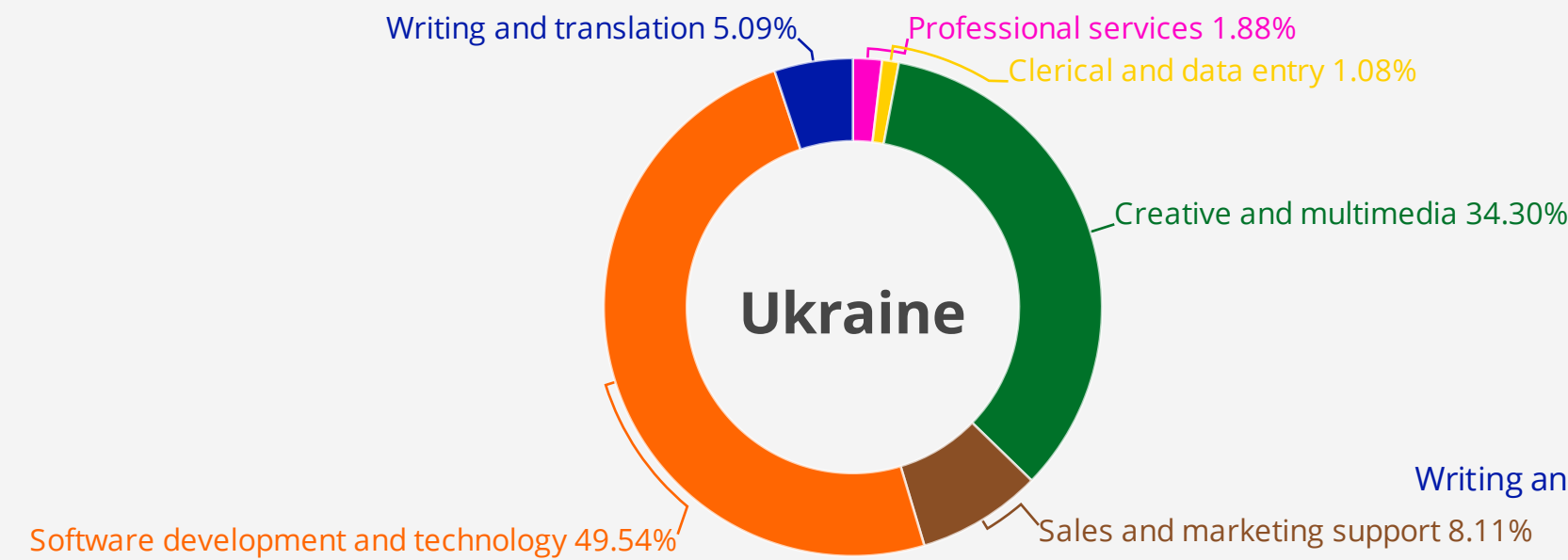


FIGURE 3 Proportion of OLI occupations in the Ukrainian gig workforce

Romania’s online gig workers mainly offer creative and multimedia services and software development, with each comprising 36 percent of the total platform workforce. Writing and translation accounts for 13 percent of the supply of digital labour, followed by sales and marketing support at 8 percent and clerical and data entry at 5 percent; professional services, at only 2 percent, is a very rare occupation for this country’s digital workers.

Based on data from platforms measured by OLI, nearly one-half of all Ukrainian gig workers provide software development services, with the creative industry coming in second (at 34 percent). The visualisations reveal all other occupations to be much less represented: sales and marketing support account for 8 percent, writing and translation for 5 percent, professional services for 2 percent, and clerical and data entry for just 1 percent of all Ukrainian digital workers.

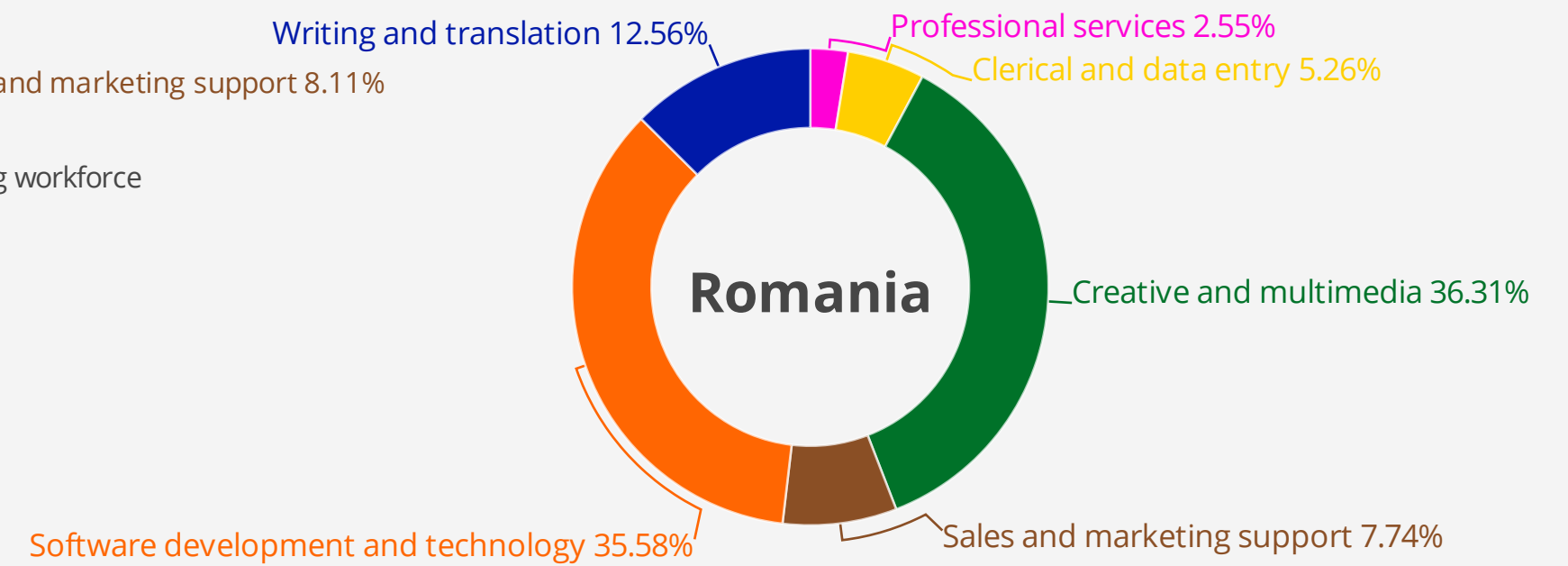


FIGURE 4 Proportion of OLI occupations in the Romanian gig workforce

Accounting for 46 percent of the total, most Serbian gig workers operate in the creative industry, with software development also commanding a significant 39 percent. Writing and translation is in third place with 6 percent, followed by clerical and data entry with 4 percent. At no more than 1.6 percent, professional services are the least common skills for Serbian online workers.

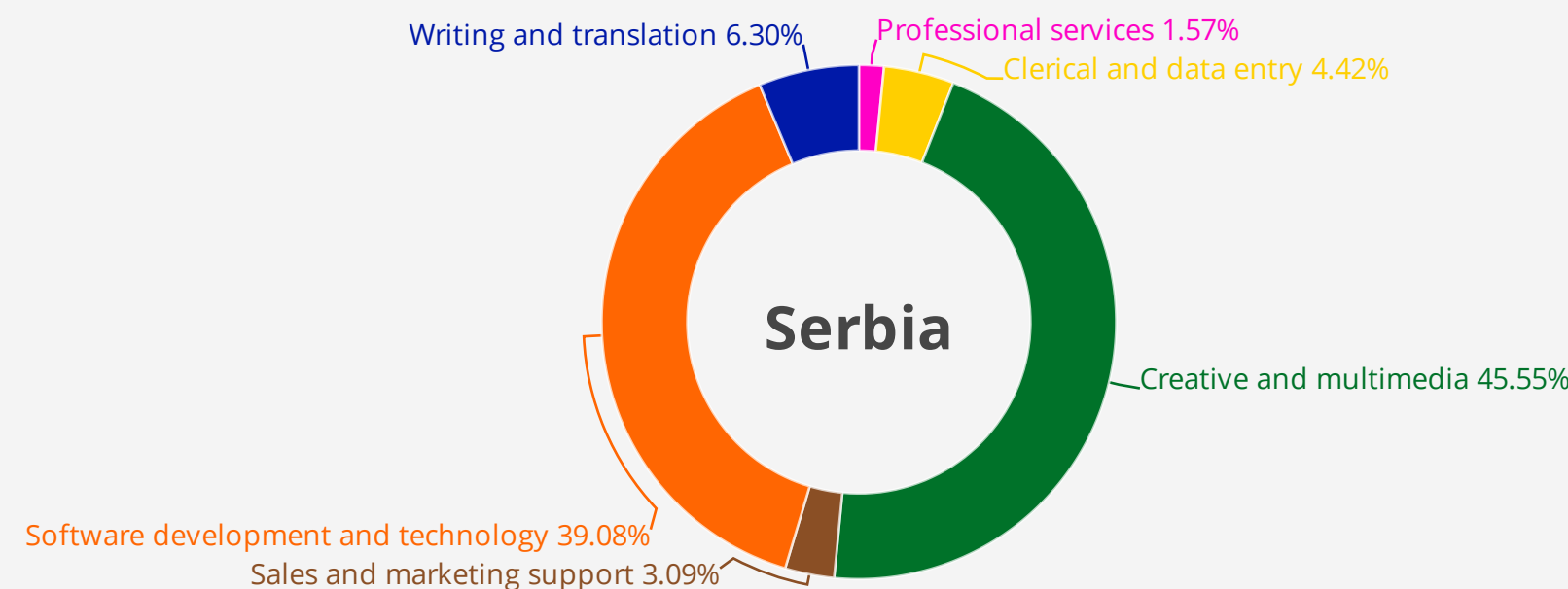


FIGURE 5 Proportion of OLI occupations in the Serbian gig workforce

Professional services are quite rare in all three countries (where they account for some 2 percent of the total gig workforce), whilst clerical and data entry hold similar shares in both Romania and Serbia (4 and 5 percent, respectively). Serbia’s proportion of writing and translation skills is close to that of Ukraine (6 vs 5 percent). By contrast, with a share of 3 percent, sales and marketing support is the least common occupation in Serbia when compared to the other two countries.

Ukraine has remained in the top 10 of the world's suppliers of online workers throughout this period, with Romania and Serbia making it only into the top 15 or top 20 rankings.

Over the past four years, Ukraine and Serbia have seen their digital workforces grow by 87 percent and the figure for Romania has been 75 percent.

The major role these countries have to play in supplying the global market with gig workers is belied by the number of their citizens: Ukraine, Romania, and Serbia account for just 0.006, 0.003, and 0.001 percent of the global population, respectively.

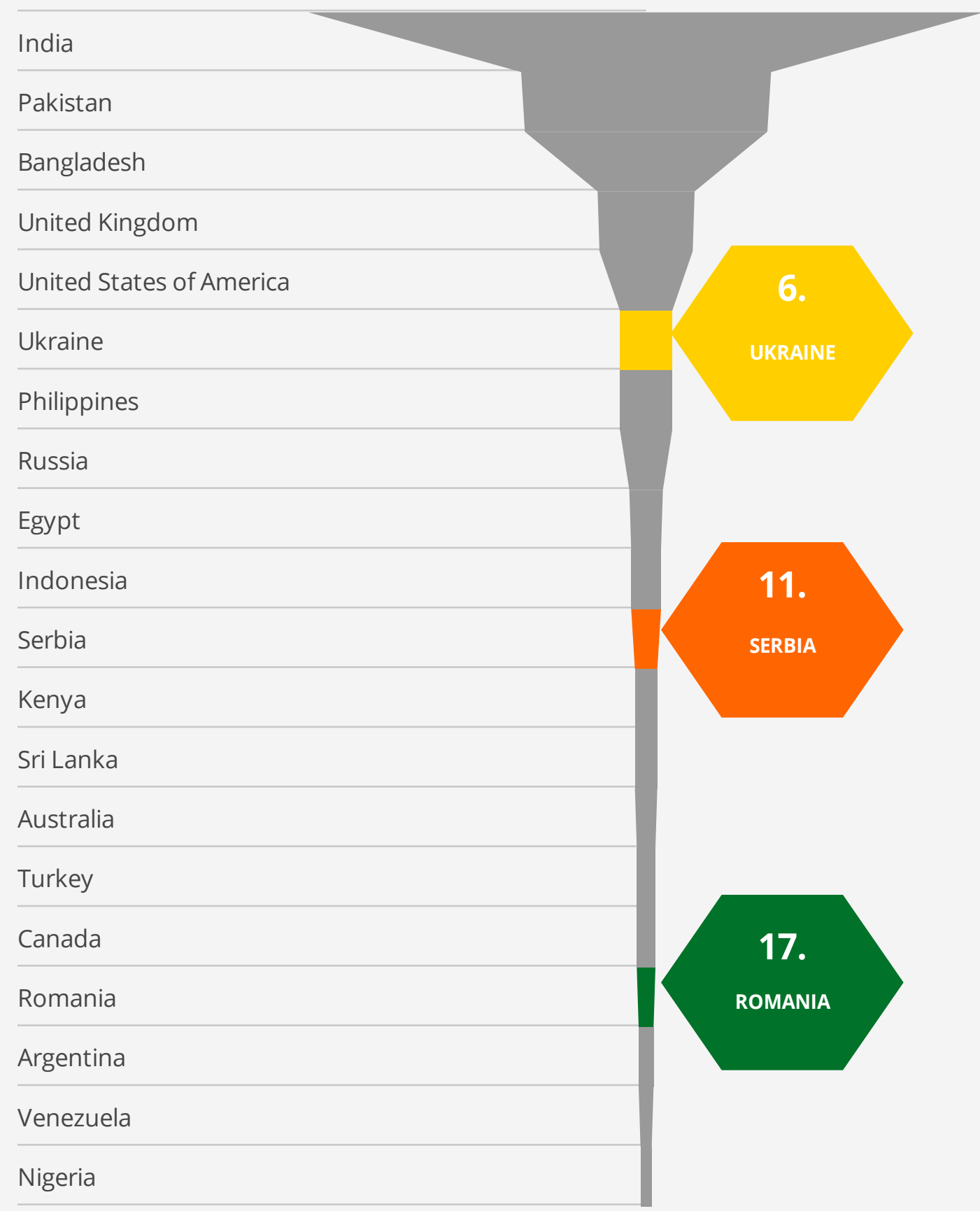


FIGURE 6 Top 20 countries by supply of digital labour

Is it lonely at the top of the world?

In the global competition for the largest gig workforce, the pedestal is quite expectedly shared by India, Bangladesh, and Pakistan, some of the world's most populous countries, with only India never relinquishing the lead. These three countries were the top three suppliers of digital labour from June 2017 to October 2020 (for 174 weeks). The rankings were only disturbed briefly from late 2018 to Week 10 of 2019, when the United States assumed the title of global digital workforce vice-champion. Another change came in April 2020, when Pakistan came from behind to replace Bangladesh as the runner-up after several brief intervals in which it had alternated with the US in third place.

Interestingly, at the regional level, Northern Macedonia registered more digital workers than Serbia in the early years of the OLI dataset.

This trend was reversed in early 2019 as Serbia saw a greater increase in its gig workforce and Northern Macedonia stagnated.

Nevertheless, not even the 2017 and 2018 data can support a view of Northern Macedonia as a regional leader, as the OLI dataset captures only workers on four platforms, excluding Upwork, which is the world's largest labour marketplace with the most registered freelancers.

Looking into the mirror: who are the largest global employers and what skills do they seek?

With a share of nearly 43 percent, US clients are the major users of gig services globally. These are followed by European employers, excepting those from the UK, which alone occupies a high fourth place in the rankings by demand for digital workers.

The Asia-Pacific region also has a substantial appetite for online workers, with India, Canada, and Australia leading the field. African countries and the Americas have a slightly less pronounced need for online labour.

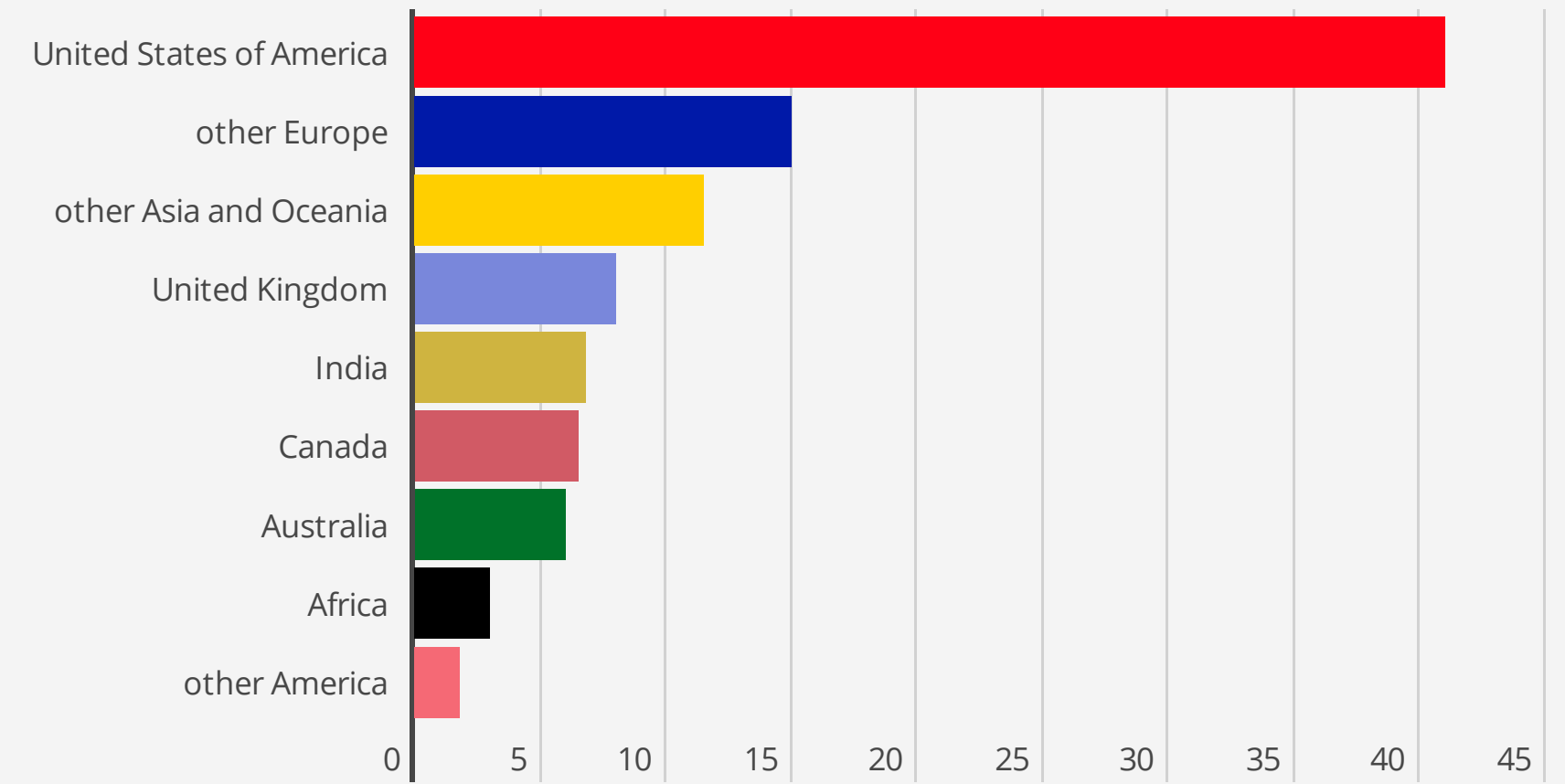
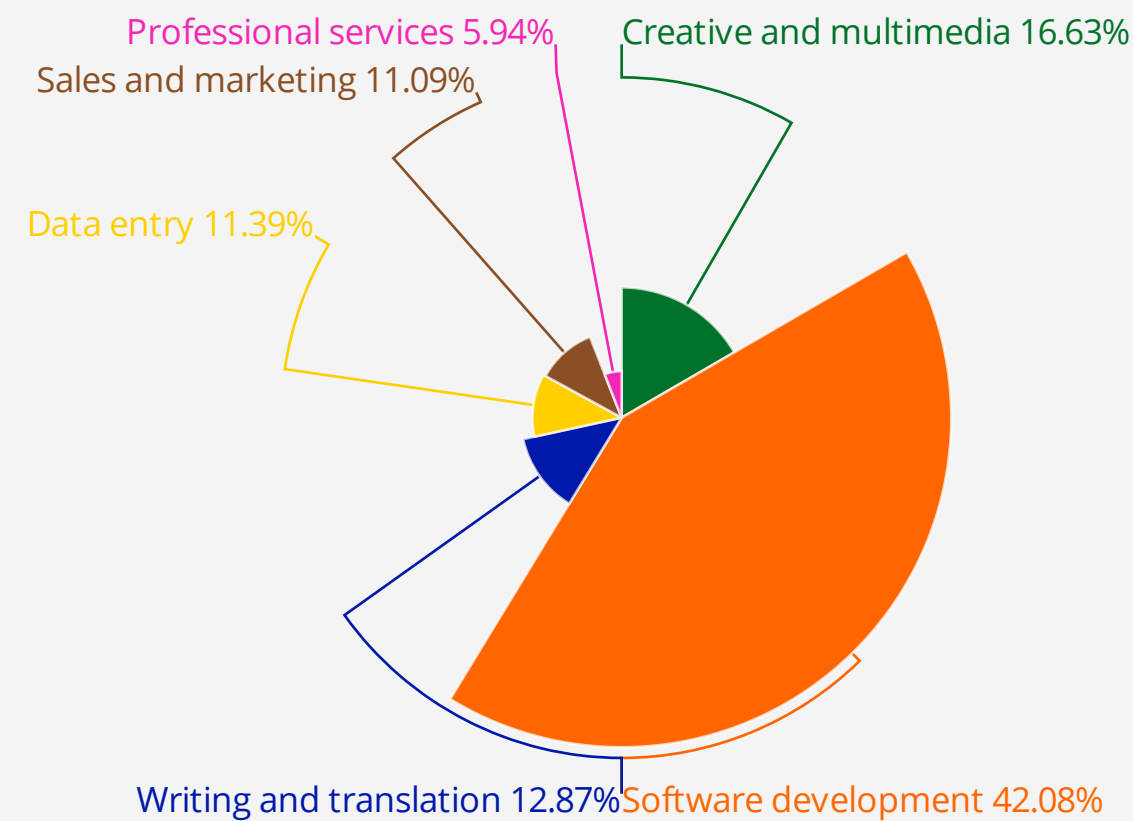


FIGURE 7 Demand for gig workers

Tellingly, with a share of between 40 and 60 percent, software development is by far the most sought-after online occupation.

Creative and multimedia and writing and translation come next, with all other occupations (clerical and data entry, sales and marketing support, and professional services) much less in demand.



The large supply of software development and creative skills in Ukraine, Romania, and Serbia may partly be a response to the huge demand for these occupations globally.

FIGURE 8 Structure of global demand for OLI occupations

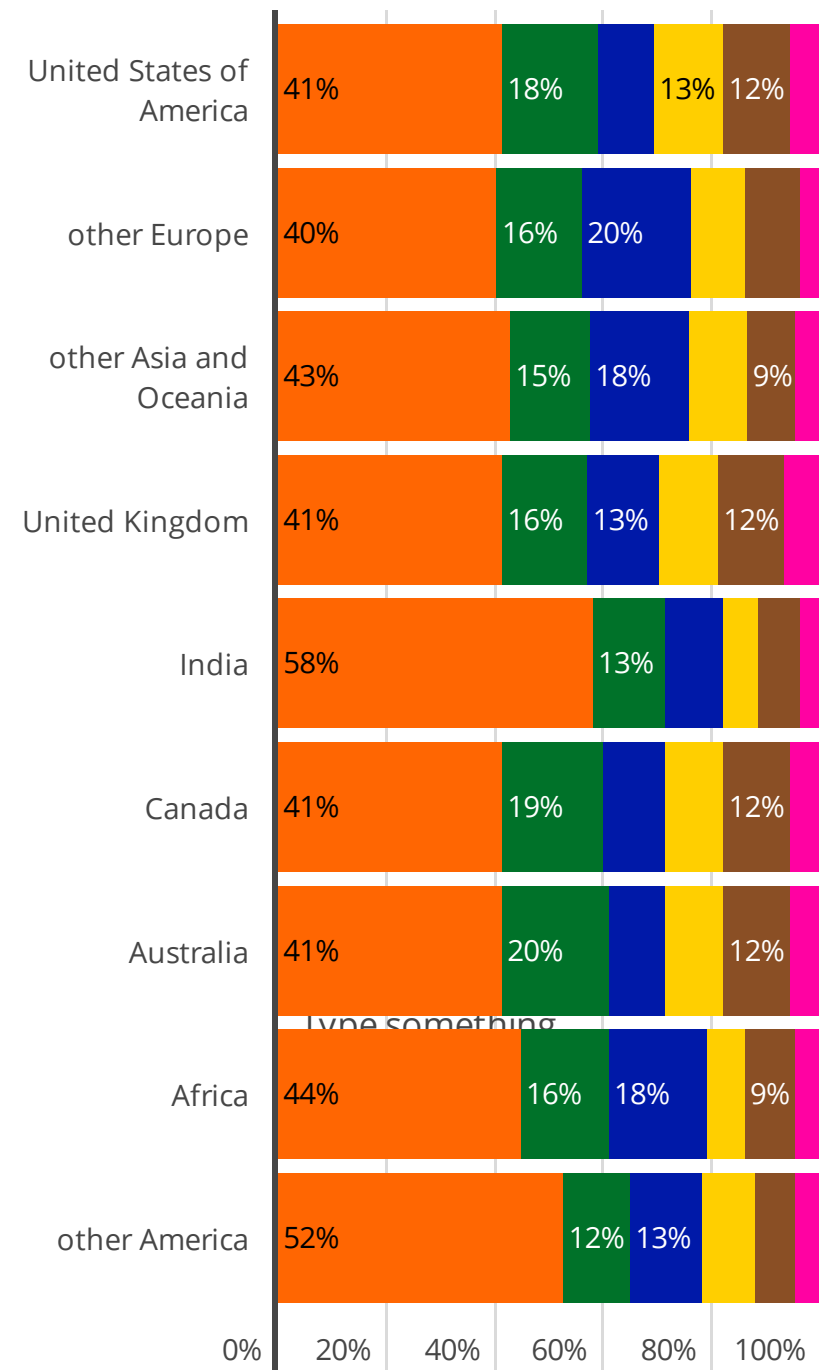


FIGURE 9 Structure of demand for OLI occupations by country

The pandemic and occupations: software development and creative and multimedia grow as all other skills stagnate

In addition to being the commonest type of service offered on online platforms, software development has not suffered any adverse consequences of the pandemic. On the contrary, the supply of these services has continued growing even as lockdowns were introduced across the world to control the coronavirus outbreak.

Ukraine's gig workforce of software developers and creatives continued to grow from March to late June, with both occupations only seeing a short-lived dip in early July. Tellingly, the supply of software development services increased by 61 percent from March to June 2020.

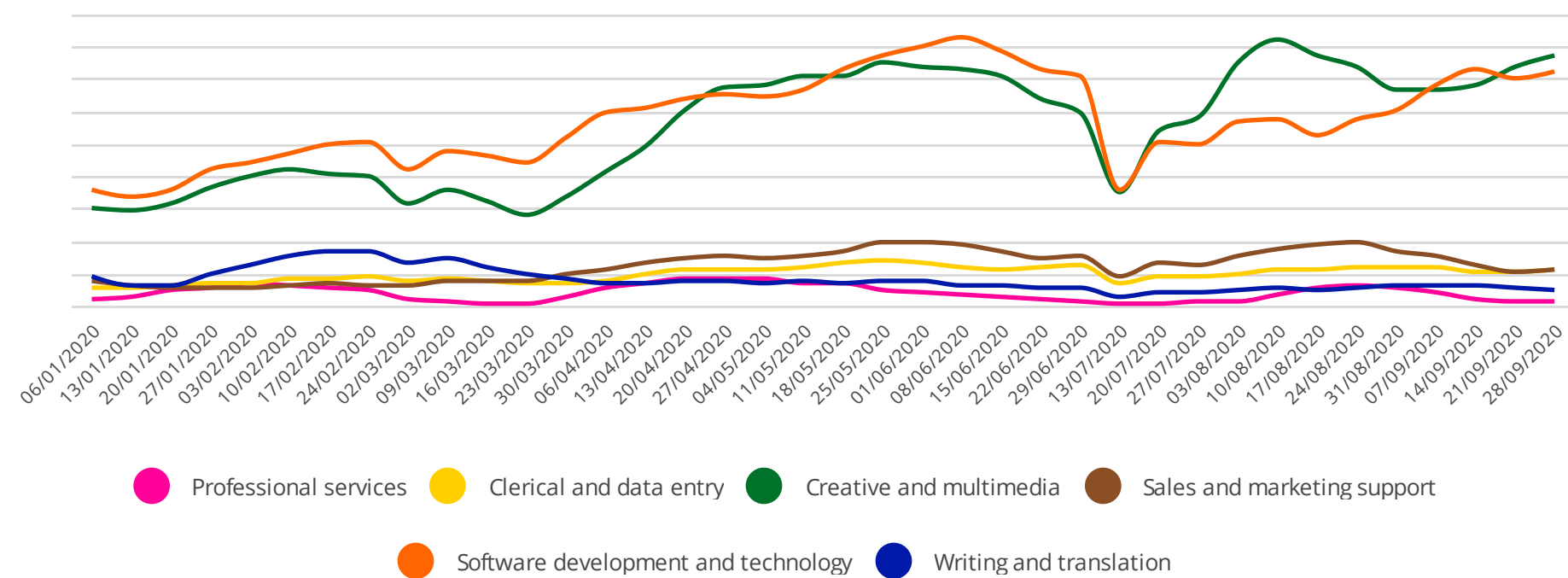


FIGURE 11 Romanian gig workforce trends, by occupation, during the pandemic

The Serbian count of gig developers rose steadily throughout the lockdown, which is to say from early March to early June, only to decline in mid-July. An upward trend resumed later that month, with the software development labour pool growing to levels much greater than in the first week of March, in the run-up to the lockdown. In early March the occupation numbered 619 gig workers, and by late March the number had risen to 3,245. This surge, captured by the OLI, demands closer attention.

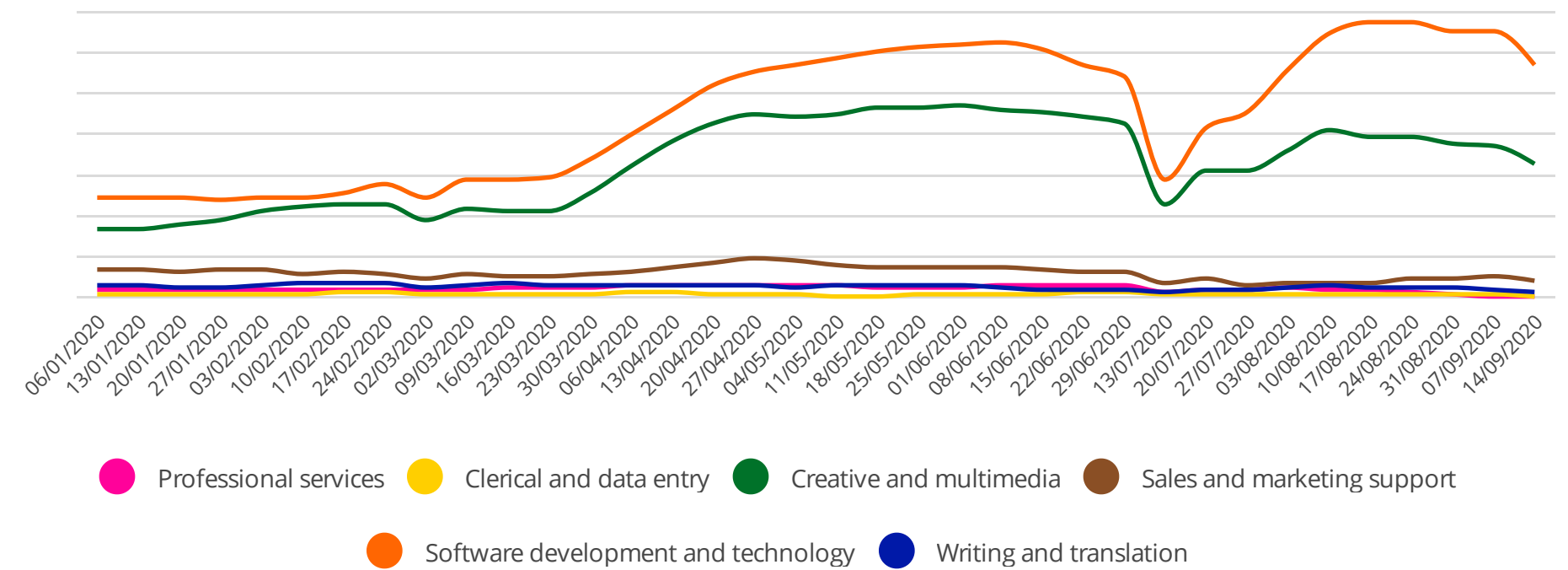


FIGURE 10 Ukrainian gig workforce trends, by occupation, during the pandemic

In Romania, the number of gig software developers nearly doubled from early March to early June 2020. In addition, the creative services and multimedia occupation, as tracked by the OLI, saw its strongest growth during the country's lockdown, with the workforce peaking in early August.

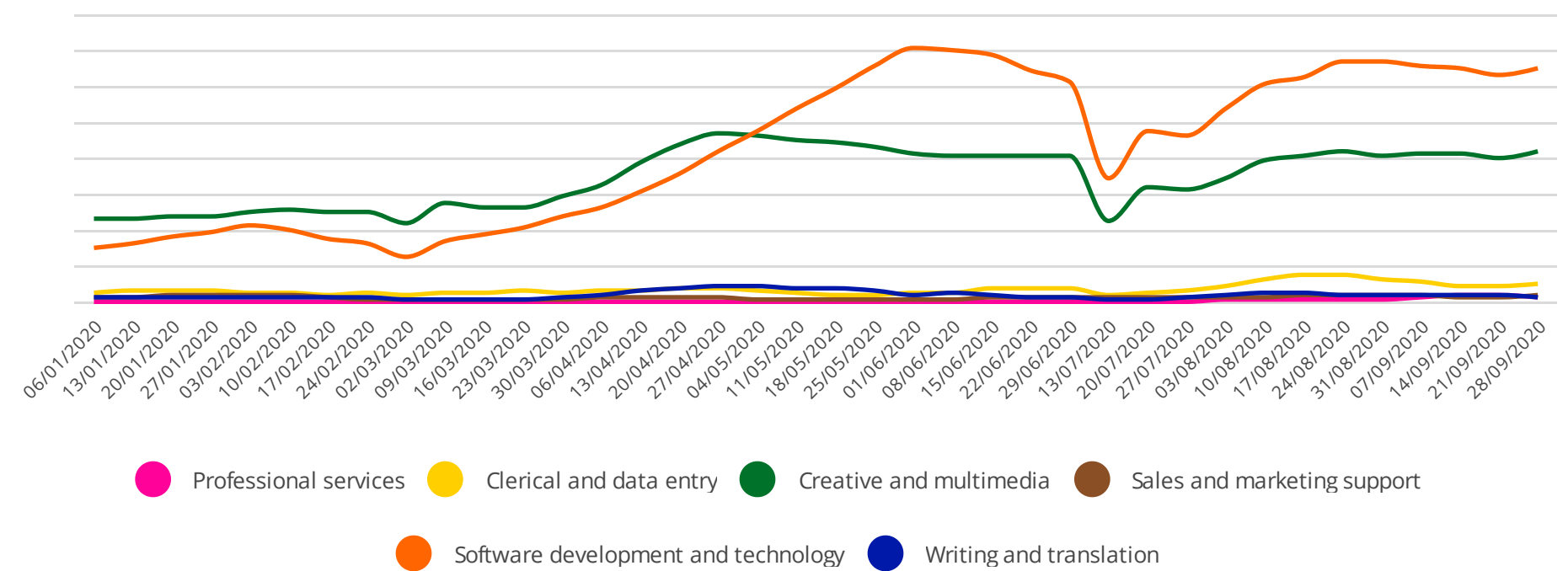


FIGURE 12 Serbian gig workforce trends, by occupation, during the pandemic

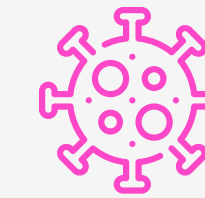
What have we learnt?

- ! Of the three countries examined, Ukraine is the greatest supplier of digital labour from Europe on the marketplaces measured by the OLI in both relative and absolute terms.

- ! Over time, the digital workforce gap between Romania and Serbia has narrowed, with Serbia overtaking Romania by size of its online workforce on the OLI platforms.

- ! Steady growth over a period of several years has allowed Serbia and Romania to position themselves well in the digital market, outstripping larger and more advanced economies.

- ! In all three countries, the total gig workforce is dominated by creative and multimedia and software development providers, in line with the needs of the global market and overall trends in digital work.



The Covid-19 pandemic has not affected the growth in supply of software development and creative and multimedia workers and the upward trend in these areas across the three countries continued during the pandemic, although their contribution to the global gig workforce for other OLI occupations stagnated in 2020.



It ought to be recalled, nevertheless, that the analysis is based on the OLI dataset, which tracks gig workers on only four online marketplaces.



The absence from the OLI of many gig platforms popular in these countries (such as Upwork in Serbia and Romania, and national and Russian labour marketplaces in Ukraine) means more research is needed to assess trends and characteristics of online work in Ukraine, Romania, and Serbia.



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