Agenda

- Executive Summary
- Country: Facts & Advantages
- IT Outsourcing & Software Development: Role in the Economy
- IT Outsourcing
- Software Development
- Overseas Call-Centers: a Wise Alternative to India
- Geographic Coverage of the Sector
- SWOT Analysis
- Current Tax Exposure
- Tax & Regulatory Advantages and Benefits
- Establishing Legal Presence
- Industry Players – Top 20
- Our Industry-Specific Services
- Current Major Projects in IT Industry

This is an overview of the IT outsourcing and Software Development markets in Ukraine rather than exhaustive report. We would be happy to provide a more detailed report on a specific subject.
Executive summary

IT outsourcing is one of the perennial growth hope stories for Ukraine, drawing its inspiration from the Soviet tradition of science teaching, and the country’s plethora of scientific institutes that used to churn out rocket scientists. Under market conditions, the schools have switched to producing programmers...

- In 2015, Ukraine is for the first time in history officially named as Europe’s #1 IT outsourcing and software development powerhouse
- IT sector experiences about 25% growth annually in Ukraine, rising by 10 times on the amount it was ten years ago
- Per industry estimates, IT currently accounts for 3% of Ukraine’s GDP; it could rise to more than 10% by 2020
- IT sector already holds 4th place within the export industry of Ukraine (after agriculture, metallurgy and transport); by 2020 it is expected to become #1
- This year, A.T. Kearney ranked Ukraine 24th in the global outsource ranking; that is 17 places up compared to 2014
- **Ukraine is #1** in CEE by the number of engineers and **#4 – globally**
- In 2015, at least $2.5 bn worth of software and IT services were exported from the country
- Currently, about a thousand companies and at least 100,000 programmers serve the clients across the world
- Multinational players run about **100 Research & Development centers** across the country
- **Serious tax and regulatory benefits** for both self-employed entrepreneurs and small-size companies additionally boost the industry growth
- The BrainBasket Foundation stand-alone aims to **train 100,000 new IT professionals by 2020**, by launching **100 learning hubs** all over Ukraine
- Regional IT clusters are spread rather evenly across the country, and they include the following cities: **Kyiv, Kharkiv, Lviv, Odessa, Dnipro, Sumy, Chernivtsi, Cherkassy, Lutsk**
Ukraine: Facts & Advantages

- **Ukraine** provides **visa-free entry** for nationals of developed world countries.

- A clear plan for modernization is in place to fit Western values, together with signing the **Association Agreement with the EU**.

- The **good educational system** provides the market with a stable supply of well-educated and highly motivated young workers that continue to acquire new competencies, including good command of foreign languages after graduation.

- **Ukraine** is among the world leaders for educated population (100% literacy, over 70% have higher education) and for **IT/programming professionals**.

- **Property, labor and services** became extremely **price competitive** as a result of the crisis, which significantly reduces the costs involved with entering the market. In addition, Ukraine has been “an employer” market since 2008.

- Ukraine provides a market of **40m+ consumers** (70% population – urban), and **cultural differences** are substantially **lower** when compared with Asian countries.

- Significant progress in World Bank’s ‘Ease of Doing Business’ ranking: 83rd place in 2016 (2015: 96th). A remarkable jump from No 70 to No 30 re Starting a Business in 1 year!
IT Outsourcing & Software Development: Role in the Economy

- **2nd place of services in export potential**
- **25%** growth in dollar terms
- **100 000** (over 200 000 by 2020) IT professionals (#1 in Europe)
- **2%** of total young working population
- **>1 000** IT service companies work in the sector
- **USD 2.5 billion**
  - IT industry (export segment) came in third in export potential
- **>100** Multinational R&D centers
- **>2 000** Startups

Exports of services in 2015

Source: State Statistics Service of Ukraine
IT Outsourcing

“… as a company we intend to remain based in Ukraine. We are all comfortable living here… and have access to a range of great and inexpensive specialists”

Ivan Pasichnyk (owner of Ecoism), first Ukrainian featured in Forbes “30 Under 30” international ranking

- Ukraine has the largest and fastest-growing number of IT professionals in Europe
- About 60% of all engineers work for outsourcing companies and a quarter of them work for top 25 software companies
- Ukrainian outsourcing companies offer a wide range of engineering capabilities, with most companies having already switched to agile development
- Ukraine hosts over 100 R&D subsidiaries of global companies from a variety of industries, including telecoms, software, gaming and e-commerce

Most popular industries

<table>
<thead>
<tr>
<th>Industry</th>
<th>Number of companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security</td>
<td>5</td>
</tr>
<tr>
<td>Retail</td>
<td>6</td>
</tr>
<tr>
<td>Travel</td>
<td>6</td>
</tr>
<tr>
<td>Healthcare</td>
<td>8</td>
</tr>
<tr>
<td>Financial</td>
<td>12</td>
</tr>
<tr>
<td>Media</td>
<td>12</td>
</tr>
<tr>
<td>E-commerce</td>
<td>16</td>
</tr>
<tr>
<td>Gaming</td>
<td>16</td>
</tr>
<tr>
<td>Cloud</td>
<td>18</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>26</td>
</tr>
<tr>
<td>Data management</td>
<td></td>
</tr>
</tbody>
</table>

Number of companies covering each field (out of the biggest ones)

Source: Ukraine Digital News, "High Tech Ukraine From A To Z,” 2015
Software Development

- **1st in CEE** by the number of engineers

- The **largest** IT labor force in Europe

- IT professionals are **at the top of the remuneration list in Ukraine** (average USD 1 600 net of tax monthly vs. USD 180 average official monthly salary)

- Over **75%** of Ukrainian IT professionals have a **university level degree** and over 6% pursued a **Masters** or **PhD**

- Most clients of Ukrainian IT firms are situated in the USA and Western Europe

---

<table>
<thead>
<tr>
<th>Role</th>
<th>Java</th>
<th>Java Script</th>
<th>C#/ .NET</th>
<th>C++</th>
<th>Obj. C</th>
<th>PHP</th>
<th>Python</th>
<th>Ruby/ Rails</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jr. Software Engineer</td>
<td>630</td>
<td>625</td>
<td>650</td>
<td>900</td>
<td>700</td>
<td>400</td>
<td>650</td>
<td>700</td>
</tr>
<tr>
<td>Software Engineer</td>
<td>1 750</td>
<td>1 700</td>
<td>1 800</td>
<td>1 500</td>
<td>1 800</td>
<td>1 500</td>
<td>1 800</td>
<td>1 600</td>
</tr>
<tr>
<td>Sr. Software Engineer</td>
<td>3 300</td>
<td>3 000</td>
<td>3 000</td>
<td>2 800</td>
<td>3 200</td>
<td>2 700</td>
<td>3 000</td>
<td>3 500</td>
</tr>
<tr>
<td>Software Technical Lead</td>
<td>3 800</td>
<td>3 900</td>
<td>3 100</td>
<td>3 500</td>
<td>3 300</td>
<td>3 200</td>
<td>3 500</td>
<td>4 500</td>
</tr>
<tr>
<td>System Architect</td>
<td>4 275</td>
<td>5 000</td>
<td>4 500</td>
<td>4 000</td>
<td>N/A</td>
<td>3 500</td>
<td>3 800</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Sources: Dou.ua
Overseas Call Centers

- A solid interest from overseas business has been detected to serve their operations from Ukraine during the night hours in the US/Canada, in view of convenient timing difference.

- Ukraine quickly becomes a serious competitor to India and Pakistan, by providing many solid arguments & advantages:
  - Good educational system in big cities
  - For many years, Ukraine is the “employer market” and the recent crisis just adds to that.
  - A severe competition between the youth forces them to acquire good command of English
  - The salary levels are constantly going up in the Asian countries, historic leaders in this segment. The comparison of wages already plays in favor of Ukraine.
  - Foreign investors frequently complain about a rather low level of management and high human turnover rates at Asian call centers – that should not be the case with Ukraine.
  - Strong Asian accent in speaking English is hardly well comprehended by native speakers – solving the accent problem as the result of intensive training is possible in Ukraine.
  - The cultural differences are substantially lower in Ukraine, if to compare them with the Asian countries, though proper training in customer focus is still paramount.
  - Other services (including first of all office lease) are reasonably priced and broadly available.

- One of first successful pioneers in call center field was Nestle that opened a SSC in Lviv back in 2011 to provide the Finance and HR support for its East Europe operations.

- Another good example is the Ukrainian call-center subsidiary of the Turkish GlobalBilgi.
Geographic coverage of the sector

- Just a bit more than 100 companies have a staff of 80 IT specialists and more. The rest are much smaller.
- Most of them are headquartered in Kyiv, Kharkiv, Lviv, Dnipro and Odessa
- Together they have offices in more than 50 countries on 6 continents
- Two thirds of companies are headquartered in Ukraine, 22% in North America, 13% in Europe and 2% in Israel.
- Their expertise ranges from data management and telecom to e-commerce and travel

Source: Ukraine Digital News, "IT Ukraine From A To Z," 2015
## SWOT Analysis

### Strengths
- Extremely fast-growing market
- Cheapest & largest engineering labor force in Europe
- 5% profit tax rate for private entrepreneurs as well as straight 18% PIT for employees
- Highly educated population (about 300 colleges and universities)
- One of the lowest operating/setup costs in Europe
- Favorable geographic position

### Weaknesses
- Still somehow cumbersome legal entity registration and closure laws, though situation improves quickly
- Rather insecure IP protection legislation, despite of the gov’t is working hard to harmonize it with EU rules and practices
- The level of bureaucracy is relatively high
- Quite volatile and frequently changing tax and regulatory field, though the majority of such changes aimed on improvement of business environment

### Opportunities
- Notwithstanding outdated Labour Code (the new is expected to come in force since 2017), it is relatively easy to recruit and terminate employment due to absence of strong restrictions, trade unions, if to follow the law
- Advantages of quickly developing IT infrastructure, with a fast-growing innovation ecosystem
- Non-visa regime with the majority of developed countries

### Threats
- Devaluation of the Ukrainian currency
- Significant political and economic challenges as the outcome of Revolution of Dignity and geopolitical crisis in the region. However, the military conflict impacts only 3% at the East of Ukrainian territory
- Significant degree of corruption across many government bodies, though some progress is detected. At the same time, this is possible to fight efficiently (through business associations and courts)
- Quite frequent situations of checking IT companies by controlling bodies (though to be honest, many of these are using doubtful tax optimization schemes)
Current Tax Exposure

- Corporate Profit Tax: 18%
- Value Added Tax (common): 20%
- Value Added Tax (exports): 0%
- Personal Income Tax: 18%
- Unified Social Contribution*: 22%
- Military Tax: 1.5%

* USC has a salary cap of UAH 34.9K (USD 1.4K) per month
Tax & Regulatory Advantages and Benefits

- Taxpayers (legal entities) with annual income of up to UAH 20m (~USD 0.8m) pay CPT annually (otherwise quarterly)

- Taxpayers (legal entities) with annual income of up to UAH 20m have the right not to adjust their financial statements for tax differences, for CPT calculations purpose

- Self-employed individuals (so called “Private Entrepreneurs”) have simplified taxation regime: income of up to UAH 5m (~USD 0.2m) per annum is taxed with 5% only.
Establishing Legal Presence

- “One window principle” – submission of docs to a single authority, State Registration Service
- No minimal Charter Capital requirement
- Time for registration: stand-alone ~ 1 week (in comparison to average 1.5 months preparatory work on necessary documentation and its alignment)
- Legal address is required for LLC registration
- LLC single executive body: General Director acting based on Company’s Charter
- Obtaining work permit by foreign citizen: up to 2 months
## Industry players – Top 20 (1)

<table>
<thead>
<tr>
<th>Company</th>
<th>Engineers in Ukraine</th>
<th>Presence in Ukraine</th>
<th>Global locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>COG</td>
<td>5,000</td>
<td>Cherkasy, Kyiv</td>
<td>Edinburgh</td>
</tr>
<tr>
<td>Epam</td>
<td>3,900</td>
<td>Kyiv, Dnipro, Lviv, Kharkiv, Vinnytsia</td>
<td>HQ: USA +Armenia, Australia, Austria, Belarus, Bulgaria, Canada, China, Czech Republic, Germany, Hong Kong, Hungary, India, Ireland, Kazakhstan, Malaysia, Mexico, Netherlands, Poland, Russia, Singapore, Sweden, Switzerland, UK</td>
</tr>
<tr>
<td>Luxoft</td>
<td>3,727</td>
<td>Kyiv; Dnipro, Odessa</td>
<td>HQ: Switzerland, +Australia, Bulgaria, Canada, Germany, Mexico, Poland, Romania, Russia, Singapore, South Africa, UK, USA, Vietnam</td>
</tr>
<tr>
<td>SoftServe</td>
<td>3,200</td>
<td>Lviv, Dnipro, Ivano-Frankivsk, Kyiv, Rivne, Kharkiv, Chernivtsi</td>
<td>HQ: USA +UK, Germany, Netherlands, Poland, Bulgaria, Russia</td>
</tr>
<tr>
<td>GlobalLogic</td>
<td>2,560</td>
<td>Kyiv, Kharkiv, Lviv, Mykolayiv</td>
<td>HQ: USA +Argentina, Chile, Germany, India, Israel, Poland, Slovakia, UK</td>
</tr>
<tr>
<td>Ciklum</td>
<td>2,290</td>
<td>Kyiv, Vinnytsia, Dnipro, Lviv, Kharkiv, Odessa</td>
<td>Belarus, Denmark, Israel, Pakistan, Poland, Romania, Spain, Switzerland, UK, USA</td>
</tr>
<tr>
<td>Alex Solutions</td>
<td>1,500</td>
<td>Kharkiv</td>
<td></td>
</tr>
<tr>
<td>Infopulse</td>
<td>1,300</td>
<td>Kyiv, Zhytomyr, Vinnytsia, Chernihiv, Kharkiv</td>
<td>Bulgaria, France, Germany, Israel, Latvia, Norway, Spain, Sweden</td>
</tr>
<tr>
<td>Eleksa</td>
<td>946</td>
<td>Lviv, Ivano-Frankivsk, Kremenchuk, Ternopil</td>
<td>UK, USA, Poland</td>
</tr>
<tr>
<td>NetCracker</td>
<td>915</td>
<td>Sumy, Kyiv, Odessa</td>
<td>HQ: USA +Russia</td>
</tr>
</tbody>
</table>

# Industry players – Top 20 (2)

<table>
<thead>
<tr>
<th>Company</th>
<th>Engineers in Ukraine</th>
<th>Presence in Ukraine</th>
<th>Global locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>miratech</td>
<td>810</td>
<td>Kyiv, Kharkiv, Odessa, Vinnytsia</td>
<td>HQ: Sweden/USA +Israel, Poland, Slovakia, Switzerland, UK</td>
</tr>
<tr>
<td>ISD</td>
<td>720</td>
<td>Dnipro, Berdyansk, Lviv, Zaporizhia</td>
<td>HQ: USA</td>
</tr>
<tr>
<td>SCC</td>
<td>720</td>
<td>Dnipropetrovsk, Lviv, Zaporizhia, Berdyansk</td>
<td>HQ: USA</td>
</tr>
<tr>
<td>AARCENT</td>
<td>700</td>
<td>Kyiv, Vinnytsia</td>
<td>HQ: USA</td>
</tr>
<tr>
<td>DATA ART</td>
<td>719</td>
<td>Kyiv, Kharkiv, Kherson, Dnipro, Odessa, Lviv</td>
<td>HQ: USA +UK, Switzerland, Argentina, Russia, Poland, Germany</td>
</tr>
<tr>
<td>SAMSUNG</td>
<td>600</td>
<td>Kyiv</td>
<td>HQ: South Korea</td>
</tr>
<tr>
<td>Materialise</td>
<td>600</td>
<td>Kyiv</td>
<td>HQ: Belgium</td>
</tr>
<tr>
<td>PLARIUM</td>
<td>600</td>
<td>Lviv, Mykolayiv, Kyiv</td>
<td>HQ: Israel</td>
</tr>
<tr>
<td>Teleperformance</td>
<td>600</td>
<td>Kyiv, Cherkasy</td>
<td>HQ: France</td>
</tr>
<tr>
<td>SIGMA</td>
<td>580</td>
<td>Kharkiv, Lviv, Odessa, Kyiv</td>
<td>Poland, USA</td>
</tr>
</tbody>
</table>

Our industry-specific services (1)

- **IT services**, incl.
  - System Admin set up and permanent help desk
  - ERP systems implementation

- **Market research/ business partner search**, incl.
  - Advice on localization options (partner search, special economic zones, industrial parks, etc.)

- **Company registration and business set-up**, incl.
  - Legal and business address
  - Temporary sublease of office premises
  - Support in office space search (including contract negotiations and verification)

- **Tax and legal services**, incl.
  - Intercompany agreements
  - Labor contracts
  - Service agreements with private entrepreneurs
  - Tax advice for managers (short- und mid-term stay) in Ukraine, annual tax returns
  - Tax and legal due diligence
  - Migration services (visas, work permits)
Our industry-specific services (2)

- **Interim management**, incl.
  - General Director, head of branch or representative office
  - Risk management

- **Recruiting services**, incl.
  - Front-office IT professionals
  - Local office management, accountants etc.

- **Outstaffing**, incl.
  - Employment of your team by SCHNEIDER GROUP
  - Work place, office equipment, secretary services provided by SCHNEIDER GROUP
  - Business software potentially provided by SCHNEIDER GROUP

- **Accounting outsourcing**, incl.
  - Financial accounting
  - Transformation and reporting according to IFRS/US GAAP
  - Payroll accounting with special knowledge about local salary-related regulations
  - Tax accounting
Appendix – Details of selected projects
BrainBasket Foundation (1)

“We strive to make IT industry a driving force of economic growth of Ukraine by developing educational infrastructure. Our goal is to facilitate the training of 100 000 new IT-specialists by 2020”

- Brain Basket Foundation is a nonprofit, non-governmental organization whose ultimate goal is a development of education in the Ukrainian IT sector
- It was founded in April 2014 by the initiative group of leading Ukrainian IT companies with the participation of the Ministry of Economy of Ukraine and Kyiv City Administration.
- The Foundation is responsible for facilitating trainings to IT specialists and boosting educational eco-system in this segment.
- “The name “Brain Basket” sounds very similar to “Grain Basket”, the latter being well-associated with Ukraine always having strong agricultural segment and one of the most fertile soils in the world. “Brain Basket” capitalizes on another asset the country possesses: good technical and engineering education as well as strong intellectual potential
At the end of 2015, the Foundation launched its first challenging project: “TECHNOLOGY NATION”. This project is aimed onto free programming course to be completed by 40,000 Ukrainians during 2016-2017. Both technical skills as well as English and “soft skills” are in scope of the program. Stanford, MIT and Harvard universities’ programs are used to compile the course program. The courses will be hosted by 22 cities of Ukraine as well as their duration is 3 months. Another initiative of the Foundation is “CODING FOR FUTURE” – free IT programming courses for those impacted by the military conflict at the East of Ukraine as well as for internal migrants. The ultimate goal of the BrainBasket Foundation is to create additional 100,000 working places within IT sector in Ukraine. Per the Foundation leadership, a successful mission completion will generate an incremental USD 10bn income from IT services export to the USA and Europe as well as bring at least USD 1bn investment into Ukraine’s infrastructure and educational system.
Ukrainian IT Clusters (2)

- The Ukrainian IT clusters are currently considered as merely self-organized projects.
- The leadership of these organizations sees their main purposes in providing support to IT companies in respective locations, as well as in constant interaction with municipal authorities that are interested in quick development of the IT community and getting incremental funds to their budgets as the result.
- While still rather in the process of organization and expansion, various IT clusters already severely compete which each other for the “Ukrainian IT Capital” role / unofficial title
- Providing the educational function and forming general IT communities in respective cities are also in focus of these organizations
Ukrainian IT Clusters (2a)

Kyiv IT Cluster

- **Number of members:** 65
- “Synergy, education, promotion” – these words are the first ones that greet visitors & newcomers
- Public organization to represent the interest of Kyiv IT community in constant interaction with the state and municipal authorities
- In the process of quick expansion
- Based in Capital that is historically the main country’s innovation hub, Kyiv IT Cluster actively exploits the related opportunities for the purpose of the leadership role in Ukraine
- Out of R&D centers stand-alone, about half are located in Kyiv (Boeing, Siemens etc)
- Kyiv IT Cluster is a regular organizer of multiple conferences, forums, workshops, round tables, meetings; it also actively promotes Ukraine internationally as well as issues regular updates on the changes to the investment climate in the country
Lviv IT Cluster

- **Number of members**: 38.
- Lviv IT Cluster has a very broad agenda: initially aimed more on creating IT communities and networking, now its initiatives include even investment projects, like construction of residential property specifically for IT professionals.
- In 2015, Lviv received a recognition of the most digitalized city in Ukraine as a result of its active IT community, which works closely with municipal authorities to turn this West-Ukrainian city into a major European IT hub.
- Their joint efforts have initiated the implementation of e-government in the city, facilitating the interaction of the city’s population with banks and the local authorities.
- Another well-advertised projects include but are not limited to:
  - Educational IT Future project for students
  - IT Club project (permanent initiative providing benefits for IT community in Lviv)
  - IT House project
Kharkiv IT Cluster

- **Number of members:** 20
- Kharkiv IT Cluster is aimed onto networking opportunities, experience exchange, interaction with the authorities as well in synergies from mutual support and assistance
- This organization is well supported by both the municipal officials and well-known Kharkiv technical universities (i.e. joint Internet-Marketing course)
- Supporters see a number of serious benefits as the result of the activity of the IT Cluster in the city, including additional highly-paid working places, respective increased tax revenues, promoting Kharkiv as the investment destination etc.
- Notwithstanding the fact that Kharkiv IT Cluster has been just recently established, it already proved to be quite active by organizing the following initiatives:
  - IT-Communications platform for experience exchange (seminars / conferences)
  - Kids2IT project promoting IT industry to high school graduates
  - Series of lectures dedicated to science and IT technologies
Ukrainian IT Clusters (2d)

Odessa IT Cluster

- **Number of members**: 19.
- Even some of very well-known Ukrainian companies, including Ciklum and Luxoft, have membership in Odessa IT-Cluster.
- Generally, Odessa is quite famous within the international IT community by its successful startups: Looksery and Augmented Pixels.
- Therefore, it is not surprising that Odessa IT-Cluster demonstrates a sound energy and aspirations in promoting the city as one of the most promising locations for IT business development.
- Similarly to other Ukrainian cities, the organization continuously conducts multiple educational activities.
- Odessa IT-Cluster is also a promoter of its initiative of uniting all regional clusters in Ukraine.
Yuri Donets
Director, SCHNEIDER GROUP Kyiv
DonetsYE@schneider-group.com
Russian countries: Russia, Ukraine, Belarus, Kazakhstan, Germany, Poland.

Specialization: Accounting | ERP | Import | Legal | Tax

Website: www.schneider-group.com