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Your Investment Matters

UKRAINE'S
IT INDUSTRY
Overview

NOW ua
Ukraine

Kyiv, Ukraine
February 2020

GLOBAL **TECH** TRENDS

2017

- ECOSYSTEM POWERPLAYS
- AI is THE NEW USERS INTERFACE
- WORKFORCE MARKETPLACE
- The UNCHARTED
- DESIGN for HUMANS

2018

- INTERNET of THINKING
- FRICTIONLESS BUSINESS
- EXTENDED REALITY
- CITIZEN AI
- DATA VERACITY

2019

- GET to KNOW ME
- DARQ POWER
- SECURE US to SECURE ME
- MY MARKETS
- HUMAN+ WORKER

SOURCE: Accenture Technology Vision 2019: Full Report
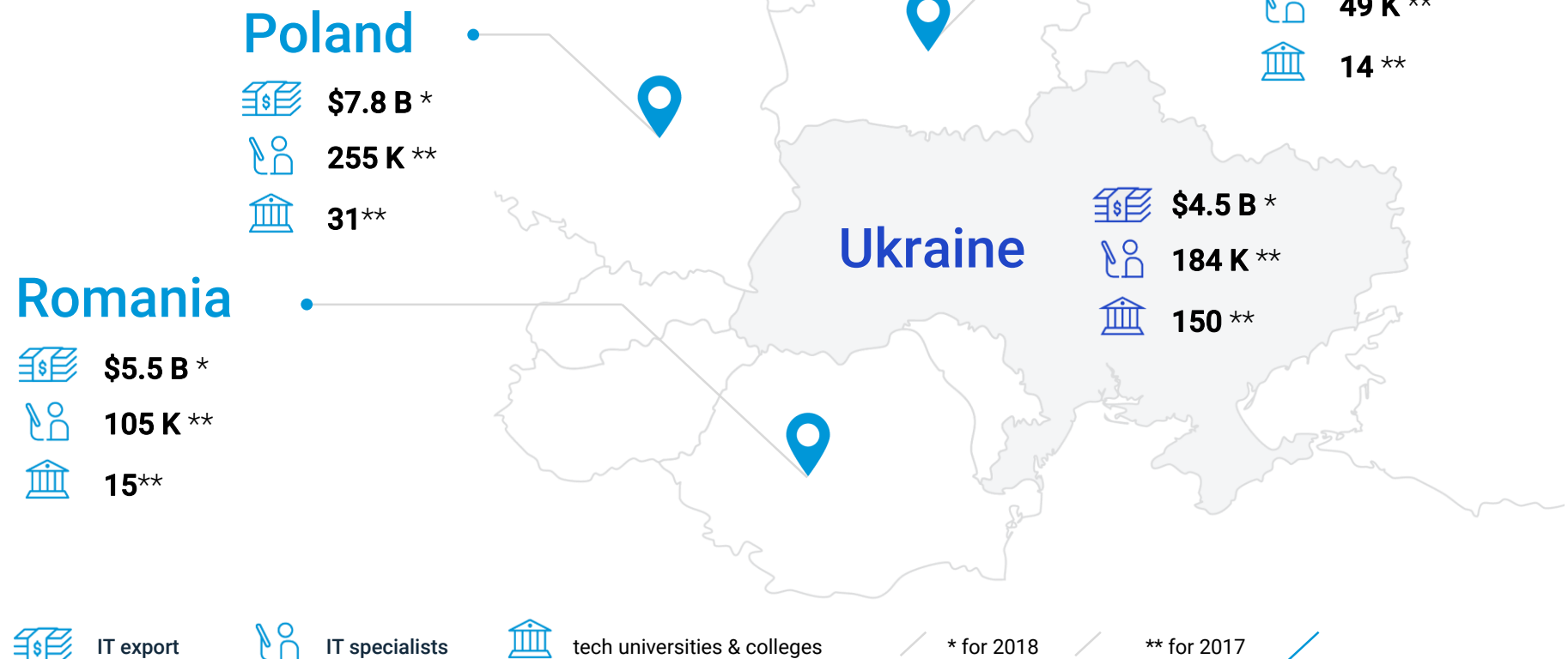
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REGIONAL **IT MARKET** Overview

Ukraine, Poland, Belarus and Romania
together present a formidable competition
to other development hot spots

Belarus
$1.8 B *
49 K **
14 **

Poland
$7.8 B *
255 K **
31**

Ukraine
$4.5 B *
184 K **
150 **

Romania
$5.5 B *
105 K **
15**

IT export   IT specialists   tech universities & colleges   * for 2018   ** for 2017
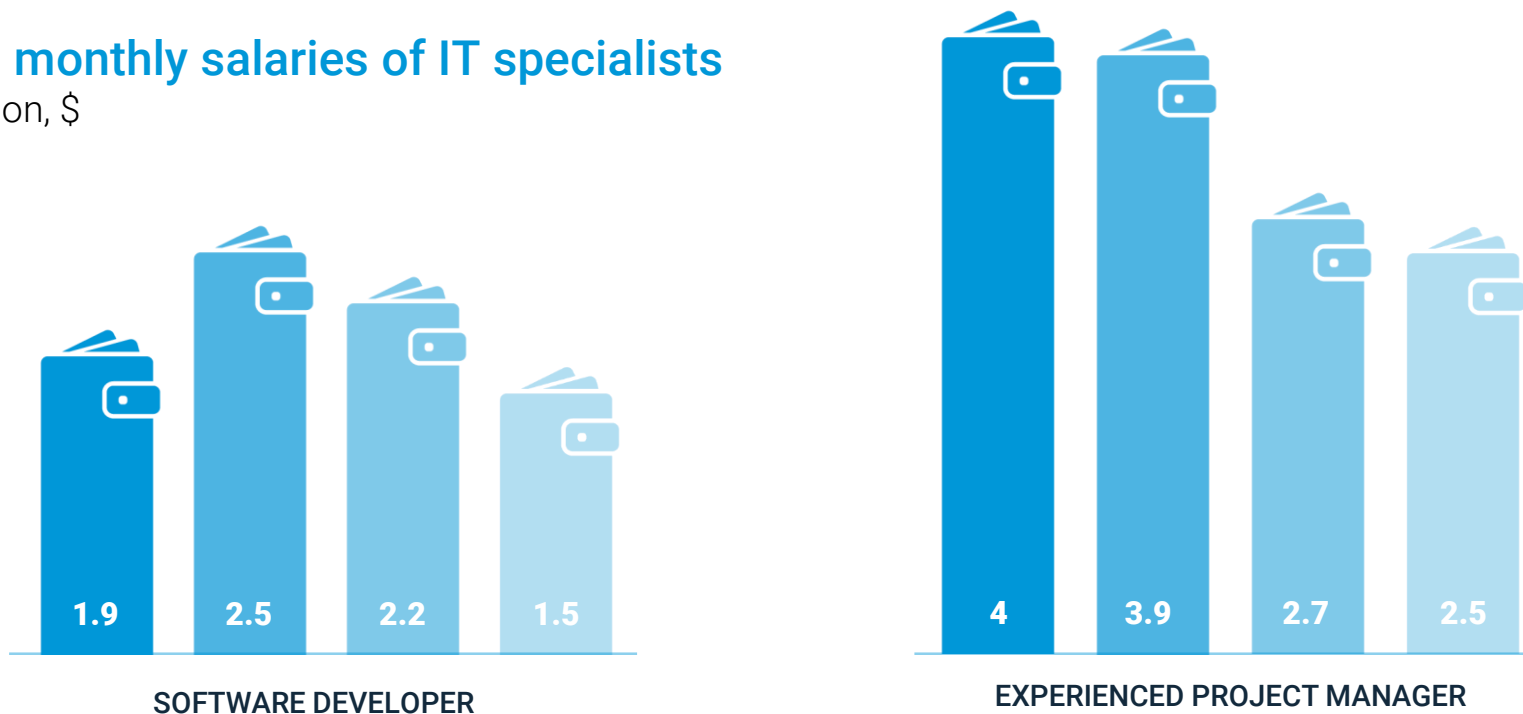
SOURCE: Trade map – International Trade Statistics, "Software Development in Ukraine, Poland, Belarus and Romania in 2019"
report by Aventures, Aventis Capital, Capital Times, Tech Ecosystem Guide to Ukraine 2019 by Unit City

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IT SPECIALIST **COST** in the region

Median monthly salaries of IT specialists
in the region, $

SOFTWARE DEVELOPER

| 1.9 | 2.5 | 2.2 | 1.5 |

EXPERIENCED PROJECT MANAGER

| 4 | 3.9 | 2.7 | 2.5 |

Ukraine   Poland   Romania   Belarus

SOURCE: "Software Development in Ukraine, Poland, Belarus and Romania in 2019" report by Aventures, Aventis Capital, Capital Times, jobs.dou.ua

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UKRAINE: PREDICTABLE & STABLE EMERGING MARKET

In 2018 Ukraine demonstrated **THE MOST RAPID GROWTH** In the past 7 years

GDP Growth, %
(comparing to respective period in previous year)

- 2015: -9.8
- 2016: 2.3
- 2017: 2.5
- 2018: 3.3
- 2019E: 3.3

EBA Investment Attractiveness Index
(index, as at year end)

- 2015: 2.6
- 2016: 2.9
- 2017: 3.0
- 2018: 3.1

Ease of Doing Business Index by WB

- 2015: 96
- 2016: 81
- 2017: 80
- 2018: 76
- 2019: 71
- 2020: 64

SOURCE: World Bank, State Statistics Service of Ukraine, Dragon Capital

"UKRAINE IS OPEN FOR BUSINESS because of **THE SUCCESS OF REFORMS"**

EBRD President Suma Chakrabarti, in Davos 2019

Ukraine in **GLOBAL INNOVATION** INDEXES

Good Country Index
Category Science & Technology

1 — 2018

1 — 2019

European Innovation Scoreboard Ranking

27 — 2017

27 — 2018

Startup Ecosystems Blink Ranking

35 — 2017

31 — 2018

Global Open Data Index

54 — 2015

31 — 2018

Global Innovation Index

50 — 2017

47 — 2019

INNOVATION TECHNOLOGIES
in Ukraine

The ITC industry is among the country's **FASTEST GROWING** industries and **A MAJOR DRIVING FORCE** of Ukraine's economy

the **2nd**
largest export service industry

> 4,000
tech companies

184k +
software developers (the number is expected to rise to 250k by 2025)

100 +
Fortune 500 companies have chosen Ukrainian IT services

$ 337 M
total value of venture capital deals in 2018

18
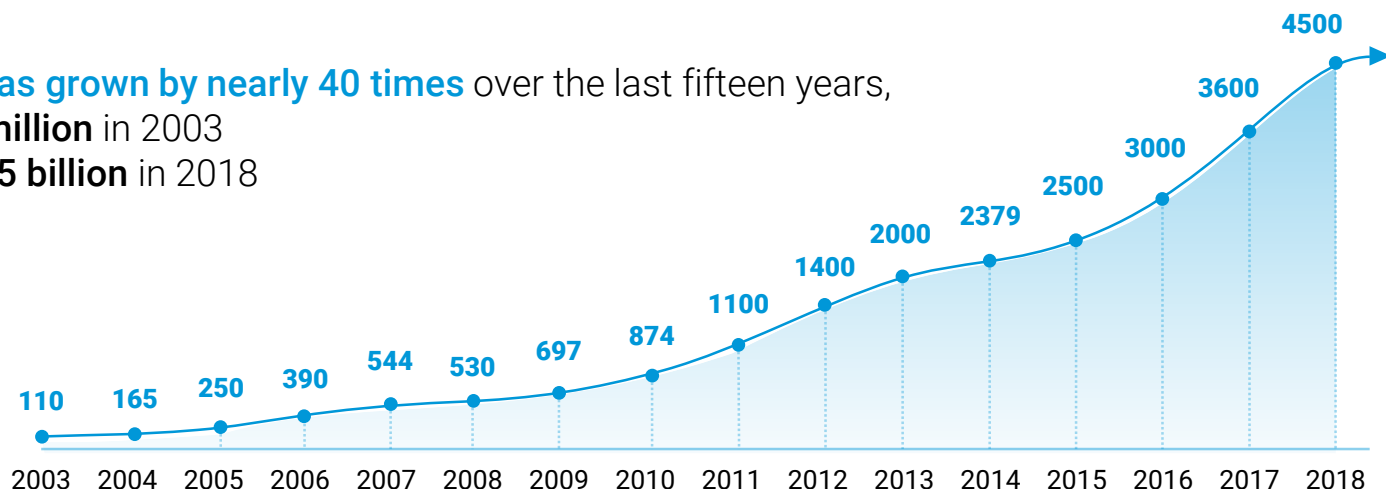IT service providers in the 2018 Global Outsourcing-100

Overview of the Ukraine's IT industry

It is also diverse, from cutting edge work in **AI, cyber security, natural language processing** and nanotechnologies to highly commercial ventures in **blockchain, FinTech, big data management, gaming, agribusiness and ecommerce**

IT SECTOR in Ukraine

IT industry has grown by nearly 40 times over the last fifteen years,
from **$ 110 million** in 2003
to about **$ 4.5 billion** in 2018

Year	Value
2003	110
2004	165
2005	250
2006	390
2007	544
2008	530
2009	697
2010	874
2011	1100
2012	1400
2013	2000
2014	2379
2015	2500
2016	3000
2017	3600
2018	4500

4%
share in Ukraine's
GDP 2018

17%
share in export
services
for 2018

28%
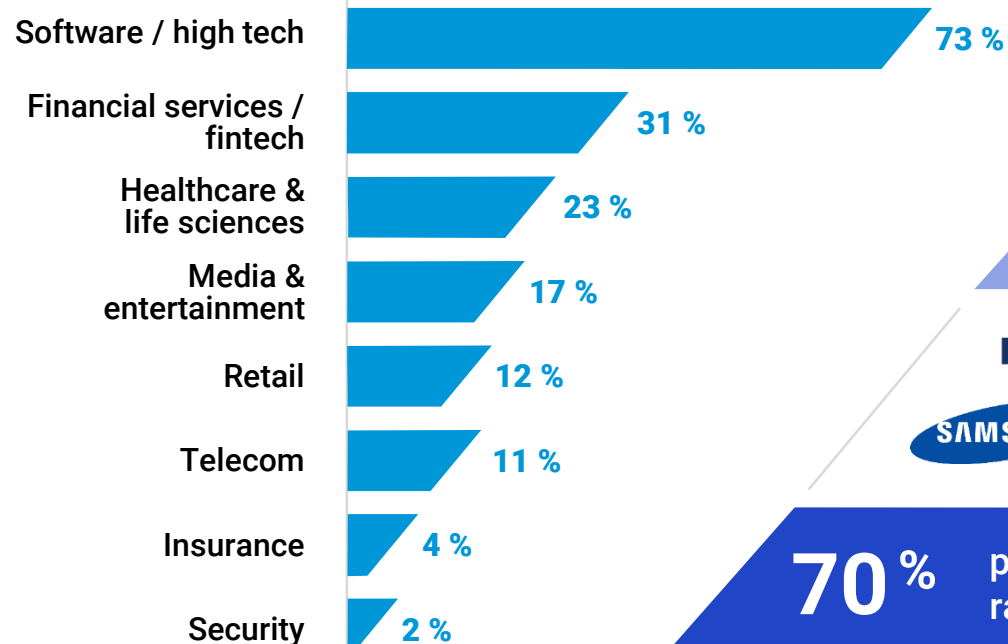share in IT export
of Eastern Europe*
in 2017

*Ukraine, Belarus, Poland and Romania

SOURCE: Ukrainian Hi-Tech Initiative, Symphony-solutions, Tech Ecosystem Guide to Ukraine, MoEDT estimates, State Statistics Service , "Software Development in Ukraine, Poland, Belarus and Romania in 2019" report by Aventures, Aventis Capital, Capital Times

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IT COMPANIES in Ukraine

Ukrainian IT companies get majority
of revenues from **software/hi-tech vertical**

Category	Percentage
Software / high tech	73 %
Financial services / fintech	31 %
Healthcare & life sciences	23 %
Media & entertainment	17 %
Retail	12 %
Telecom	11 %
Insurance	4 %
Security	2 %

15 % create their own product

Petcube   Terrasoft   AiViX   evo company   GENESIS   grammarly   depositphotos

15 % work as an in-house center for the parent company

ERICSSON   Google   ORACLE   ring   SAMSUNG   BOEING Forever New Frontiers   Netcracker

70 % provide IT services to a wide range of clients

CIKLUM EMPOWERING COLLABORATION   miratech   intellias   GlobalLogic   itera   infopulse   softserve

IT TALENT POOL

Over **130k** & **16k** annually

engineering graduates   IT graduates

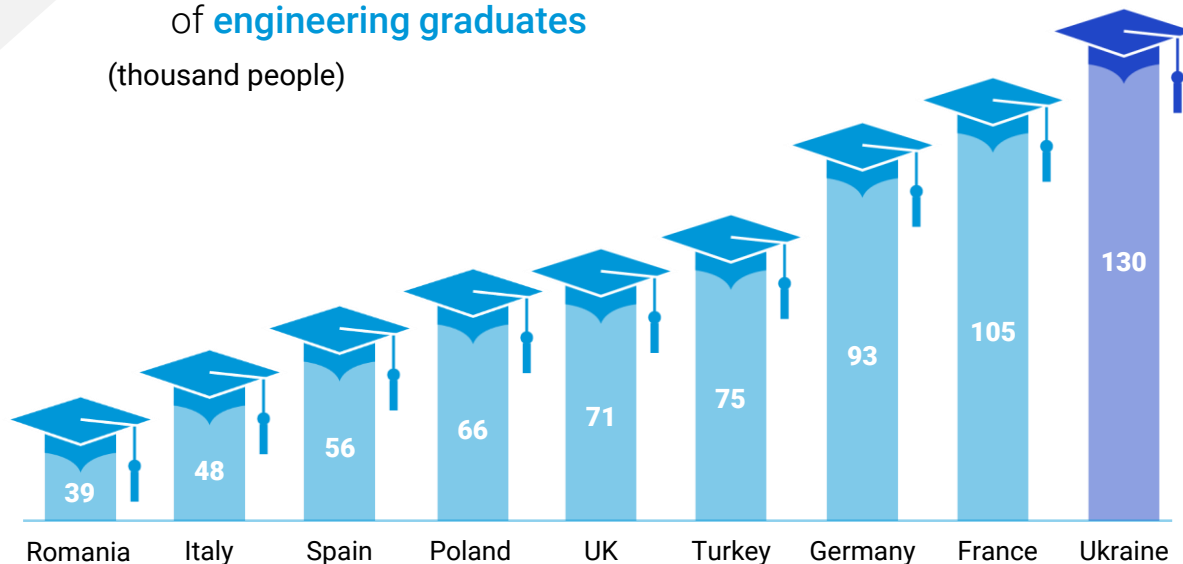## Ukrainians are historically strong in cybernetics

180k +

Ukrainian tech specialists work for **startups** and **IT service companies worldwide**

SOURCE: World Economic Forum, Forbes

European countries by number of **engineering graduates**

(thousand people)

Romania	Italy	Spain	Poland	UK	Turkey	Germany	France	Ukraine
39	48	56	66	71	75	93	105	130

MAJOR TECH UNIVERSITIES
in Ukraine, 2018

Odesa

Odesa National Polytechnic University

1,366 tech graduates

National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"

4,314 tech graduates

Taras Shevchenko National University of Kyiv

1,324 tech graduates

National Aviation University

1,692 tech graduates

Kharkiv

National Technical University "Kharkiv Polytechnic Institute"

2,105 tech graduates

Kharkiv National University of Radioelectronics

2,698 tech graduates

Lviv

Lviv Polytechnic University

2,675 tech graduates

Kyiv

Dnipro

National Technical University Dnipro Polytechnic
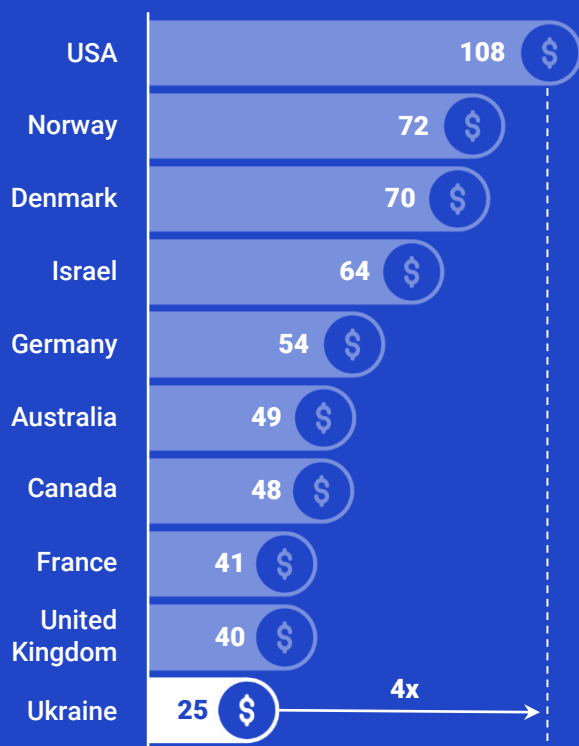
1,014 tech graduates

Overview of the Ukraine's IT industry

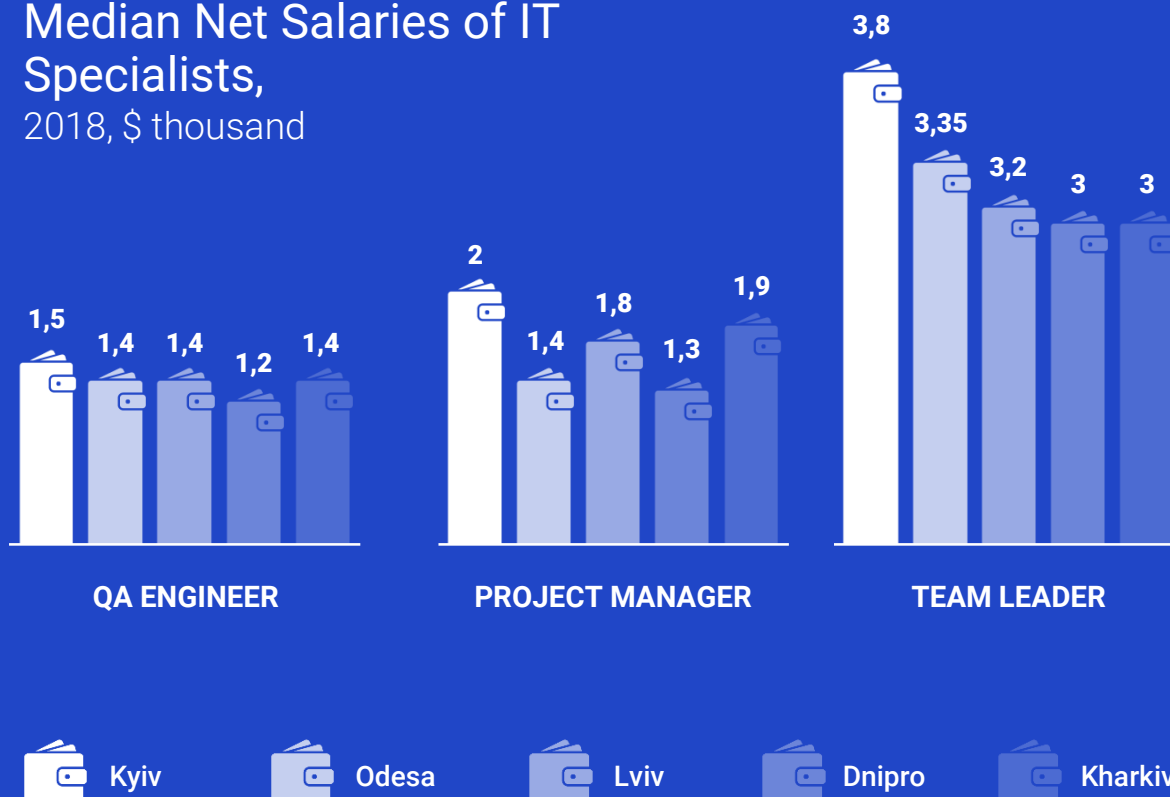**Ukraine**Invest
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COST-EFFICIENT IT PLATFORM

Average Annual Software Engineering Salary,
February 2019, $ thousand

Country	Salary
USA	108
Norway	72
Denmark	70
Israel	64
Germany	54
Australia	49
Canada	48
France	41
United Kingdom	40
Ukraine	25

4x

SOURCE: daxx.com, payscale.com

Median Net Salaries of IT Specialists,
2018, $ thousand

QA ENGINEER
- 1,5
- 1,4
- 1,4
- 1,2
- 1,4

PROJECT MANAGER
- 2
- 1,4
- 1,8
- 1,3
- 1,9

TEAM LEADER
- 3,8
- 3,35
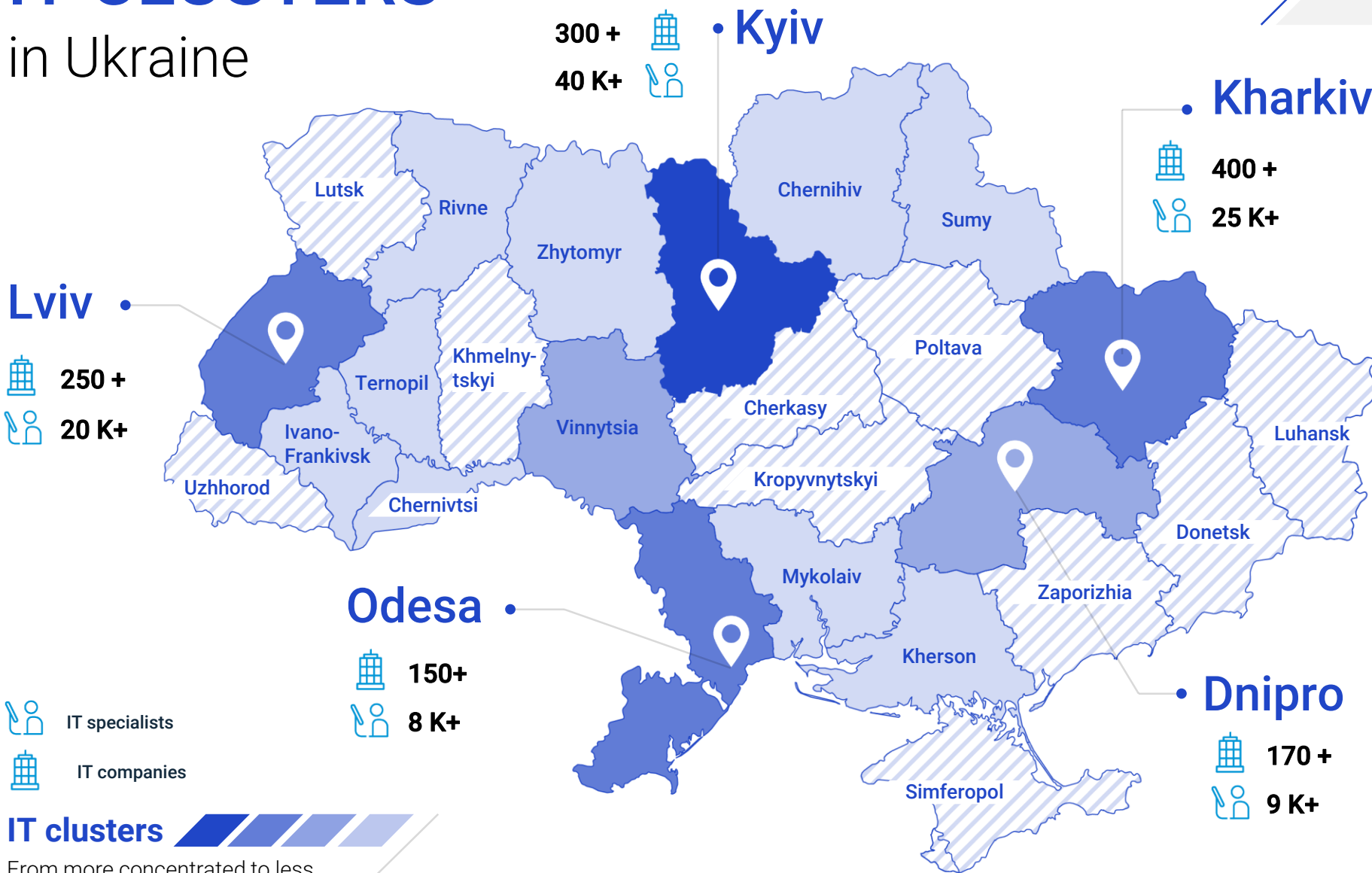- 3,2
- 3
- 3

Kyiv   Odesa   Lviv   Dnipro   Kharkiv

SOURCE: "Software Development in Ukraine, Poland, Belarus and Romania in 2019" report by Aventures, Aventis Capital, Capital Times

According to Gartner, a global research and advisory firm, Ukraine's IT specialists rank **first in Eastern Europe in terms of price/quality ratio**

IT CLUSTERS
in Ukraine

300 + 🏛
40 K+ 👤 **Kyiv**

Kharkiv
🏛 400 +
👤 25 K+

Lviv
🏛 250 +
👤 20 K+

Lutsk
Rivne
Zhytomyr
Chernihiv
Sumy
Khmelny-tskyi
Ternopil
Vinnytsia
Cherkasy
Poltava
Ivano-Frankivsk
Uzhhorod
Chernivtsi
Kropyvnytskyi
Mykolaiv
Luhansk
Donetsk
Zaporizhia
Kherson
Simferopol

Odesa
🏛 150+
👤 8 K+

Dnipro
🏛 170 +
👤 9 K+

👤 IT specialists

🏛 IT companies

IT clusters
From more concentrated to less

STARTUPS in Ukraine

2k

startups

146k
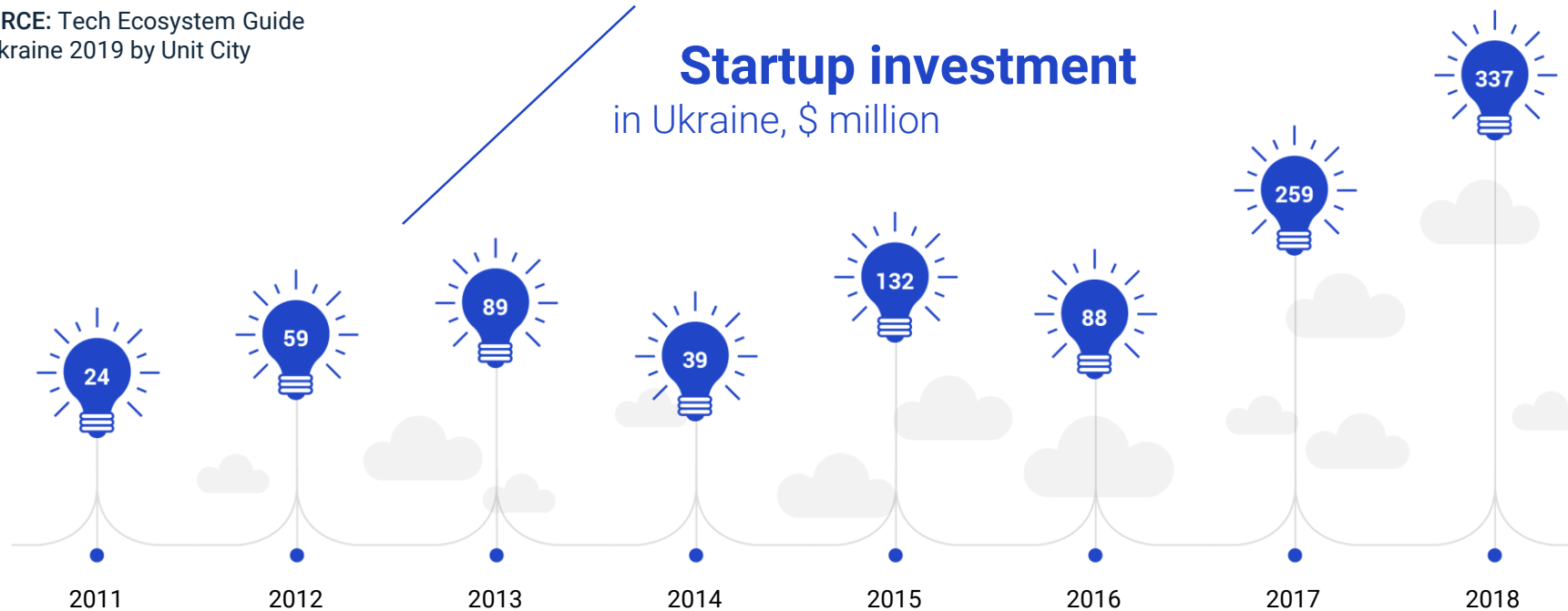
patents and utility models since 2007

1k ⁺

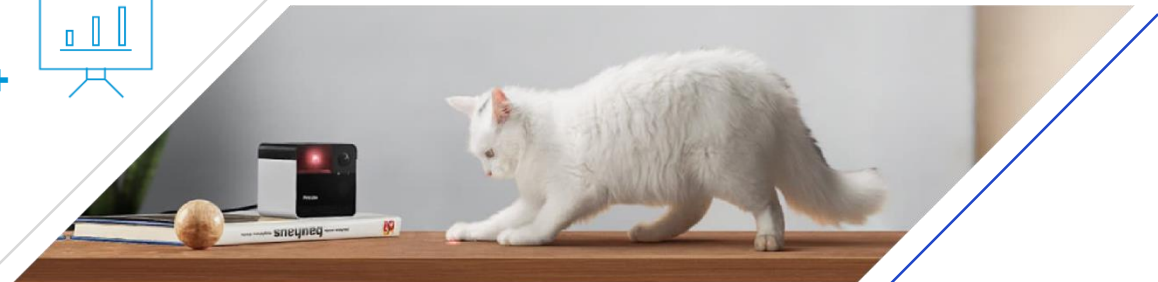Events for IT specialists, startups and investors

SOURCE: Tech Ecosystem Guide to Ukraine 2019 by Unit City

Startup investment
in Ukraine, $ million

24 — 2011
59 — 2012
89 — 2013
39 — 2014
132 — 2015
88 — 2016
259 — 2017
337 — 2018

STARTUPS in Ukraine

GitLab BITFURY grammarly

each valued at **>$1 billion**

Most prominent
Ukrainian startups

Petcube MacPaw Viewdle

Preply people.ai

L∞KSERY jooble

depositphotos

Readdle

$130 ᵐ GitLab

cloud service for programmers

$110 ᵐ grammarly

cloud service for programmers

$110 ᵐ BITFURY

full-service blockchain technology

$70 ᵐ NEUROMATION

synthetic data platform for deep learning applications

$37 ᵐ people.ai

platform for sales based on artificial intelligence

**LARGEST
INVESTMENT**
in Ukrainian startups
2017-2018

GLOBAL R&D In Ukraine

100 +
global players

have located R&D facilities in Ukraine, further driving the high-tech sector

Ukraine emerges as a global R&D hub

Ring Success story

In 2018, **Ring** which has a 900-empoyees R&D office in Ukraine, was acquired for **$1B** by **Amazon**

Kyiv

SIEMENS · Magento · masseeds UNITED TO GROW · SAMSUNG

Google · ARICENT · BOEING · ring

Lviv

GAMELOFT

MIRANTIS

ERICSSON

Odesa

COMODO Creating Trust Online™

Snap Inc.

Netcracker

Dnipro

SIGMA Software

sitecore

Playtika

Kharkiv

PLARIUM

miratech

ORACLE

About
UKRAINEINVEST

UkraineInvest is the Government's Investment **promotion office reporting to the Prime Minister** created to attract and support investments in Ukraine.

WE PROVIDE:

Introductions

Navigation & Guidance

Advocacy

Regional Support

Information & Insight

Key Sector Expertise

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