



**Driving
Innovation.
We have the
right DNA.**

A small nation that is big on ideas

As a young, vibrant nation defined by its innovative mindset and can-do attitude, Lithuania is the perfect home for industries that are looking to drive their ideas forward. With its growing position as a hub for likeminded creative professionals working across a number of sectors, and the advantage of being a small nation where solutions are quick, networks are instant, and costs more than competitive, we have the right environment for innovation.



Key sectors

Building on our established advanced technical skills base, and with the aim of creating the best conditions for real R&D and tech growth, Lithuania has defined a number of key sectors it intends to focus its efforts on:

1. New processes, materials and technologies
2. Health technologies and biotechnology
3. Information and internet technologies
4. Future focus – sustainable technologies



DID YOU KNOW?

Technology developed in Lithuania is the basis for the world's most powerful laser.

1 New processes, materials and technologies

Lithuanians have a long history when it comes to industrial innovation. With developmental experience dating back to the invention of the laser, our technology and skills are at the forefront of this field. And with photonics playing an essential role in scientific development across a number of industries, from laser physics and optical technologies, through to electronics, robotics and nanoengineering, we are perfectly placed to drive scientific innovation wherever it is needed. What's more, as a country we are committed to preparing the right talent for innovation. To this end, we are fostering strong collaborative links between industry and academic institutions to further strengthen STEM fields within our education system. Through this approach, we are able to provide businesses with the skilled specialists they need.



DID YOU KNOW?

Workshop of Photonics is developing new laser glass processing technologies in co-operation with the US market leader in extra-resistant glass, Corning Incorporated, whose Gorilla Glass product is found in over 4.5 billion smartphones worldwide.

WHAT WE DO AND WHO WE DO IT FOR

Mechatronics, robotics and electronic engineering:



Photonics and applied physical sciences:



Material science and nanoengineering:



2

Health technologies and biotechnology

Our life sciences industry has skyrocketed over the last two decades, doubling in value in the last five years alone. And it's not difficult to see why. Lithuania's life sciences industry is now regarded as one of the most advanced in Central and Eastern Europe, witnessing 15% growth in 2016 within the biotechnology, pharmaceutical research and production sectors¹. Its reach is truly global; 79.4% of product from the pharmaceuticals sector is exported. With their passion for innovation, can-do attitude, and drive to deliver results above and beyond what is expected, our talent has the right mindset to thrive in this field.

And we are fast developing Lithuania as a hub for Regenerative Medicine. Vilnius' new state-of-the-art facilities have been designed to bring together stem cell researchers and physicians with the aim of fast-tracking stem cell-based therapies and advanced therapy pharmaceuticals and medical devices.



WHAT WE CURRENTLY DO AND WHO WE DO IT FOR

Biotechnology, biopharmacy and chemistry:



Medical technologies and engineering:



DID YOU KNOW?

Thermo Fisher Scientific's World Excellence Center for Molecular Biology is located in Lithuania.

Source 1: Statistics Lithuania, 2017

3

Information and internet technologies

As one of Europe's most tech-savvy and innovative countries, Lithuania is home to true pioneers in the IT sector. The country's burgeoning startup community has attracted over €250 million in investment in recent years, and their driving talent is bolstered by the presence of some of the biggest global names in the business: Nasdaq, Uber, Wix, Revel Systems and others. Lithuania boasts some of the fastest and most affordable internet connections in Europe, plus an IT-fluent population ranked second globally for their Digital/Technological skills¹. That's why it is a rising star in Europe in the IT sector.



WHAT WE CURRENTLY DO AND WHO WE DO IT FOR

Game engines and game developers:



Fintech:



AI and Big Data:



Software solutions:



DID YOU KNOW?

Oxipit.ai – a Lithuanian medical image analysis company – has won first place numerous times in Kaggle competitions in deep learning.

Source 1: IMD World Digital Competitiveness Ranking 2017

4 Future focus – sustainable technologies

From Lithuania's agricultural roots comes a strong commitment to the environment and an appreciation of the earth's resources. That's why – from sustainable food production and crop protection, through to plant and animal genetics, renewable energy and waste management – innovation and sustainability have always gone hand in hand in Lithuania. And a strong culture of collaboration between universities and industry means new breakthroughs are developed to their full potential. For example, DuPont Pioneer, the world's leading developer and supplier of advanced plant genetics, has acquired usage rights from Vilnius University for a unique guided Cas-9 genome editing technology.



WHAT WE CURRENTLY DO AND WHO WE DO IT FOR

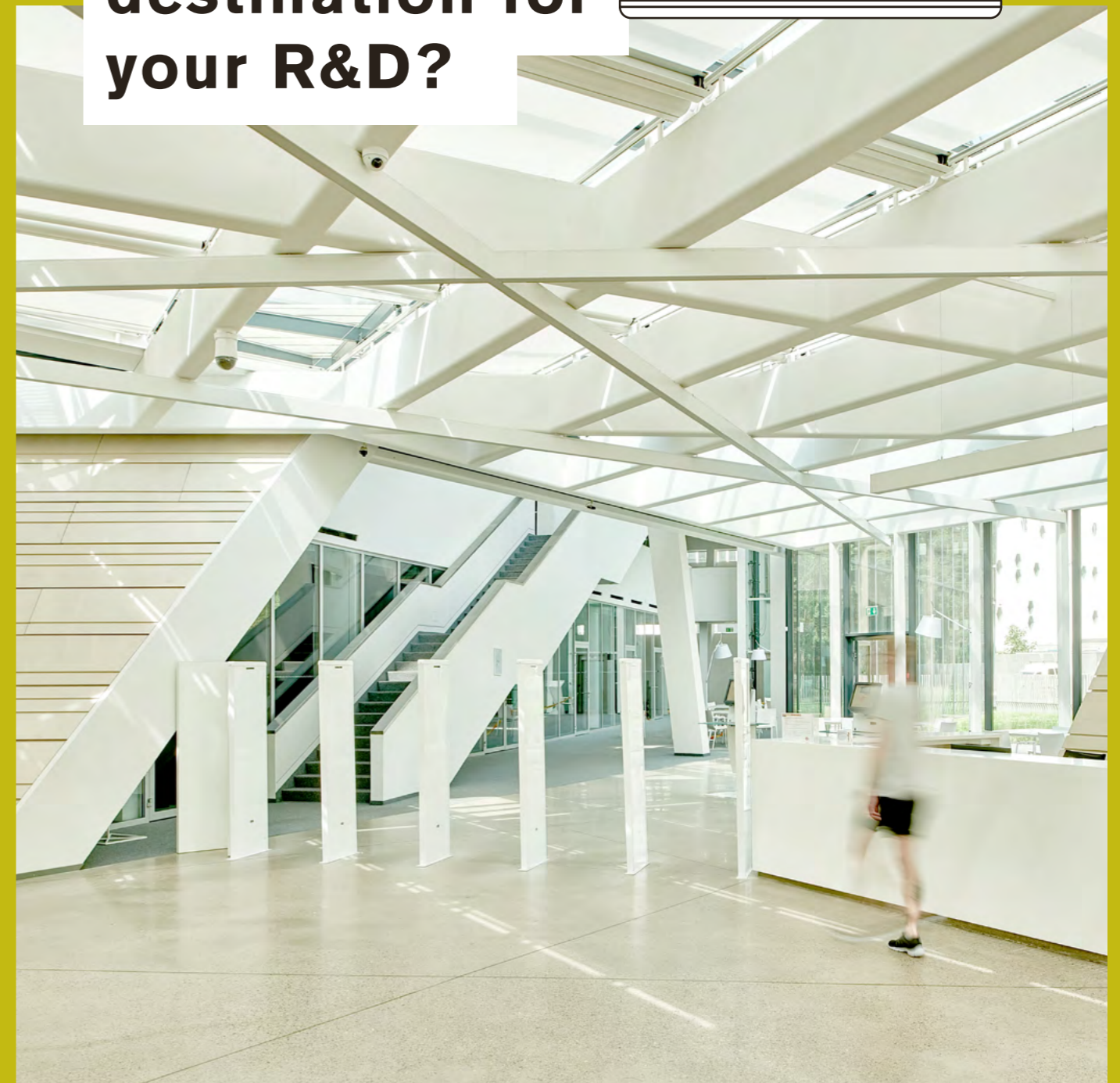
Agri-innovation and food technologies:



Future energy and environmental engineering:



What makes Lithuania the perfect destination for your R&D?



1 Talent, talent, talent

We work hard to seed and develop our talent, with IT education being implemented from as early as 1st grade. And with a continuing commitment to the establishment of links between business and education, we are perfectly positioned to provide companies with the bright minds they need.

#1 in the CEE for university-business collaboration in R&D



DID YOU KNOW?

A team of students from Vilnius University won the main prize in the prestigious international synthetic biology competition iGEM in 2018.

LABOUR POOL

60 960

SPECIALISTS EMPLOYED IN ENGINEERING, MEDICAL & LIFE SCIENCES FIELDS

39 600

STUDENTS ENROLLED IN INNOVATION-RELATED PROGRAMMES IN 2017

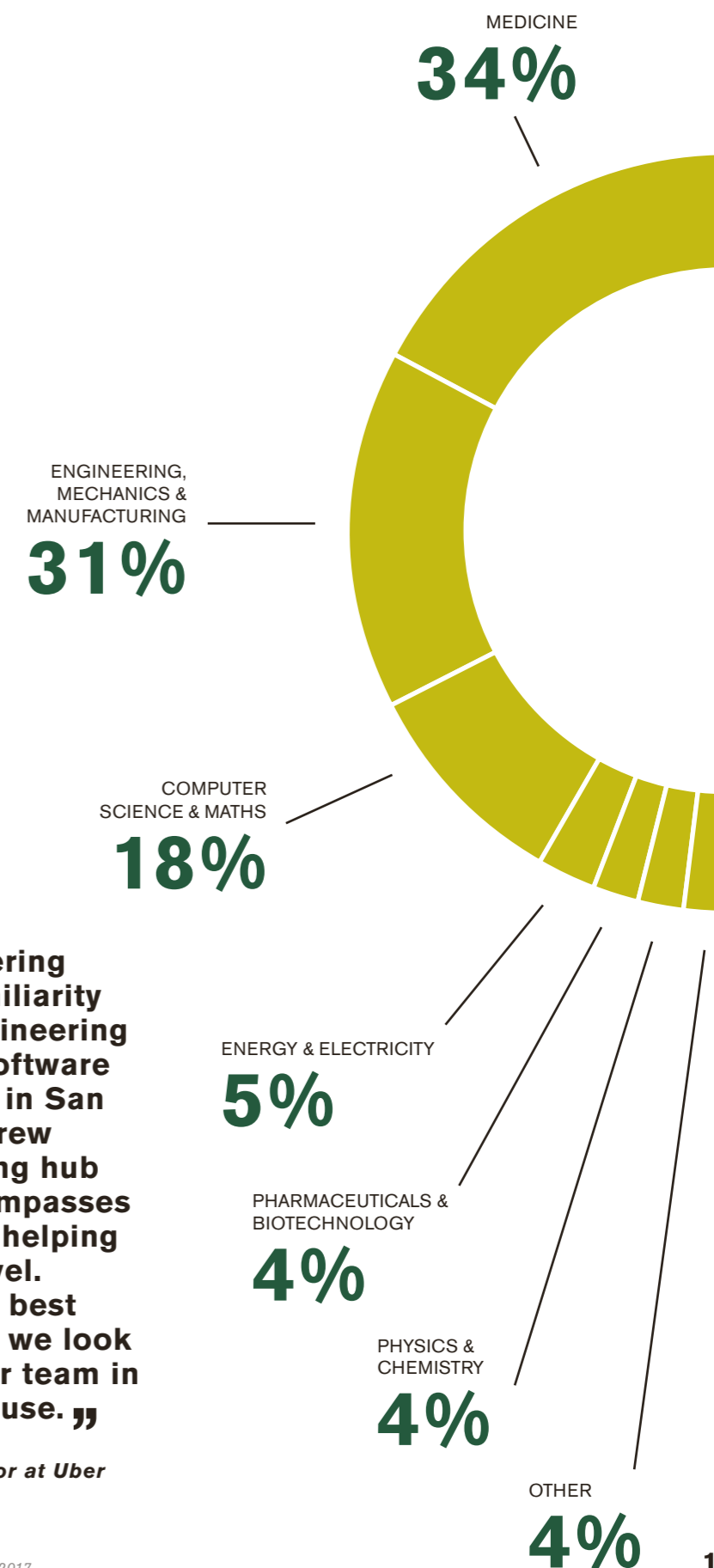
8 500

GRADUATES IN INNOVATION-RELATED PROGRAMMES IN 2017

22 400

EMPLOYED IN R&D

STUDENTS ENROLLED IN INNOVATION-RELATED PROGRAMMES, 2017



“ Before setting up our engineering hub in Lithuania, the only familiarity we’d had with Lithuania’s engineering talent was through a fellow software engineer based in our offices in San Francisco. This pool rapidly grew once we set up our engineering hub in Vilnius, and now also encompasses talent from across the region helping us run our app on a global level. Lithuania houses some of the best global engineering talent and we look forward to further growing our team in Europe’s secret tech powerhouse. ”

AG Gangadhar, Senior Engineering Director at Uber

2 Infrastructure

We are committed to creating the right infrastructure for R&D. That's why, since 2007, we have invested nearly €1 billion into making this a reality. What's more, as a small nation we have the ability to quickly create and consolidate lasting networks that facilitate and nurture innovation.

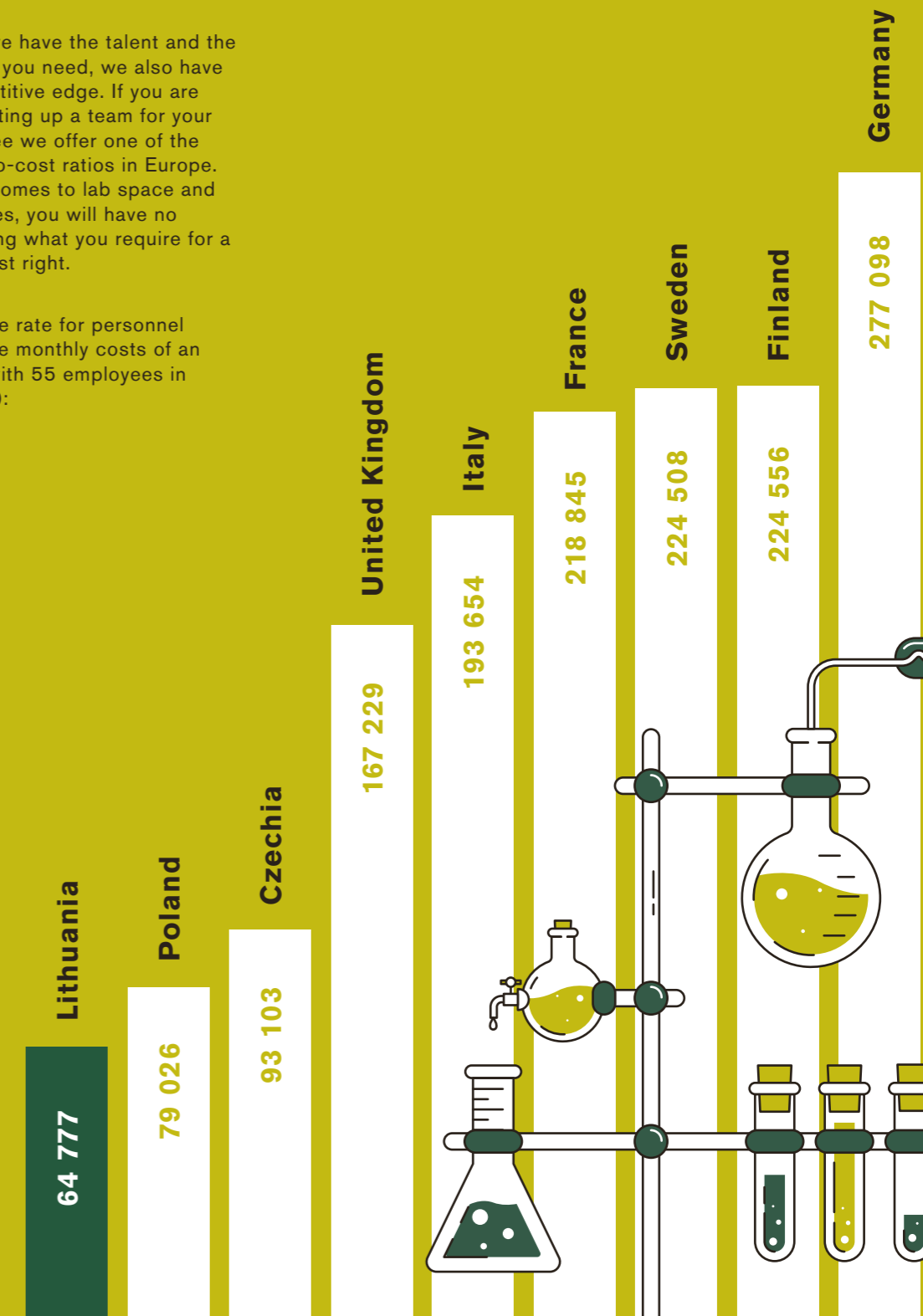
Here's a look at the Science Valleys and open access research centres we already have up and running:

SCIENCE VALLEYS AND RESEARCH CENTRES	COMPETENCES
SANTARA VALLEY (VILNIUS)	
<ul style="list-style-type: none"> Information Technology Open Access Centre Open Access Centre for Nature Reserch Joint Centre of Innovative Medicine 	<ul style="list-style-type: none"> Biotechnology Innovative medical technologies Molecular medicine and biopharmacy Ecosystems and sustainable development Informatics and communication technologies
SAULĖTEKIS VALLEY (VILNIUS)	
<ul style="list-style-type: none"> Joint Life Science Centre Centre for Physical Science and Technology "Naglis" Multi-Functional Laser Facility Civil Engineering Research Centre 	<ul style="list-style-type: none"> Laser and light technologies Material science and nanotechnologies Semiconductor physics and electronics Civil engineering
SANTAKA VALLEY (KAUNAS)	
<ul style="list-style-type: none"> Centre for the Latest Pharmaceutical and Health Technologies National Open Access R&D Centre within Kaunas University of Technology 	<ul style="list-style-type: none"> Sustainable chemistry Biopharmacy Mechatronics and related electronics technologies Future energy Information and communication technologies
NEMUNAS VALLEY (KAUNAS)	
<ul style="list-style-type: none"> Animal Health and Materials of Animal Origin Quality Open Access Centre within Kaunas University of Technology Open Access Joint Research Centre for Agriculture and Forestry 	<ul style="list-style-type: none"> Agrobiotechnology Bioenergy and forestry Food technology Safety and health
MARINE VALLEY (KLAIPĖDA)	
<ul style="list-style-type: none"> National Open Access Centre for Marine Sciences and Technologies 	<ul style="list-style-type: none"> Marine environment and marine technologies

3 Cost competitiveness

Not only do we have the talent and the infrastructure you need, we also have a cost-competitive edge. If you are looking at setting up a team for your R&D, you'll see we offer one of the best quality-to-cost ratios in Europe. And when it comes to lab space and office premises, you will have no problem finding what you require for a price that's just right.

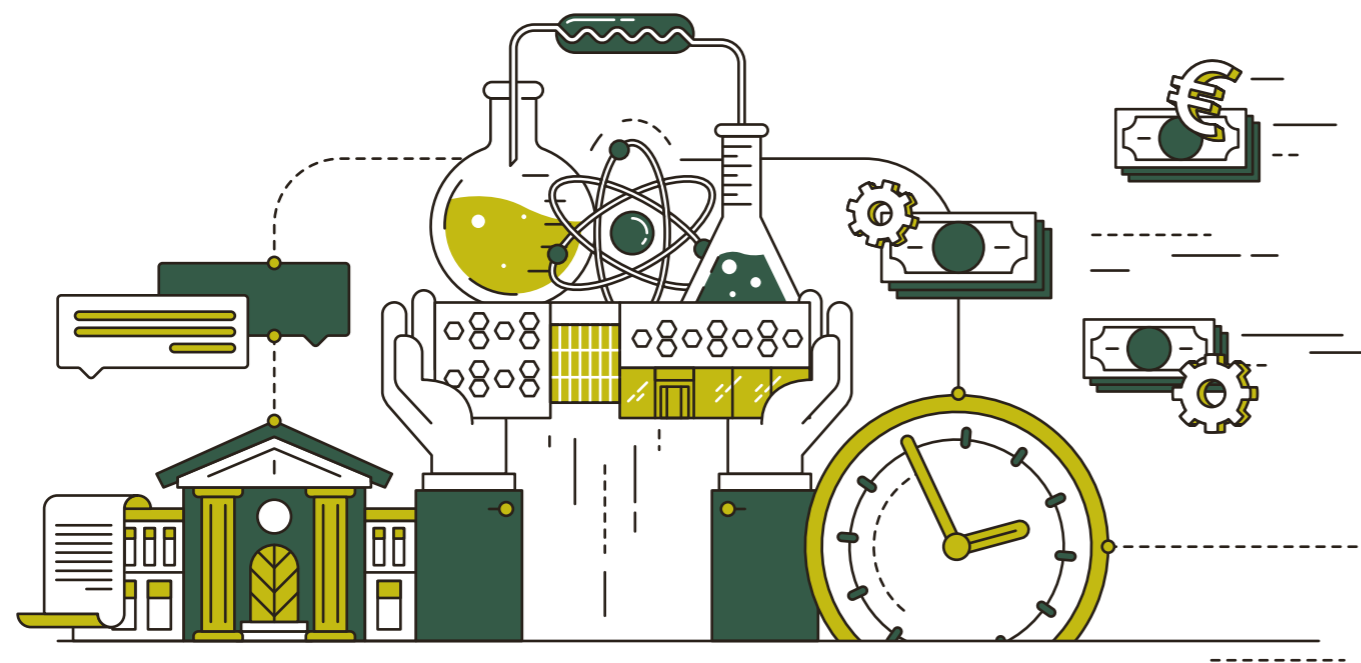
Here's how we rate for personnel costs (average monthly costs of an R&D centre with 55 employees in 2017, in EUR):



Source: IDi Benchmark, 2017.

4 Governmental backing and financial support

Support for R&D and the tech sectors is a national priority. From developing its R&D infrastructure and science valleys, the country is also quick to respond to industry needs and encourage collaboration. To foster patented inventions, Lithuania recently introduced the Patent box, which allows a 5% reduction in corporate income tax. You'll also find other generous financial support available – expenses for R&D are fully deductible three times, while corporate tax can be reduced by up to 50%.



HERE ARE SOME OF THE OTHER FINANCIAL INCENTIVES AVAILABLE:

- 25%* off investment in R&D infrastructure
- 50%* off R&D activities
- Up to 50% off employee training

* Typical reimbursement

SMART FDI grants to make innovation work

COST CATEGORY	R&D OPERATIONS	R&D INFRASTRUCTURE	INNOVATION CHANGE MANAGEMENT
TYPICAL REIMBURSEMENT ¹	50%	25%	15%
GRANT AMOUNT	up to € 3M	up to € 6.5M	up to € 0.5M
PROJECT DURATION	2 years	3 years	2-3 years
ELIGIBLE COSTS	Contractual research, materials, supplies, personnel costs, patent purchase, long-term asset depreciation	Construction, reconstruction, long-term assets	Service costs, short-term assets, travel costs, project administration

GRANT TIMELINE AND REQUIREMENTS



EXAMPLES OF RECENTLY AWARDED R&D GRANTS

virtustream

Research intended for development of innovative cloud solutions (3rdCLOUD)

Grant awarded **€1.4M**

adform

Technology for presenting personalized programmable online advertising between different devices

Grant awarded **€0.9M**

EndoBioTech

R&D infrastructure for innovative botanical biorefining technologies

Grant awarded **€1.5M**

€1.1M
average size of grant

¹ Depends on company size

² Not more than 15% of eligible costs in other EU countries outside of Lithuania

Lithuania's success stories

THE RISING STAR OF FINTECH

For the last five years, the Bank of Lithuania has been in the driving seat when it comes to building a world-class Fintech ecosystem. A future-oriented strategy has led to it becoming one of the most pro-Fintech regulators in Europe.

With the fastest licensing in the EU, direct access to the SEPA Market, and e-licensing which allows companies to register from anywhere in the world, Lithuania is an ideal destination for Fintech companies looking to access the 512 million-strong market.

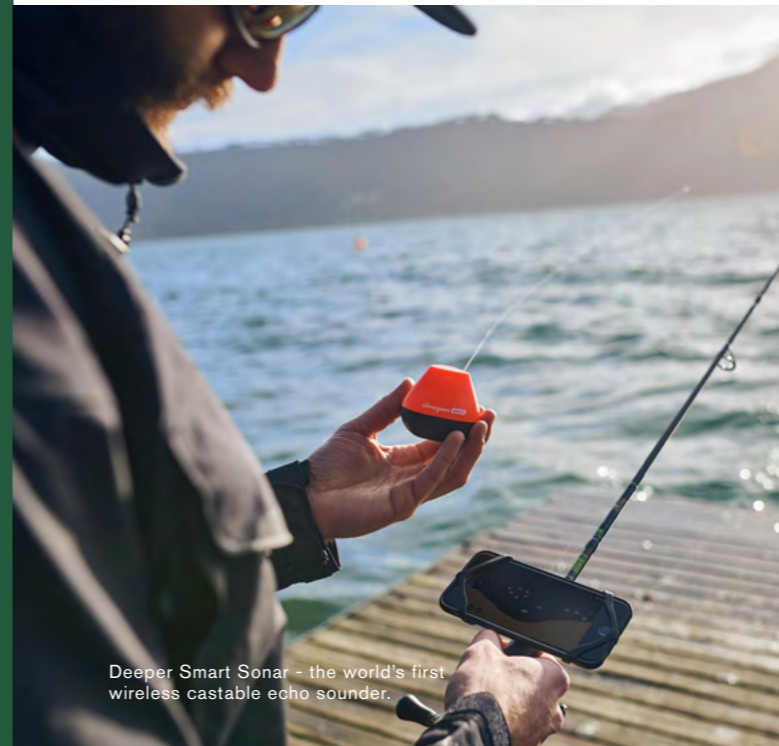
What's more, with a deep and growing talent pool (currently over 31,000 IT professionals in Lithuania), and an ICT infrastructure for business that ranks fourth in the world, there is plenty of room for Fintech companies to grow and scale their operations. That's why there are now over 120 Fintech companies based in Lithuania, and the number continues to grow.



FINTECH COMPANIES IN LITHUANIA

- | | | | |
|-------------|---|---|---|
| Payments: |  |  |  |
| Lending: |  |  |  |
| Blockchain: |  |  |  |
| Others: |  |  |  |

SOME OF THE LITHUANIAN INNOVATORS WHO ARE MAKING WAVES ACROSS THE GLOBE:



Deeper Smart Sonar - the world's first wireless castable echo sounder.

deeper

Deeper created an entirely new product category, and successfully disrupted the fishing technology market, when it introduced the first ever castable wireless sonar for anglers. It scans the water column and bed and transmits data directly to the user's smart phone. Today, Deeper smart sonars sell in over 50 markets, bringing incredible new fishing experiences to hundreds of thousands of anglers. During this time, Deeper has picked up over 35 international awards, including a CES award, and been named by Deloitte as one of Europe's fastest growing tech companies. All thanks to our commitment to quality and innovation.

CUJO AI

CUJO AI is a nextgen artificial intelligence company that provides cybersecurity and device management solutions for network operators worldwide.

CUJO AI platform solutions are delivered via SaaS for all home network devices. It analyzes vast amounts of local network data and then uses proprietary machine learning algorithms to power the features.



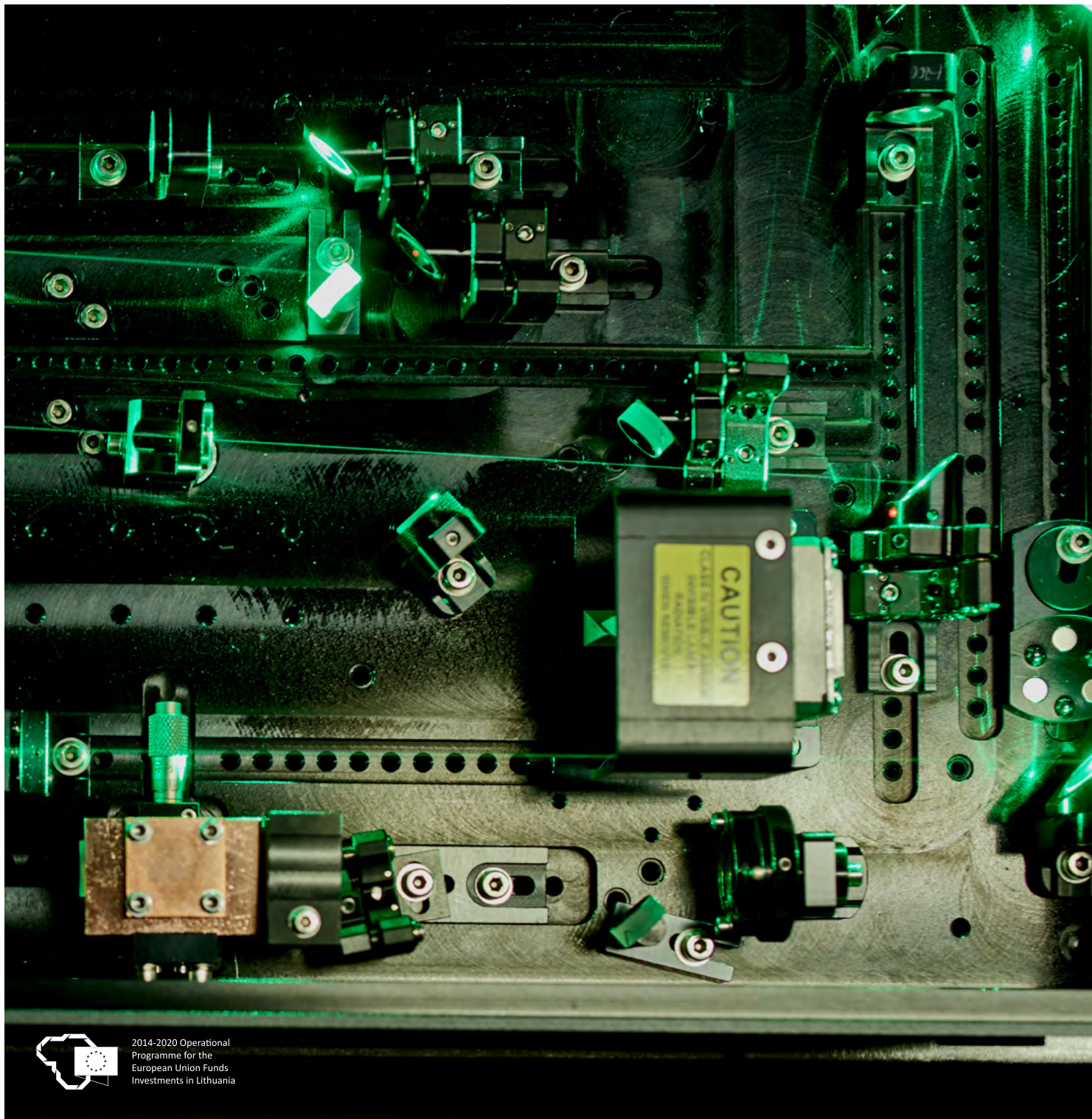
Trafi I>>

Featured on Apple's 'Best Apps of 2014' list, TRAFI uses data collected from both users and transport authorities to provide precise journey information and times. Already present in the Baltics, Turkey and Brazil, the company recently raised \$6.5 million in a Series A funding round led by Octopus Investments.

transferGo

With its customer base currently numbering over 200,000 and expanding by 20% each month, digital remittance service TransferGo has grown substantially since its launch in the Baltics in 2013. And having just secured the largest ever round of seed funding in the money transfer sector, the company is well-positioned to meet its aim of expanding to at least one new destination every month.

Notes



2014-2020 Operational Programme for the European Union Funds Investments in Lithuania



Invest Lithuania is the official agency for Foreign Direct Investment and Business Development.

We'll partner with you to get your business set up and off to the best start possible:

DECISION-MAKING

- Tailored, in-depth market and industry insights
- Advice on business costs
- Information concerning the local labour and legal framework

BUSINESS ESTABLISHMENT

- Intros and meetings with key market players and relevant governmental institutions
- Sourcing of governmental financial support

BUSINESS DEVELOPMENT

- Assistance with one-off problems
- Lobbying for greater governmental support



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