

INNOVATION SHIP
BULGARIA | Digital

Bulgarian Digital SMEs

November 2016

NATIONAL SURVEY

EDIT.bg (Economic Development via Innovation and Technology) is an open network, uniting organizations and companies concerned with the development of digital industry in Bulgaria. Founders of the project are MOVE.BG, Start It Smart, StartUP Foundation, Association of Bulgarian Leaders and Entrepreneurs ABLE, Betahaus, Bulgarian Centre of Women in Technology, Brain Workshop Institute, Eleven Accelerator Venture Fund, LAUNCHub Seed and Acceleration Fund, NEVEQ, TAKEOVER, Perpetto, Reloyalty, JoinThePlayers, Doglar. EDIT.bg is an open initiative for everyone contributing towards the development and recognition of digital Bulgaria.

You can find more information about EDIT.bg on www.edit.bg.

MOVE.BG is a platform found by creative people. The organization is seeking innovative solutions for social change; works toward sustainable development and recognition of a culture concentrated around constructive dialogue, active leadership and shared values. Since its establishment in 2013 MOVE.BG has partnered with over 50 Bulgarian and foreign organizations and has worked with more than 2,000 volunteers. MOVE.BG is the initiator of EDIT.bg. You can find more information about MOVE.BG on www.move.bg

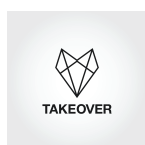


Brain Workshop Institute is an expert platform, established by energetic professionalisms from various fields of expertise, such as business, finance, media, civic and academic sectors, who share common ideas and values. The Institute is generating innovative proposals for effective solution of local, national and global problems and challenges, as it has conducted multiple economic, business and financial analyses, as well as various projects and initiatives within the fields of education, personal and professional development. You can find more information about Brain Workshop Institute at www.brain-workshop.org



Economic Development via
Innovation & Technology

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Why EDIT.bg

The global connectivity and the development of technology change the axioms on which we build our world. They set completely new line of communication, learning, doing business, collaboration, personal affirmation. Today knowledge is available to everyone and our collective intelligence is doubling each day online.

The paradigm of competition and consumption is changing - businesses benefit from sharing common platform with competitors, customers participate in the improvement of products using systems of loyalty and trust. Virtual money replaces the traditional banking processes.

The global exchange changes the nature of the political process –ad-hoc communities gathered around causes dictate the public agenda. The virtual environment becomes more social than the actual one. It becomes a place for our individual identification and determines our choices in an integrated process in which we are both followers and creators.

This is a completely new formula of living – one of co-creation and mutuality. Digital knowledge and technology are the foundation of this new world.

Success in it belongs to those who create, master and validate.

There are many talented engineers and entrepreneurs in Bulgaria that develop cutting-edge technologies and businesses. They do not, however, determine the nature of the Bulgarian industry, leading our country to lag behind the average performance of European countries in terms of innovation, digital skills and application of digital technologies in business and public systems.

The creation of accelerators, the existing financial mechanisms for investment in start-up companies, and the establishment of a co-working culture stimulate the development of digital ecosystem in the country. However, this ecosystem requires further maturity and purposeful development of mechanisms for the exchange of technology and business knowledge, access to finance for growth, integration into the global system of exchange and positioning.

Sasha Bezuhanova

Founder of **MOVE.BG** and initiator of **EDIT.bg**



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SURVEY METHODOLOGY

The national survey of **EDIT.bg** was conducted between **July and October 2016**.

Over 250 companies participated in the survey, 229 of which suit all criteria for contemporary digital company. Our research is based namely on their submitted answers.

Participants are filling out an **online survey**, consisting of 45 questions, related to the company's year of foundation, scope of activity, its history, financing mix, current and target markets, recruitment specifics, business development challenges and others.

Some of the questions include multiple-choice option, as parts of the visualized answers do not add up to 100%.

We refer as **"newfound digital companies"** to enterprises, established within the period 2014-2016

Data analysis has been carried out by **MOVE.BG** and **Brain Workshop Institute**.



MAIN STUDY RESULTS AND COMMON FINDINGS

The development of digital enterprises is one of the best opportunities for Bulgaria to increase its export potential and competitiveness, thus retaining its young and talented specialists. Just in the period between 2008 and 2016 the number of employees within the information technology sector increased from 18 thousand to 38 thousand people, while foreign direct investments rose from 104M to 232M Euro.

The first national study of the digital ecosystem in Bulgaria, conducted by EDIT.bg, gives answers to many of the important issues concerning the digital enterprises development.

We already know that:

43% of participating companies were established in the period 2014-2016. There is a clearer trend for more active foundation of companies in the period after 2010.

44% of the participating companies are allocated within the “App and software development” field of specialization, followed by 24% within the “E-commerce & marketplace” area of specialization.

91% of participating companies are **expecting to hire more employees** within the following 12 months, while almost 10% of the companies will open more than 10 new positions.

58% of digital companies **are hiring interns**, while one third of the companies is reporting **above 76% share of employees below 30 years old**. The largest concentration of young employees is observed within companies, established between 2011 - 2015.

68% of respondents are outsourcing **activities towards freelancers**. Almost half of the digital companies require personnel with technical skills, as well as specialists within the field of sales and marketing.

40% of the surveyed companies **have successful capital raising experience**, while half of them have raised more than EUR 250k per company.

80% of successfully funded companies plan to raise capital again within the next 18 months.

7% of the companies generate annual turnover above EUR 1M, while 22% of the companies are declaring turnover within the range of EUR 100k and EUR 1M.

32% of companies aged up to 3 years succeed to achieve positive cash flows.

46% of Bulgarian digital companies target the world market. The main target markets of the companies are Bulgaria - **55%**, Europe - **34%**, North America - **28%** and EU - **21%**.

21% of surveyed companies are represented abroad. One third of those have been operating for more than 5 years. Many young Bulgarian digital companies manage to develop and successfully implement strategies for sustainable expansion on foreign markets.

47% of cash flow positive companies define inflows as completely sufficient for anticipating their financial needs.

26% of participating companies have registered trademarks or patents.

43% of Bulgarian digital companies still aren't realizing any export revenues, however more than half of respondents are start-ups, expecting to achieve exports up to 40% of their total revenues in the short term.

41% of all companies are suffering under the lack of adequate partnerships, which the main challenge ahead of higher exports.

32% of digital companies experience difficulties in finding suitable personnel. Lack of knowledge of foreign markets is another problem ahead of sector development.

77% of companies consider, that the government "doesn't support" or "rather doesn't support" SMEs



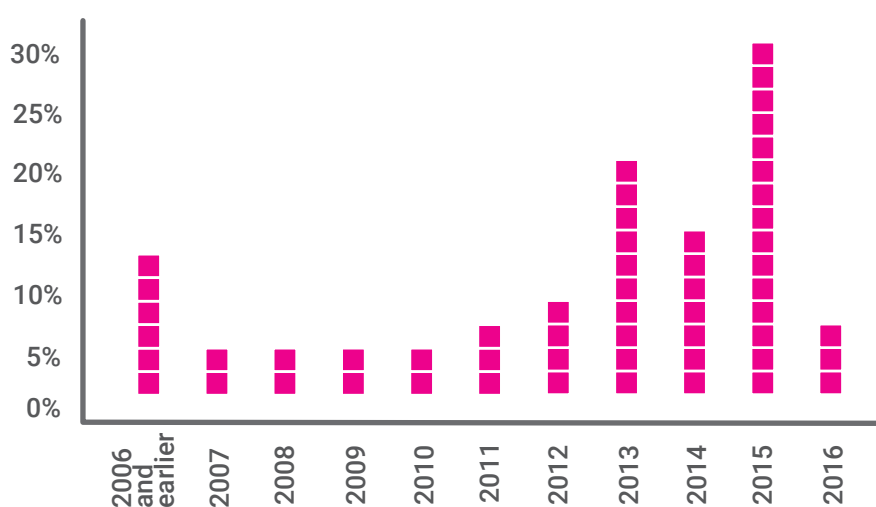
DIGITAL COMPANIES IN BULGARIA

■ Company Foundation

Most of the companies have been found in 2012-2016, as the largest numbers have been established in 2015 and 2013.

There is an evident trend towards more active registration of digital companies in the period after 2010.

However, there are also experienced companies – approximately **13%** of them operate from 10 or more years.



43%

of participating companies have been founded within the last 3 years.

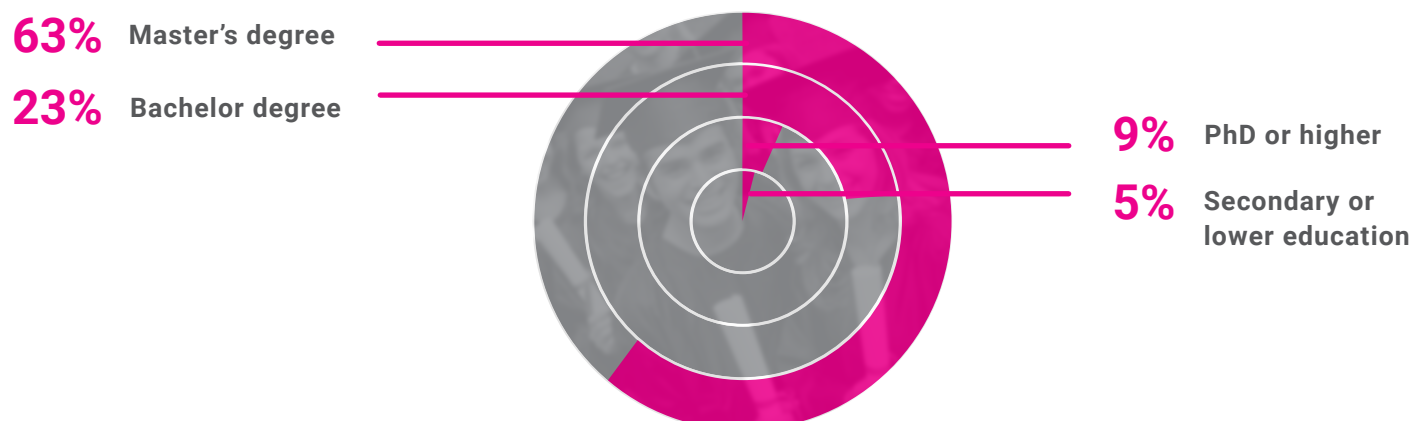
95%

of digital companies have been found by university graduates.

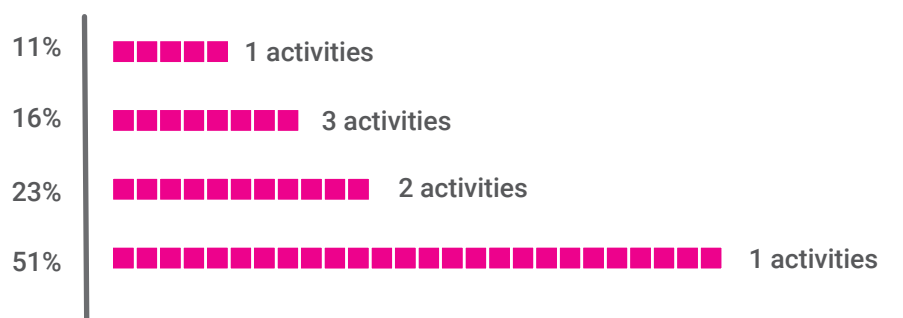
■ Education of the founders

95% of digital companies have been founded by at least one graduate, as in 23% of the cases it is a bachelor, in 63% a master and in 9% PhD or higher.

Just **5%** of digital companies have been found by entrepreneurs with secondary or lower education.



■ Scope of activity

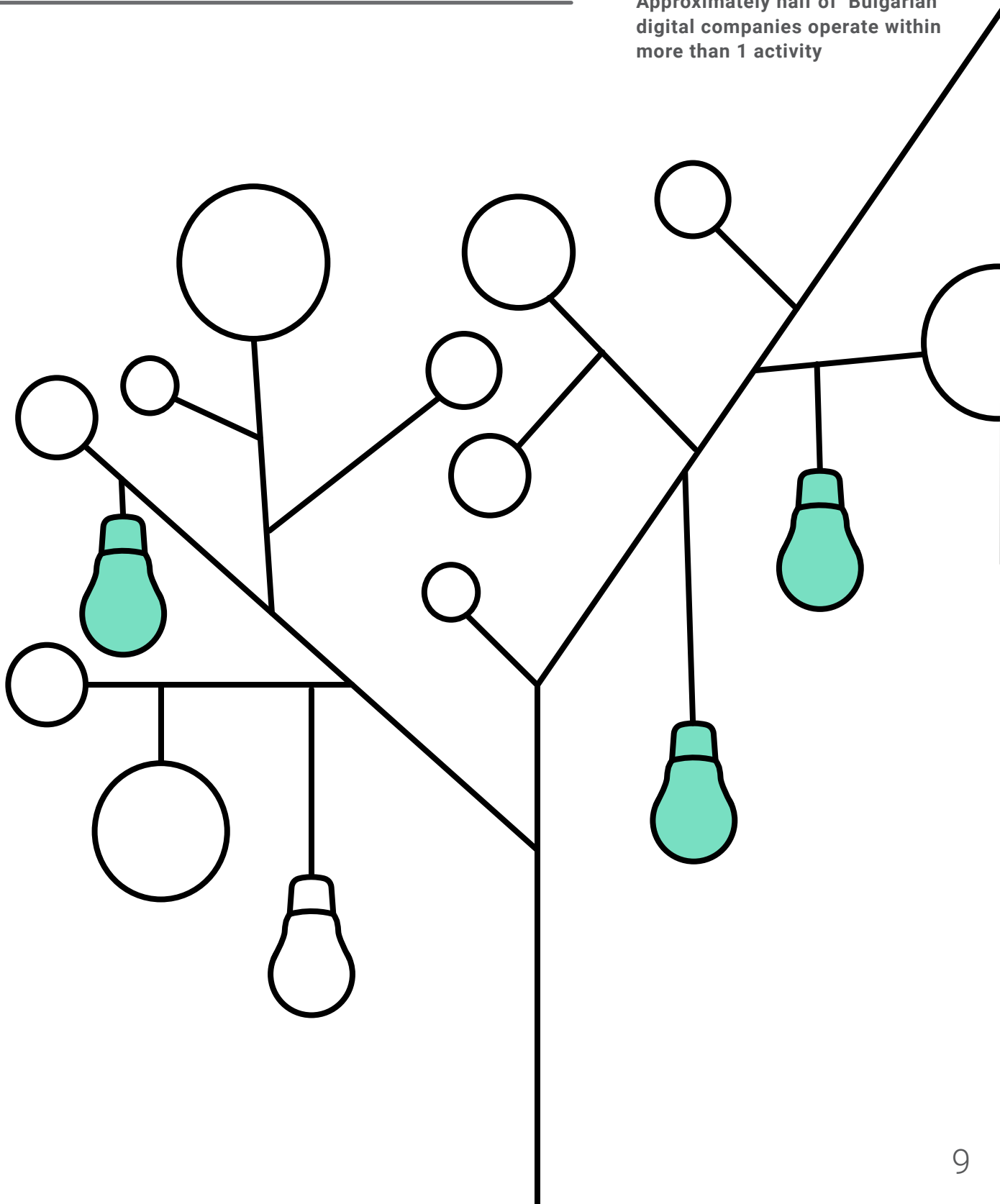


51%

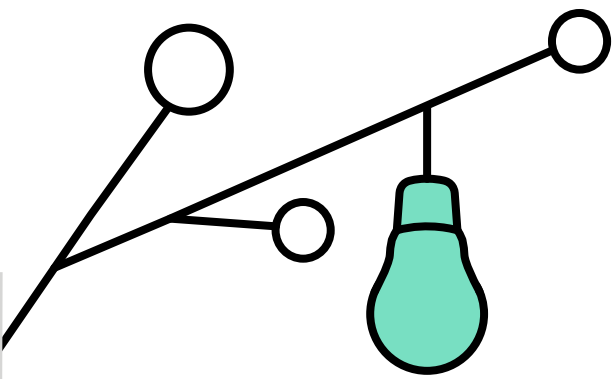
of companies operate in one economic activity.

49%

Approximately half of Bulgarian digital companies operate within more than 1 activity



■ Count of companies according to their activity



77

Marketing, PR and design

71

Science and high-tech

45

Business support services

40

Consultancy and advice

28

Education

20

Publishing and print

19

Consumer goods

16

Film and broadcast media

17

Professional training

15

Electronics equipment and instruments

14

Finance

10

Arts and music

9

Recruitment and HR

9

Civic and social organizations

8

Sports and leisure

6

Electronic parts and components

4

Pharmaceuticals and biotech

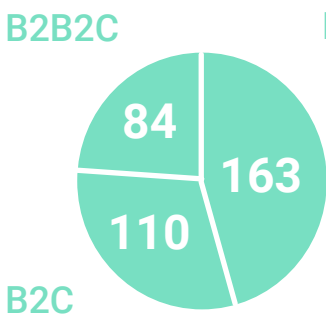
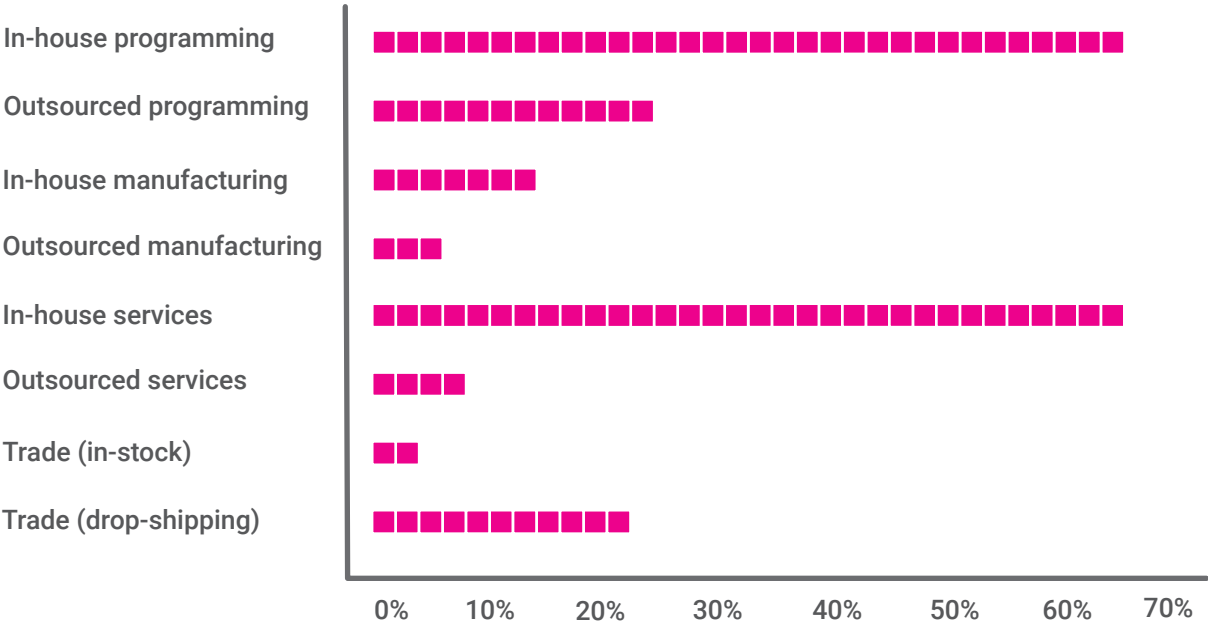
4

Facilities services

3

Agriculture, fisheries and industrial food productions

■ Number of employees



Bulgarian digital companies tend to prefer **internalization of most work-related processes**. Outsourcing is mostly used in programming activities - **22%** of companies and services - **21%**. **B2B** has been specified as probably the main business channel, but more than half of all companies use more than one business channel.

■ Clients

Main clients are small and medium enterprises (SME), as **71%** of the companies work with such companies.

Next in share are individuals - **64%** and large corporations - **52%**.

Public institutions are the most rarely specified client group - just $\frac{1}{4}$ of digital companies.

There is no significant correlation between company demography (age, headcount, export and other factors) and their usual customer base.

■ Sector of specialization

44% App and software development

24% E-commerce & marketplace

23% Digital advertising & marketing

22% Enterprise software & cloud computing

21% Data management & analytics

16% Digital media & entertainment

12% IoT & connected devices

10% Social networks

7% Telecommunications & networking

7% Telecommunications & networking

6% Gaming

6% Cyber security

6% Cyber security

6% Gaming

5% Fintech

5% Fintech

4% Edtech

4% Healthtech

4% Healthtech

4% Edtech

2% Online gambling

2% Online gambling

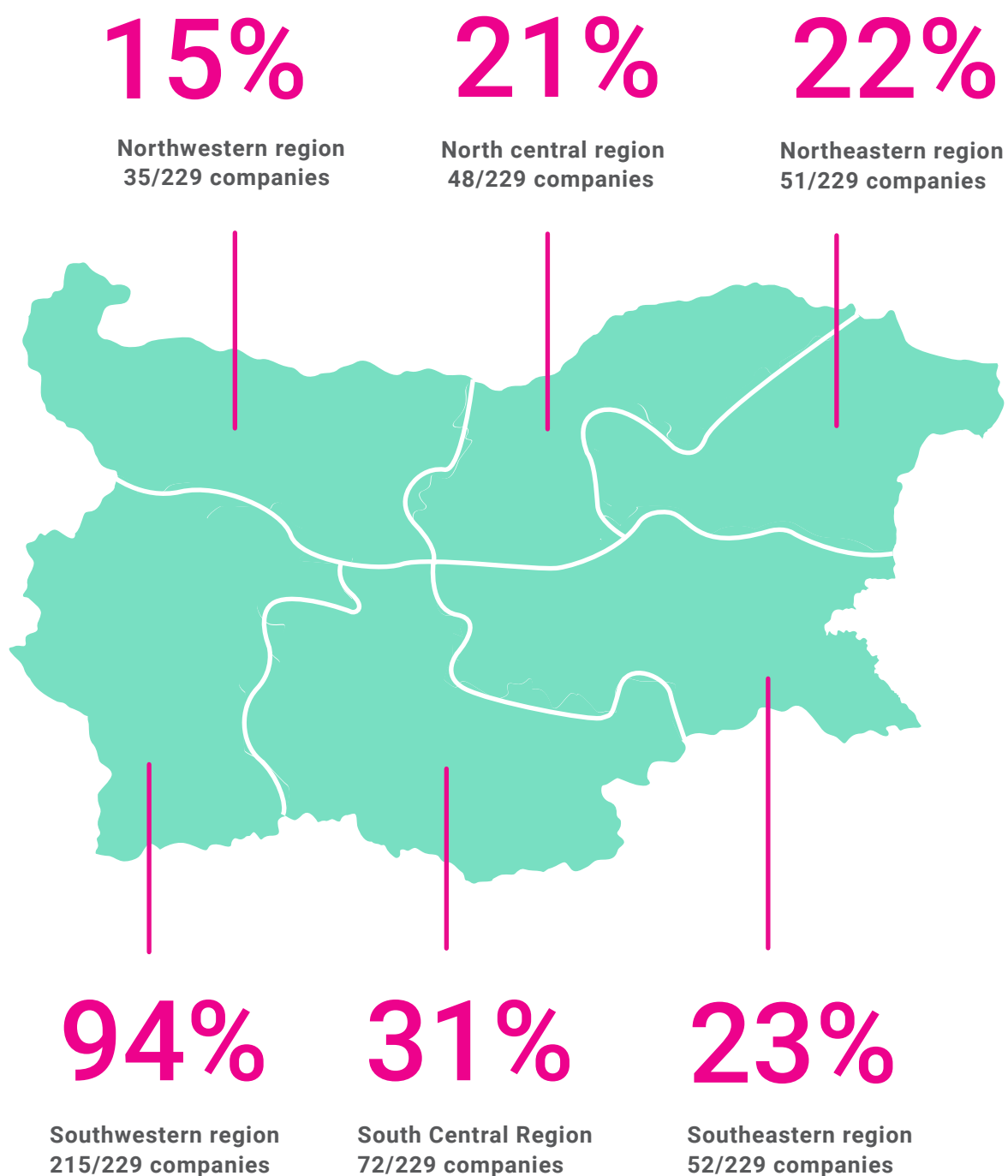
■ Activities in Bulgaria

Bulgarian digital companies operate within all regions of the country; however **Sofia is their main destination.**

Second in rank is South central Bulgaria and Plovdiv, **while the difference between the regions of Burgas, Varna and Veliko Tarnovo is minimal.**

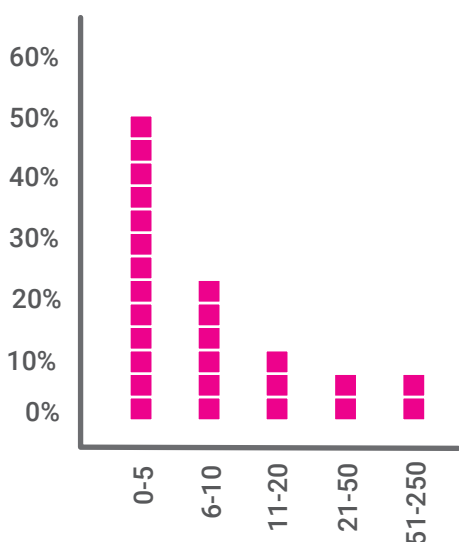
The Northwestern region lags behind, as just 35 out of 229 respondents declare to conduct business there.

Based on 473 answers



■ Number of employees

Most digital companies have relevantly few employees, but expect to continue hiring.



74%

of participating companies have less than 10 employees

91%

plan to hire additional talents within the 91% next 12 months

■ New talents acquisition within the following 12 months

20 Will not hire new employees

27 Will hire above 10 employees



182 Will hire up to 10 employees

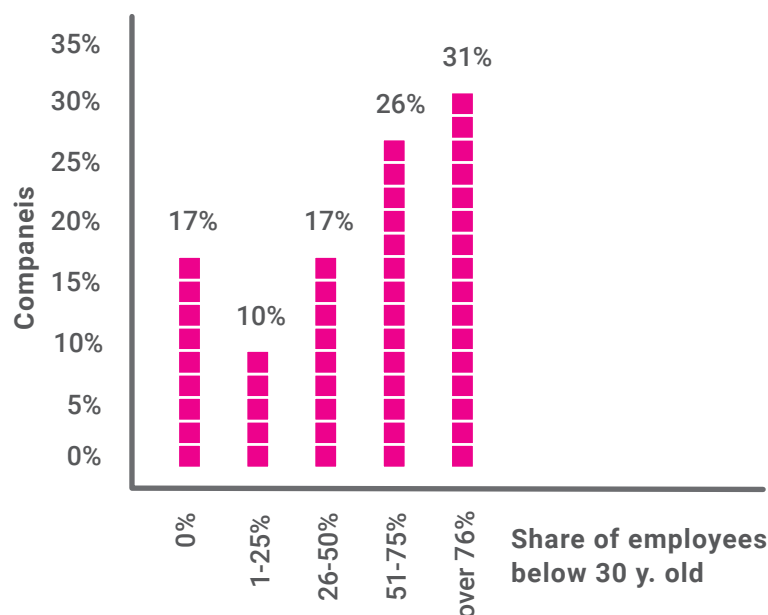
91% of surveyed companies expect to hire additional people within the **next 12 months**, while 27 of those expect significant expansion. **Two companies intend to hire more than 50 talents.**

Less than **10% of participating companies do not intend to hire new talents** in the next 12 months - total of 20 companies.

■ Employment structure

Within almost one third of the companies, over 76% of the employees are aged below 30 years old.

The largest concentration of young talents is observed within companies found after 2011.

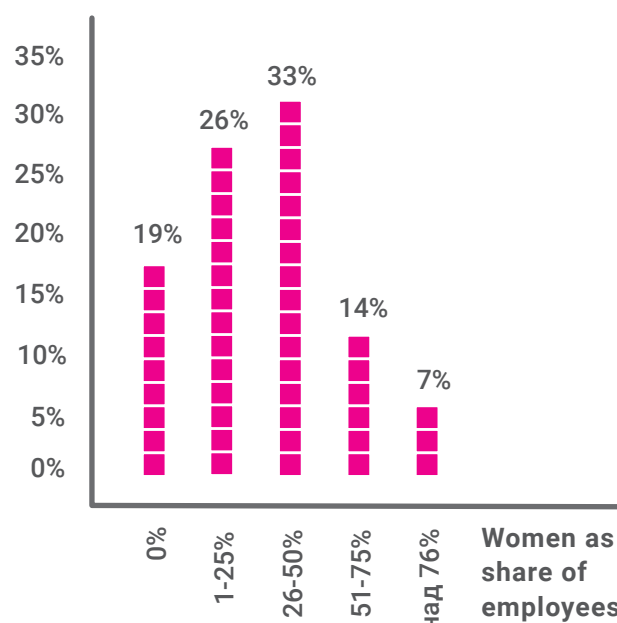
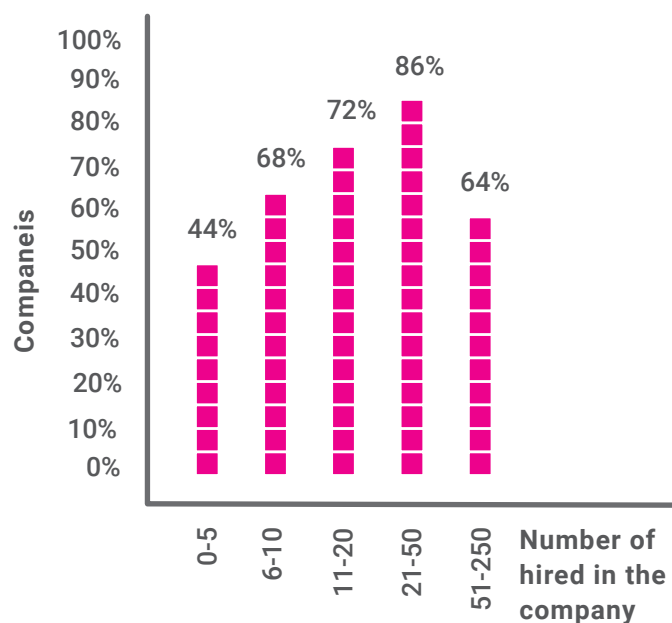


57%

Of companies report, that more than half of their employees are below 30 y. o.

Regardless of company age, more than 50% of companies work with interns. 86% of companies, employing between 21 and 50 talents, are also working with interns.

Employed women are more than men in just 21% of companies. Still a significant share - 19% have no women employed.



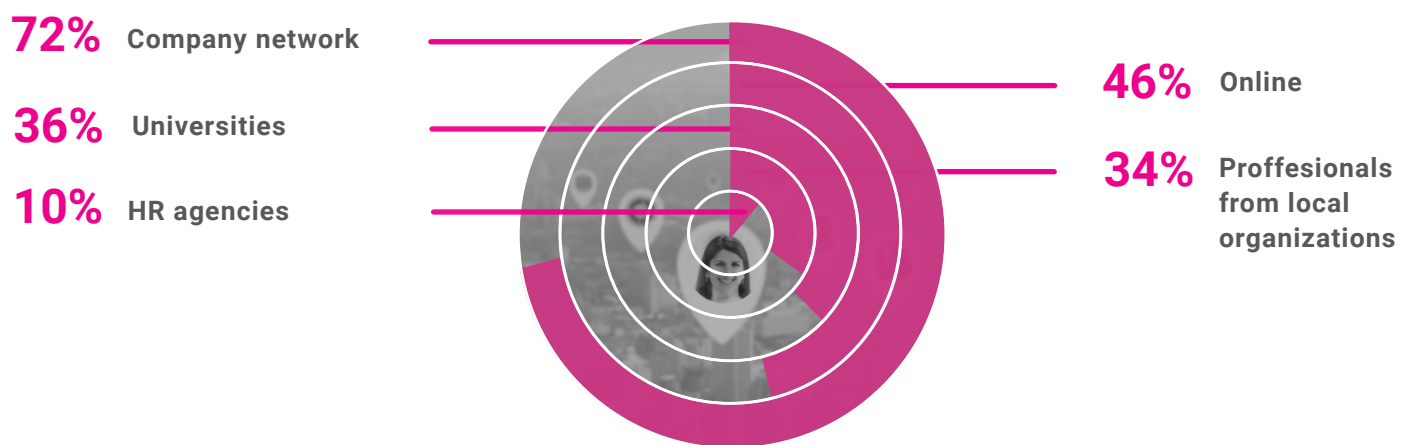
■ Talent sourcing

The main talent sourcing channels in digital companies are the company's own network - **72%** and internet channels - **46%**.

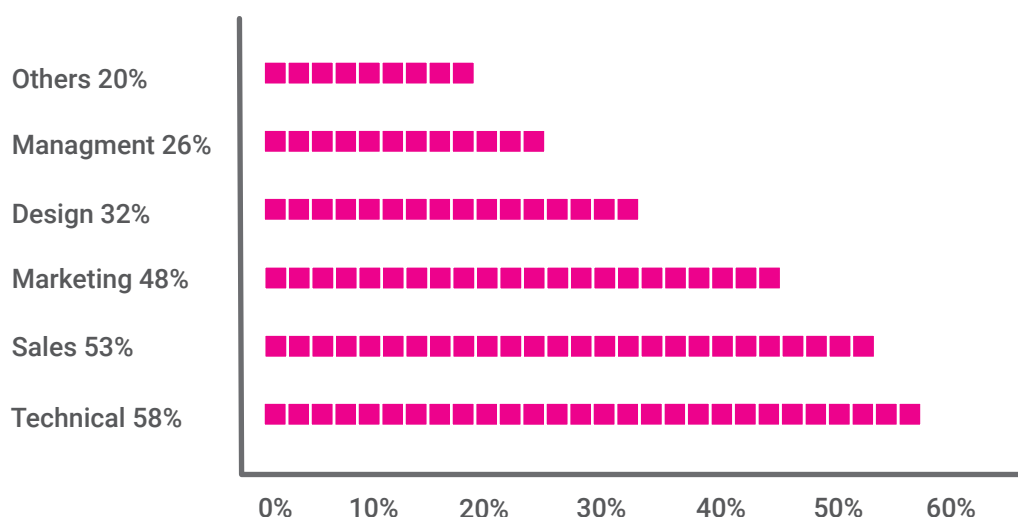
Although respondents may pick more multiple choices, a mere **10%** of companies are declaring usage of **HR agencies**.

Direct recruitment from universities remain an uncommon practice - **36%**, also comparable to hiring experienced professionals from local organizations - **34%**.

156 companies or **68%** of participants are outsourcing services towards freelancers, as the main share of those are activities related to artwork and graphic design - **40%**, followed by software coding with **33%** and marketing activities - **17%**.



■ Lack of talents



It is worth noting, that the age of the company does not relate to the type of professionals it needs. The lack of talents in newly found companies (after 2013) and established ones is similar.

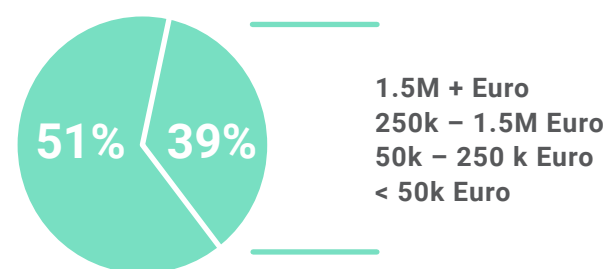
Almost half of digital companies need talents with technical skills and specialists in the fields of sales and marketing



■ Raising capital

51% of companies operate in one economic activity

Approximately **40%** of companies declare raising funds experience. **38%** of successfully funded companies are within the upper range - 250k to 1.5M Euro.



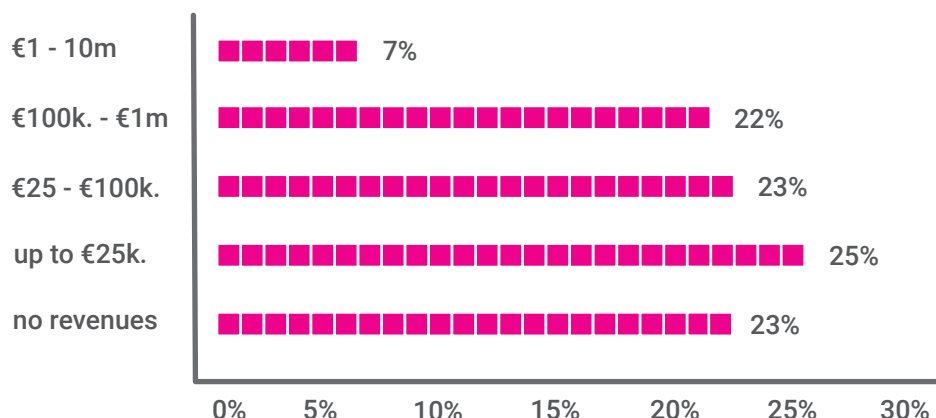
One of every 10 successfully funded companies, managed to attract more than 1.5M Euro.

80%

of funded companies expect to raise additional external capital within the following 18 months

Most of successfully funded companies come from fields such as “**Science and High-tech**”, “**Marketing, PR and design**” and “**Business support services**”

■ Annual revenue



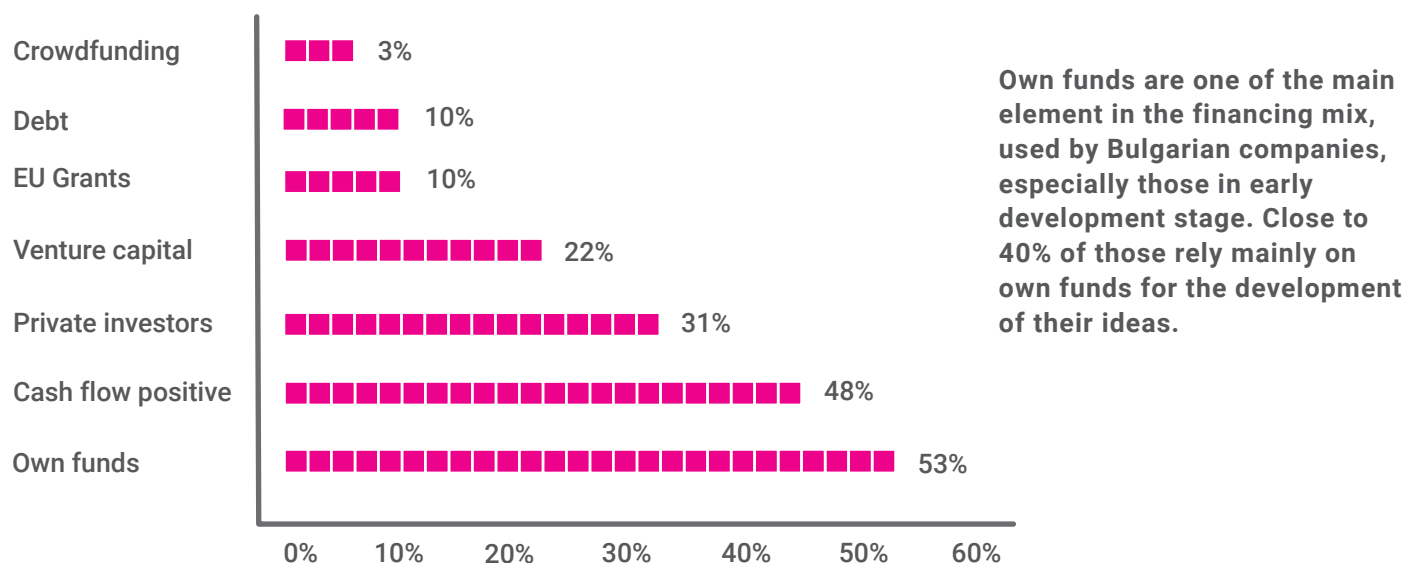
Just **23% of companies aren't generating revenue yet**, as 177/223 digital companies have passed this stage

16 Companies are generating annual turnover above EUR 1M - **7%** of respondents, while turnover between EUR 100k and EUR 1M is declared by **22%** of companies.

47% of cash flow positive companies evaluate their inflows as **completely sufficient** for meeting their financial needs.

32% of companies aged up to 3 years old, manage to achieve positive cash flows.

■ Financing sources



In general, companies rely mainly on local funding sources, as the share of foreign investors stands at slightly below **30%** (**37%** for venture capital)

The lower use of conventional financing methods such as **debt** or **EU grants** is notable, as those account for **10%** each. Modern funding methods such as crowd-funding are still not used widely enough, as just 8 companies declare to have used such.

■ Other support sources

63% Competitions

9% Community events

63% Mentoring

9% Universities

23% Acceleration programs

5% Incubators

Mentoring is one of the main sources of unconventional methods for financial and non-financial support with a share of **27%**. Some **23%** of the companies using such methods bet on community events. There is a relatively high share of acceleration program participants - **19%** of companies, while **13%** participated in incubator programs.



EXPORT AND MARKETS

■ Target markets

55% Bulgaria

8% Middle East

34% Europe

8% Asia

28% North America

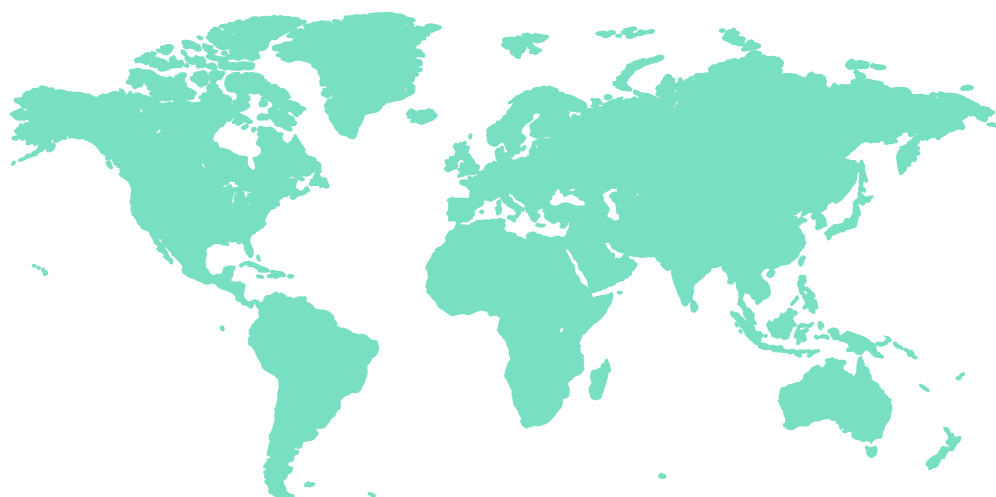
7% South America

21% EU

7% Australia and Oceania

17% Balkan Peninsula

3% Africa



46%

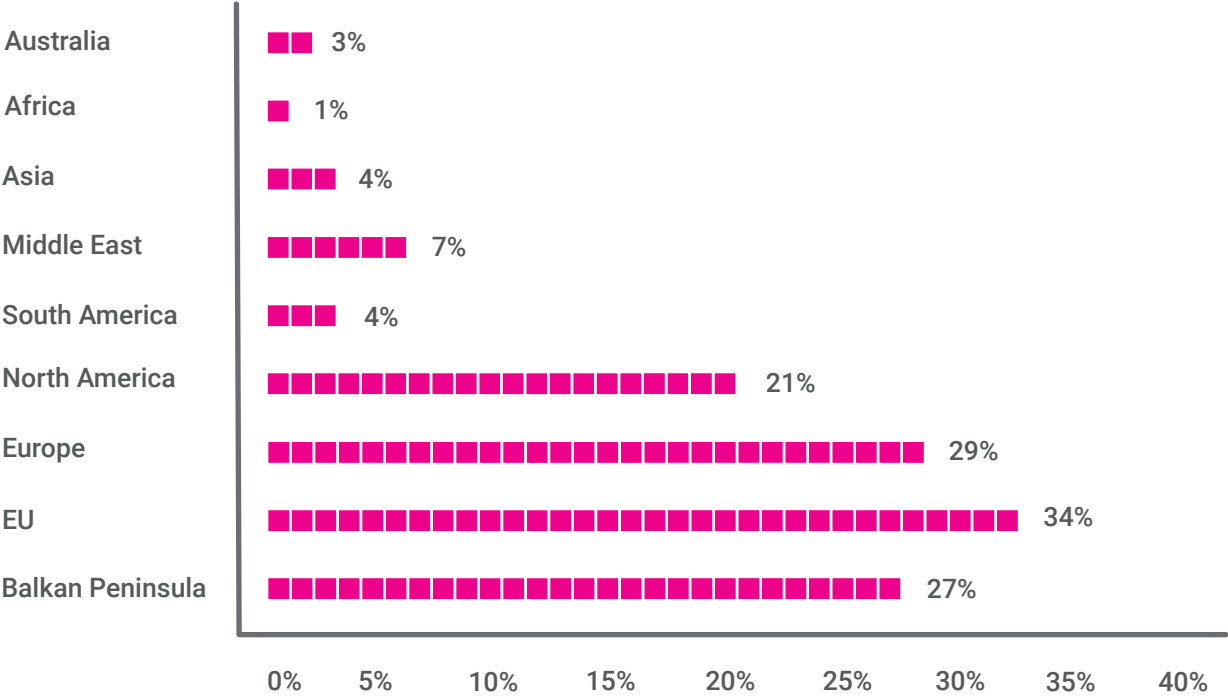
Of Bulgarian digital companies define the world market as a target one.

Main target markets of Bulgarian digital companies are:
Bulgaria - 55%, Europe - 34%, North America - 28% and EU - 21%.

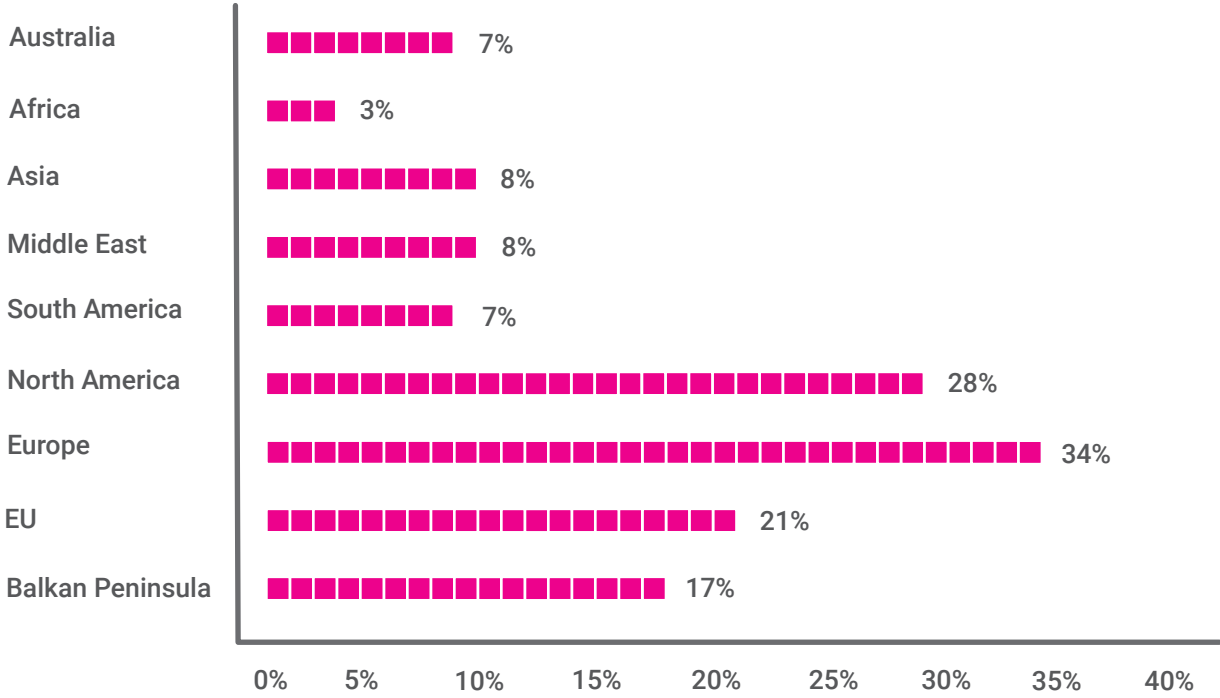
Interest towards **Asia - 8%, South America - 7%, Australia and Oceania - 7%,**
as well as **Africa - 3%** remains low.

■ Current and target markets

Current markets



Target markets



There are significant differences between current markets and target ones. This is to be expected as markets, on which companies already operate, are not always defined as target ones.

The preferences of Bulgarian companies are clearly visible:

Companies defining Australia, Africa, Asia and South America as target ones are two times lower than those that currently have customers over there.

Currently 21% of companies work with clients from North America, and 29% with clients from Europe. These markets are defined as target ones for 28% and 34% of companies, as this indicates for growing interest.

Although 34% of companies work with EU clients, just 21% if those target this market. The same trend is observed concerning the Balkan Peninsula. The region is targeted by 17% of companies, while 27% have clients over there.

Exporting companies target primarily small and medium enterprises (36% share), while interest towards individuals and large enterprises is evenly distributed (coherently 26% and 27%). Just 13% of exporting companies target public institutions.

7 of the companies with offices abroad have been found in 2015 and 6 in 2014. This indicates that some Bulgarian companies have successfully developed and adopted strategies for sustainable foreign market expansion

21%

Of participants are represented abroad

Just one third of those operate from more than 5 years

■ Share of exports

43%

Companies that do not export

1-33%

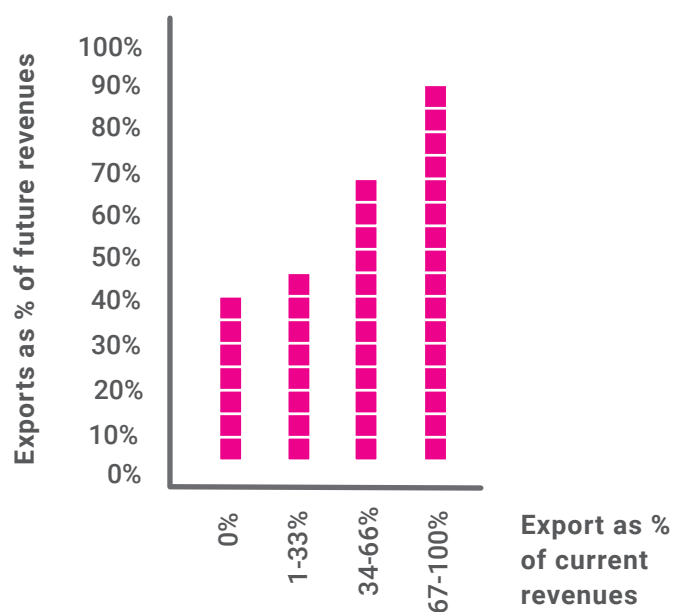
Export revenues share

34-66%

Export revenues share

67-100%

Export revenues share



Still approximately 43% of Bulgarian digital companies do not realize any export

There is significant difference between companies, whose exports constitute above 67% of revenue (21%) and those with share 34-66% of revenue (just 9%)

This trend indicates that upon successful penetration in an external market, companies usually restructure their activities towards those markets. There is positive correlation (0.49) between current share of exports and future exports expectations. Even companies currently not exporting, expect to **reach an average share of revenues standing at 37.7%**

■ Types of Innovation

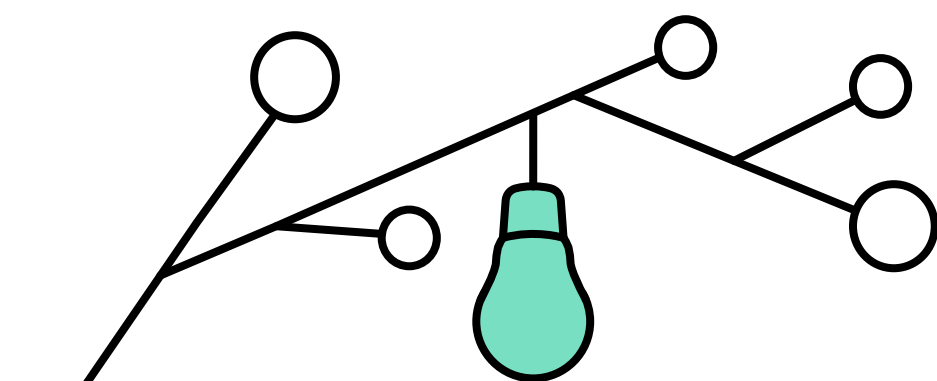
34% Product

16% Business model

20% Organization

11% Processes

19% Marketing



26%

of all companies have
registered trademarks
or patents.

Companies specialized in product innovation are evenly distributed between new products - **51%** and technological innovations - **49%**.

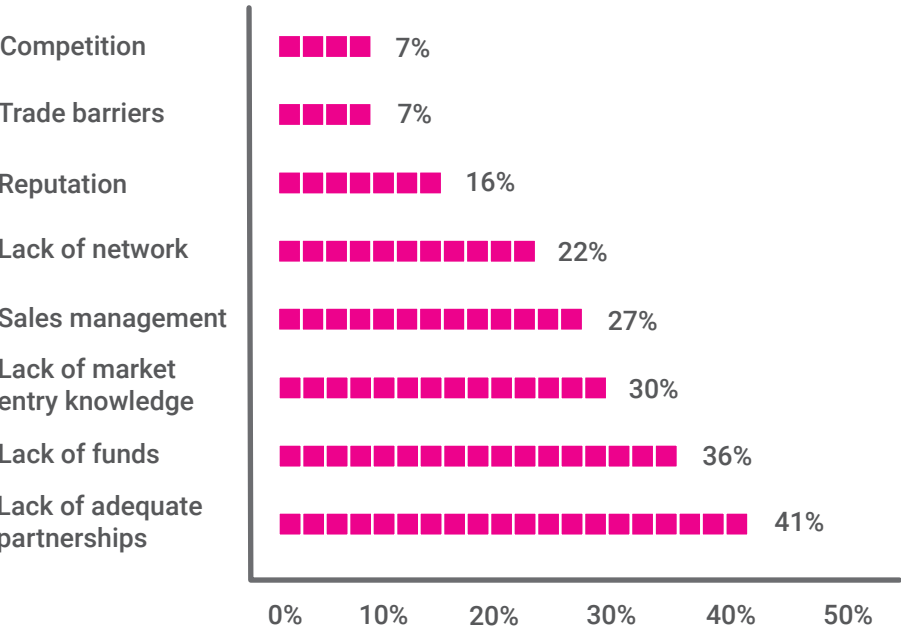
Companies offering organizational innovations are specialized primarily in work organization - **47%**, improvement of management processes, while just 15% are specializing in improvement of production processes.

Companies specialized in marketing innovations are relatively evenly distributed between new customer experience - **37%**, marketing channels - **32%** and communication - **30%**.

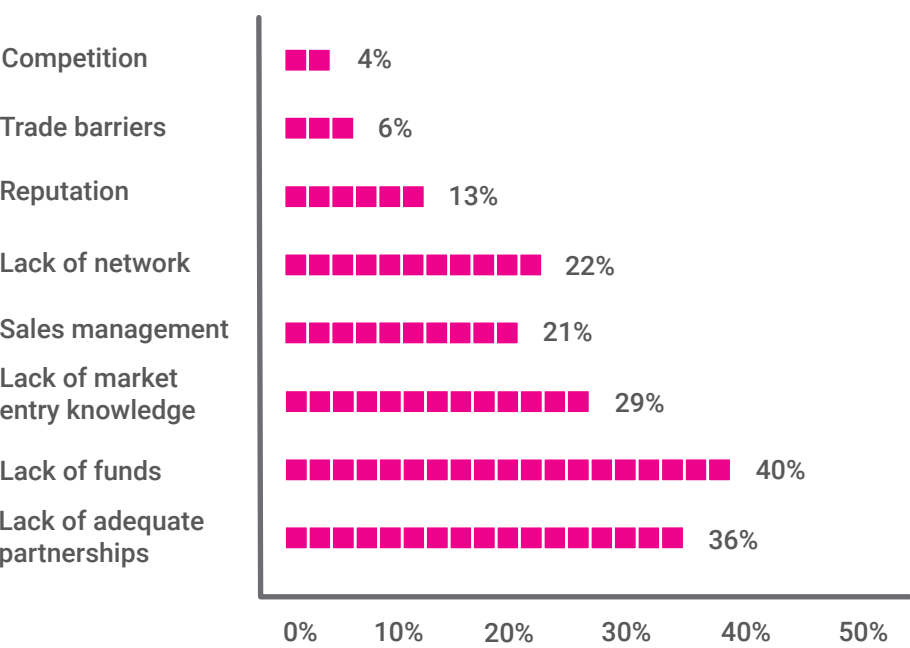
Companies specialized into innovative processes are allocated primarily in the field of services - **84%**, while just **16%** are specializing in production processes.

■ Export challenges

All companies



Non-exporting companies



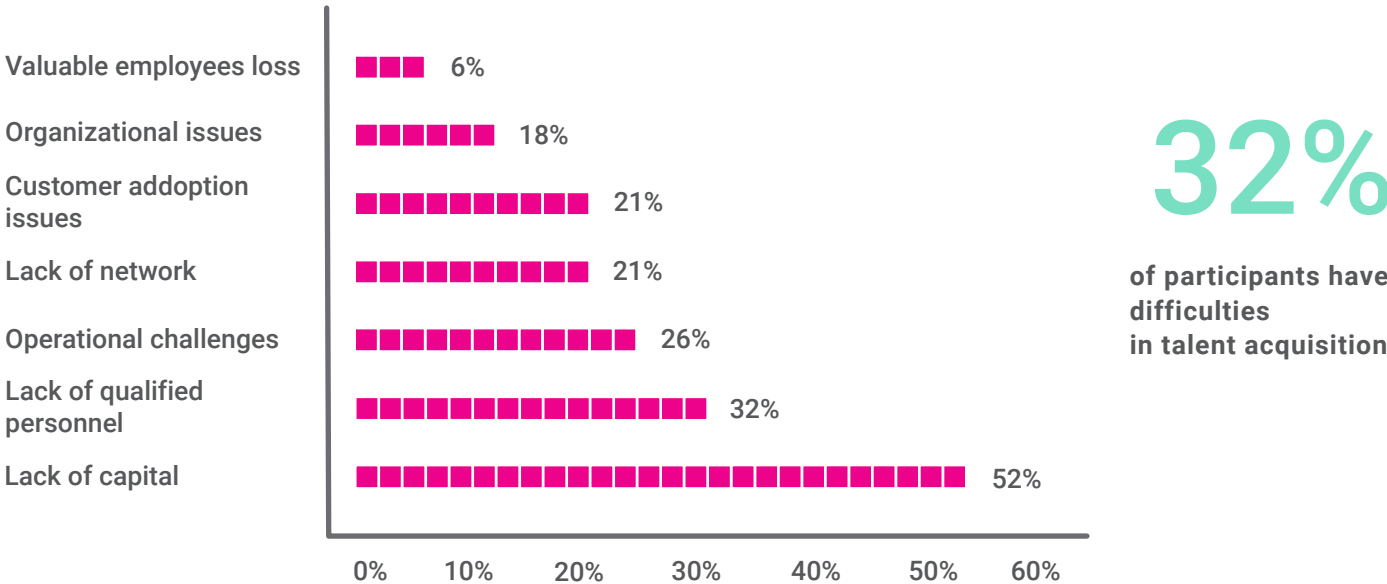
Companies identify the lack of adequate partnerships and lack of funds as the main obstacles ahead of further export development.

Bulgarian digital companies do not attribute significant importance to trade barriers, which is understandable considering sector specifics and leading target markets (Bulgaria, Europe, EU and North America)

The main difference concerning non-exporting companies is the lack of funds.

This is attributable to the fact, that 56% of those are start-up companies, most of which are registered within 2015.

■ **Business expansion challenges**



Amongst the main obstacles for development of Bulgarian digital companies is the lack of capital reported by **52%** of participants.

Lack of qualified personnel is the second most notable problem, shared by one in every three participants.

Contrary to initial expectations, the loss of valuable talent is amongst less important challenges ahead of business development. Most probably, this is attributable to the significant turnover of employees in the sectors, which allows companies to compensate quickly the loss of valuable talents.

Another factor is the significant share of newfound companies (aged less than 3 years old), which usually are characterized by different organizational structure, culture and intergroup dynamics opposed to those of established companies.



CONCLUSION

The results of the first national survey of the digital ecosystem in Bulgaria show a clear dynamic upward trend in the development of Bulgarian digital companies.

They have serious export ambitions and the potential to realize them successfully on the world market. The clearly stated intentions of further activity and staff expansion demonstrate the important role of Bulgarian digital companies for the country's economic and social development. They offer some of the most attractive career opportunities for young Bulgarians – opportunities that they clearly make the most of, as evident by the age structure of the employees in the surveyed companies.

The sector includes both well established players, which have been operating for more than a decade, as well as a significant share of newfound companies. Many of the latter have managed to develop and successfully market products which enable them to achieve positive cash flow and in some cases – to secure stable positions abroad.

The Bulgarian digital companies prefer to internalize most of the working processes, which to some extent explains the diversity of their activities.

The geographic scope of their activity is by no means constrained within the capitol, but it still remains the leading market for most companies. Of course, there are some factors that hinder the even more rapid development of digital companies. Such are the lack of suitable talent and the lack of partnerships abroad.

There is a widely spread feeling that the Bulgarian government has so far been unable to create an optimal environment for the operation of SMEs, which comprise a significant share of both the digital companies themselves, as well as their client base.

This study is just the first step of a long initiative in support of the digital ecosystem in Bulgaria. The EDIT.bg open network digital ecosystem can play a leading role in catalyzing this process. In view of the innovation and economic potential that the data show, its development is something which can only be described as a “national priority” explains the diversity of their activities.

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