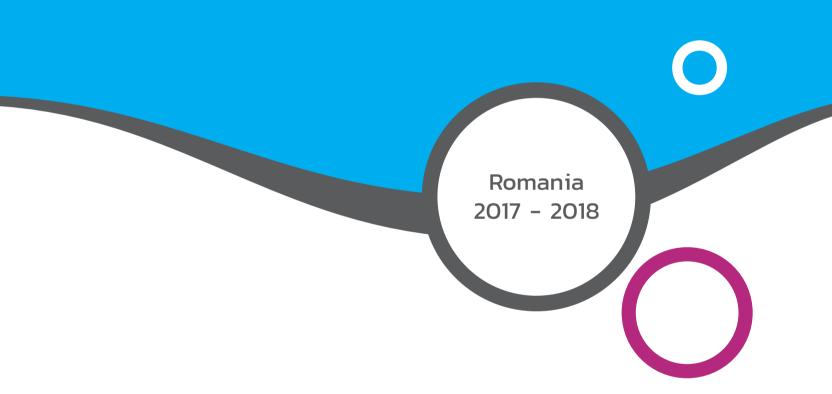
IT&C Talent Map



Brainspotting

Content

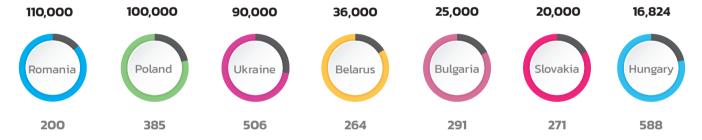
Market Overview	1
Talent Map	4
• Bucharest	4
• Cluj-Napoca	6
• lași	8
• Timișoara	10
• Brașov	12
• Craiova	14
Other cities	15
Compensation and Benefits	17
Candidate Insights	21
Recruitment Challenges	24

Market Overview

An ever growing complexity of skills with lower labor costs than Western and Central Europe, has led Romania up 5 ranks in the A.T Kearney Global Services Location Index for 2016, to position 13.

- ▶ Best ratio for IT&C professionals per capita among CEE countries.
- ▶ Approximately 20,000 companies operating within the IT&C services domain, with over 100 large IT&C players (over 200 employees).
- ▶ Overall need for recruitment for 12,000 IT&C professionals per year.
- ▶ Needs for recruitment go up to 400 per year per most important players with continuous interest from new centers to open operations.
- ▶ Over 110,000 IT&C professionals and approx. 8,500 IT graduates per year and approx. 1,800 telco graduates.

Estimated number of IT&C professionals



1 IT&C professional for every...



Brainspotting

Market Overview

Talent is spread among 12 cities, with 4 large hubs, 2 secondary and 6 small contenders for marginal talent which are targeted more and more for either small operations or secondary centers.

Although highly competitive and with higher labor costs, Bucharest has the best mix of skills and competencies and the largest numbers of IT&C talent.

Cluj-Napoca, Iasi and Timisoara are established talent hubs with good pipelines of graduates and a strong tradition in IT and Telco.

Sibiu and Brasov come next - already established IT talent hubs, they provide 500 graduates per year and already accommodate large employers with teams of up to 100.

Craiova, Ploiesti, Pitesti, Galati, Constanta and Targu-Mures have smaller talent pools but are becoming more attractive for employers who are looking to build small teams in less competitive cities.

Mix of skills	5	4	3.5	3	2
Number of skills	5	3	1.33	1	0.55
Academic Qualifications	5	5	5	4	3
Graduate numbers	5	4	3	3	2
Mobility	5	5	4	4	3
Cost of Talent	1.5	2	2.5	4	4
Competition	2	2	3	3	3
Total	4.07	3.46	3.19	3.14	2.51
	BUCHAREST	CLUJ-NAPOCA	IAȘI	TIMIȘOARA	BRAŞOV



Market Overview

High competition.

Over 60% of IT&C companies identify as the main challenge in recruitment the sourcing of quality candidates and around 28% cannot source a large enough pool. The education system underdelivers about 3,000 graduates per year, while over 50% of professionals do not have an active profile on a classical recruitment channel. Moreover, professionals are already engaged in quality jobs for good brands, work on large projects with high end technologies and make a good pay. So, unless you have a differentiated offer or are willing to be flexible on part of the requirements, recruitment can be very harsh.

Companies go where (marginal) talent is.

More companies investigate alternative sources of candidates and direct sourcing into third hubs like Suceava, Galati, Constanta, Pitesti, Ploiesti.

Stronger demand for managerial skills.

Although the main focus continues to be on specialist recruitment, we have seen an increase in the demand for managerial roles – starting from Team Lead positions to executive roles.

Talent Map - Bucharest

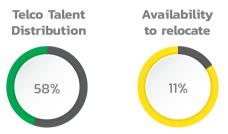


IT Talent Distribution

Developer Java QA Distribution **Distribution Distribution**

% age of national

Telco Talent Distribution



% age of national

IT Graduates*

2.195

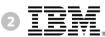
Telco Graduates

510

*Graduate numbers are based on info provided by Universities and do not take into account graduation rates.

MOST DESIRED **EMPLOYERS**

● ORACLE® 2 IBM® 3 ■ Microsoft











Talent Map - Bucharest

Players with IT&C skills

Metro Systems Microsoft
SAP Ericsson

IBM Star Storage

Stefanini Raiffeisen Bank

Accenture NN

BearingPoint Deutsche Bank Technology Center

Vodafone Axway
Oracle Teamnet
Misys Adobe

UTI Systems Sparkware
Siveco Pentalog
Totalsoft Siemens
Dell Thales

Luxoft Electronic Arts

Axway ING Bank
Gameloft Orange
Ubisoft Vodafone

1&1 UPC

Cegeka RDS & RCS
Optaros Huawei
Endava Telekom
Ixia 2K Telecom

eMAG

Alcatel-Lucent

SII

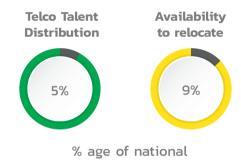
Talent Map - Cluj-Napoca



IT Talent Distribution

Developer Distribution Distribution Distribution Distribution 23% 27% 27%

Telco Talent Distribution



IT Graduates*

1.489

Telco Graduates

410

^{*}Graduate numbers are based on info provided by Universities and do not take into account graduation rates.



Talent Map - Cluj-Napoca

Players with IT&C skills

Yonder Accenture Siemens

MHP - A Porsche Company

MSG Systems

SAP

Steelcase

Yardi Romania

Softvision

Endava

Fortech

NTT Data Romania

Ullink

Betfair

Emerson

3Pillar Global

iQuest

Evozon Inc.

Arobs Transilvania

Hewlett Packard Enterprise

Bosch

Wolters Kluwer Financial Service

Garmin

Accesa IT Systems

Language Weaver

Tora Trading

Talent Map - Iași

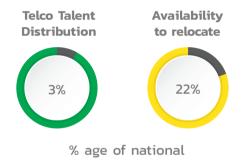


IT Talent Distribution

Developer Distribution Distribu

% age of national

Telco Talent Distribution



IT Graduates*

1.125

Telco Graduates

395

MOST DESIRED EMPLOYERS

1 Ontinental 2 amazon 3 Google endava

^{*}Graduate numbers are based on info provided by Universities and do not take into account graduation rates.

Talent Map - Iași

Players with IT&C skills

Ness Technologies

Optymyze

Mind CTI

Pentalog

Endava

Comodo

Continental

Unicredit Business Integrated Solutions

Capgemini

Centric IT

BeeNear

eMAG

Bitdefender

Amazon Development Center

SCC Services

OSF

Talent Map - Timișoara

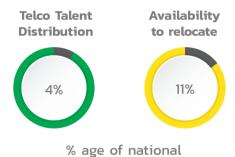


IT Talent Distribution

Developer Java QΑ Distribution **Distribution Distribution**

% age of national

Telco Talent Distribution



IT Graduates*

1.593

Telco Graduates

405

MOST DESIRED **EMPLOYERS**

① (Ontinental 3









^{*}Graduate numbers are based on info provided by Universities and do not take into account graduation rates.

Talent Map - Timișoara

Players with IT&C skills

Accenture

SAP

ACI Worldwide

Draexlmaier Systemtechnik GmbH

Continental

Waterford Research Romania

Softvision 3Pillar Global

iSoftBet BeeNear Microsoft Toluna

Elektrobit Automotive

IBM

ATOSS Software

Hella

Challenger Solutions

Siemens Autoliv Berg

Visma Software

Lasting Atos Océ Nokia Wipro

Cmed Clinical Research Services

Flex Step Up

Alten SI-Techno

Honeywell

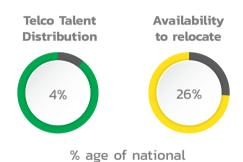
Talent Map - Brașov



IT Talent Distribution

Developer Distribution Distribution QA Distribution 5% 4% 3%

Telco Talent Distribution



IT Graduates*

500

*Graduate numbers are based on info provided by Universities and do not take into account graduation rates.



Talent Map - Brașov

Players with IT&C skills

Siemens Autoliv

Cerner Corporation

Pentalog

IBM

OSF Global Services

RIA Solutions Miele Tehnica

Schaeffler

Elektrobit Automotive

Route 66

Talent Map - Craiova



IT Talent Distribution

Developer Java QA Distribution 2% 2% 3% % age of national

Telco Talent Distribution



% age of national

IT Graduates*

250

Players with IT&C skills

Pirelli IT Six Global

Infofer QFort

OMV RCS&RDS

SintecMedia Syncrosoft

NetDania CEZ Romania

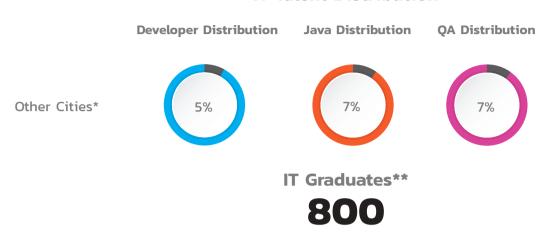


Personalised reports are available upon request.

^{*}Graduate numbers are based on info provided by Universities and do not take into account graduation rates.

Talent Map - Other cities*

IT Talent Distribution



Telco Talent Distribution

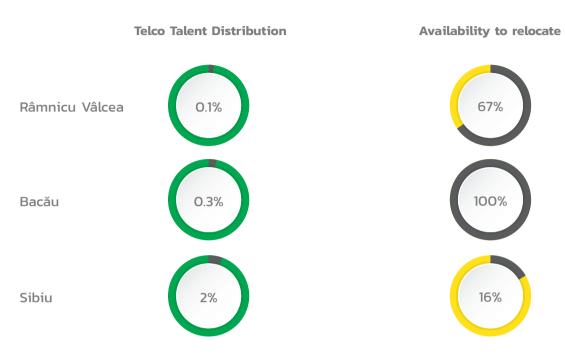


^{*}Sibiu, Galati, Pitesti, Ploiesti, Constanta, Targu-Mures

^{**}Graduate numbers are based on info provided by Universities and do not take into account graduation rates.

Talent Map - Other cities*

Telco Talent Distribution



Players with IT&C skills

NTT Data Romania
Focus Net Consulting
iQuest
BearingPoint
Visma
Marquardt Group
Public Institutions
DB Power Soft

Colt Technology
Sibex - Sibiu
Continental
Ambient
Banca Transilvania
Raiffeisen Bank

Level of experience	Junior (0 – 2 years)	Middle (2 - 4 years)	Senior (+4 years)
Software Developer	1,000-1,562	2,130 -2,982	3,124 -4,970
Full Stack Developer	1,000-1,562	2,130 -3,124	3,408-4,970
Quality Assurance	856-1298	1562 -2840	2,982-3,976

Salaries are expressed in Euro, Gross, monthly and do not take into consideration the 16% tax exemption for IT

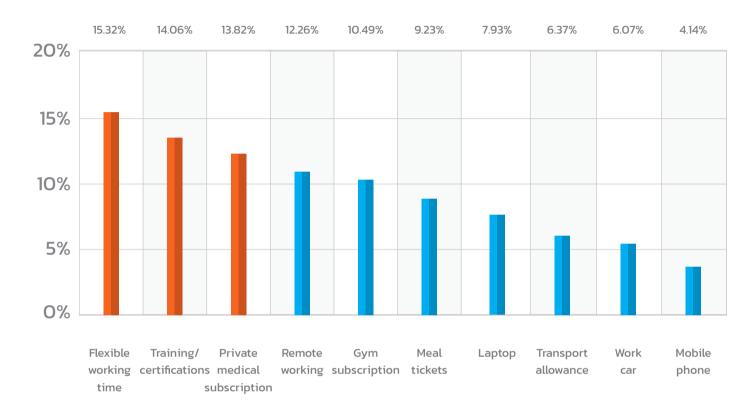
Level of experience	Junior (O – 2 years)	Middle (2 - 4 years)	Senior (+4 years)
DevOps	856-1,422	1,988-3,124	3,408-4,970
Virtualization Engineer	856-1,289	1,704 - 2,272	2,556-3,550
Sys/Network Admin*	711 -1,133	1,422 -2,272	2,556-3,550

Salaries are expressed in Euro, Gross, monthly and do not take into consideration the 16% tax exemption for IT * Linux

Pay is dependable on the technology

- Ruby and Python professionals earn the most up to 25% more than the average salary of programmers, due to the small number of specialists in the market. Java is on the 3rd place with a difference of 12% compared to the average, next there are Oracle and C#/.NET with a difference of 9%. Java, C#/.NET are some of the most widespread technologies in Romania, but the large number of offered jobs makes the employers to be willing to pay more to attract a talent.
- IT employees will change their jobs for salary increases of 29%, flexible schedule, pleasant work environment and employer support in obtaining certificates.
- The IT industry has considerable salary increases, on average, once every two years, employees receive a minimum increase of 26% for growing professionally the salary increase from the entry level (0–2 years) to middle (2–4 years) is 30% and from middle to senior (over 4 years) 26%.
- Salaries differ depending on the city, however, salaries for seniors tend to get leveled across Romania.

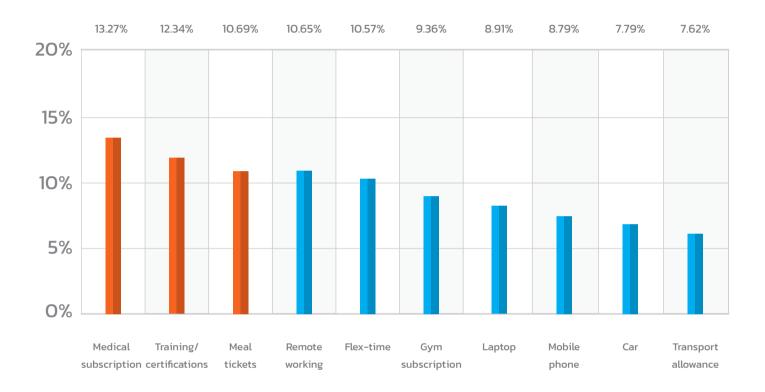
Attractive Benefits - IT profiles



N = 5.103

Flex time is becoming the new main attractor for the IT profile, with professionals in Cluj, Sibiu and Craiova being more motivated by it. It is mentioned both as a desired benefit and among the criteria for choosing an employer.

Attractive Benefits - Telco profiles



N = 686

Medical subscriptions and support for trainings and certifications are the most motivating benefits. Remote work and flex-time are more common to the IT industry but it seems they start to be attractive for telco as well.

Percentage increase when changing jobs

0% - 10%	4.3%
10% - 20%	13.19%
20% - 30%	33.29%
Over 30%	42.44%
I don't want to leave	8.78%
from the company I work for	

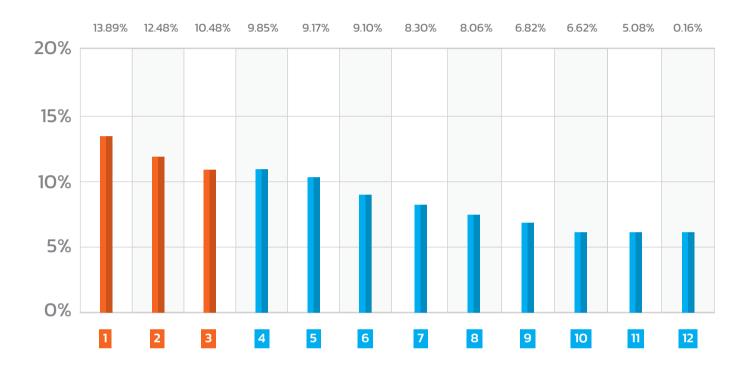
N = 5.103

75% of the people who who are considering a job change would expect a premium of over 20% to make the career move and 78% of these would ask for at least 30% increase.

IT employees will change their jobs for salary increases of 29%, flexible schedule, pleasant work environment and employer support in obtaining certificates

Candidate Insights

Criteria used to evaluate an attractive employer



- 1 Friendly environment
- 2 Flexible working time
- 3 Training programs
- 4 A good reputation/image
- 5 Secure jobs
- 6 Challenging projects

- 7 Creative & dynamic environment
- 8 Accessible offices
- 9 Rapid promotions opportunities
- 10 International opportunities
- 11 Well known products/services
- 12 Other

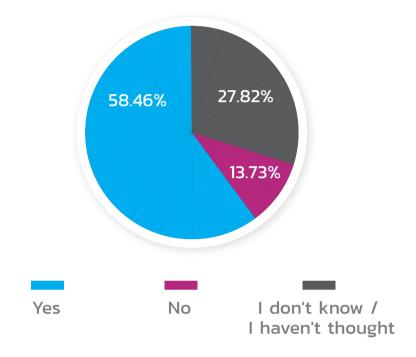
N = 5.103

Friendly environment, flex time and training programs are the most sought after characteristics of an employer. Moreover, it seems the attractors are quite uniform among all the cities studied and there are no significant differences for most of the cities.

Candidate Insights

Job changing patterns

When assessing people's interest for a new job, 58.41% of them are open to change their job, the rest do not want or have not thought about this.



Companies with 50-300 employees have better chances of retaining their talent. Nearly 40% of those surveyed are open to go abroad and 28% of those who left are considering coming back.

More inclined to change their job are either those working in small companies (under 50 employees and where 30% of employees would be available for a new job) or those working in large companies (over 800 employees – 45% are available for a new job).

More stable are those who work in companies that have between 50 and 300 employees (only 10% - 13% of them are open for a new job). 39.58% of Romanian IT professionals are willing to go abroad and 20.27% of them are willing to relocate in other cities. On the other hand, we analyzed the availability to return of those who left Romania and 28% of them were willing to come back in the country.

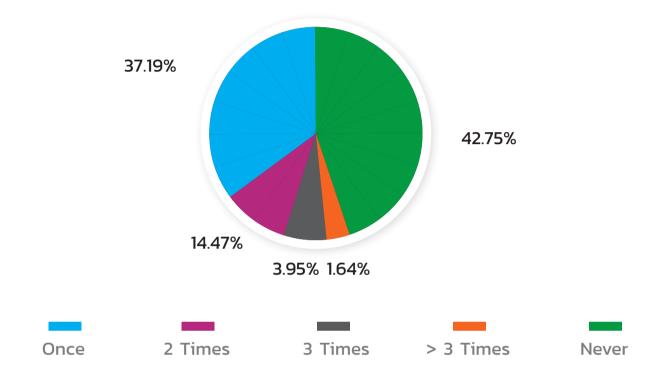
talent spotting

Get 86% more referrals for your vacancies!

talentspotting.com

Candidate Insights

Job changing patterns



Most of the respondents have not changed their job in the past three years and 37.19% have done so once. The average tenure of an IT profile seems to be 3.5 years.

Recruitment Challenges

Based on 60 respondents - IT&C companies

60 IT&C companies took part in an online survey organized by Brainspotting with the objective to identify the most important challenges in recruitment.



Identifying quality candidates



Unreasonable salary expectations from candidates



Talent competition



Identifying
a large enough
pool of
candidates for
each profile

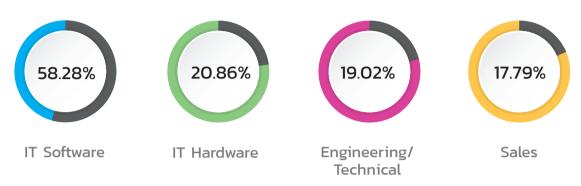
Identifying quality candidates is by far the most important challenge for employers.

Another barrier in successful recruitment is the unreasonable salary expectations of the candidates. The competitiveness of the market ranks third and a side effect of this leads companies into salary battles and counteroffers for quality candidates. Companies are also confronted with sourcing a large enough pool for each position.

Recruitment Challenges

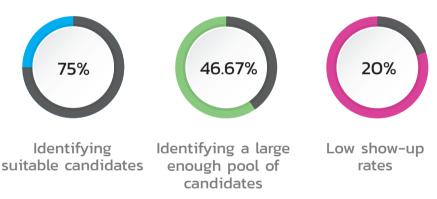
Recruiting developers seems to be the biggest challenge in the IT industry.

Profiles with difficulties in recruitment



An increasing trend among recruitment channels is the referral, which seems to deliver from 10% to 40% of the annual hires.

Most time consuming activities in recruitment



Identifying quality candidates and also, in large enough numbers, is the most time consuming part of recruitment.

Top recruitment trends according to industry respondents



Thank you for your time and interest!

In-depth analytics can be developed based on your specific needs.

contact@brainspotting.ro (+40) 735 159 310

Brainspotting

Brainspotting is the first IT&C recruitment agency in Romania, operating since 2001 for over 400 clients.