



# Quo vadis European tech?

Ivo Špigel, Perpetuum  
HROUG, Oct 2018

January 9, 2001



# Music today



AXON



# NEXT STATION: EUROPE

How Europe's tech startup ecosystems are evolving



techEU



# FUNDING ANALYSIS

## KEY TAKEAWAYS 2017

2017 funding total

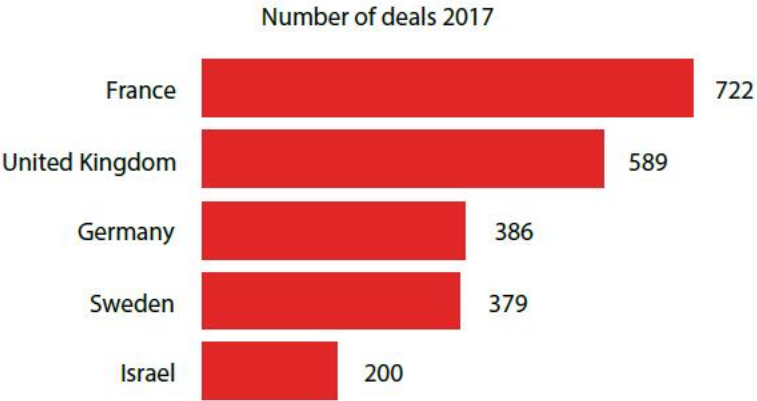


+52.4% compared to 2016

2017 number of deals



-1.7% compared to 2016



# FUNDING BY YEAR

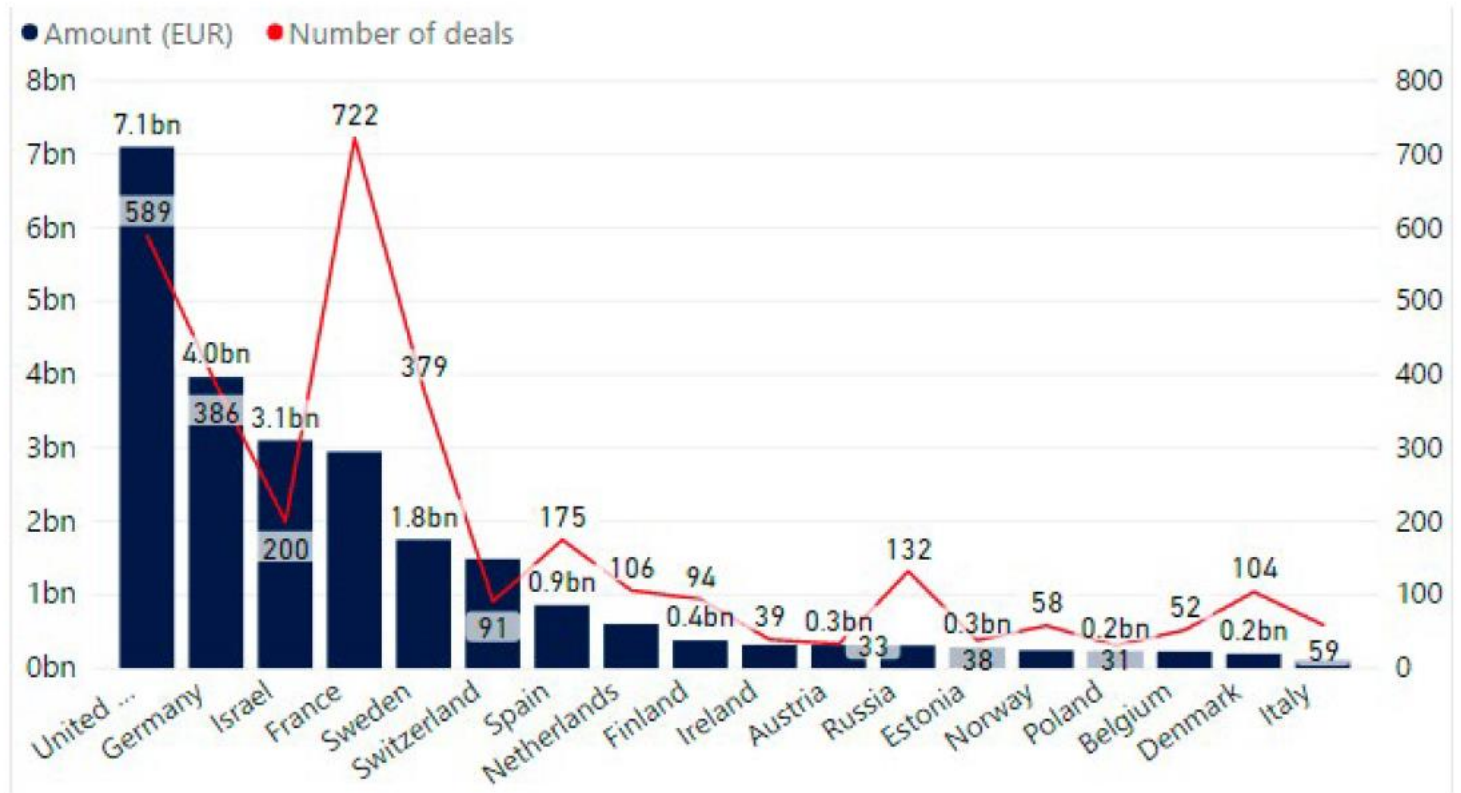
Investment volume and number of deals in Europe, Israel and Turkey by year





# FUNDING ANALYSIS

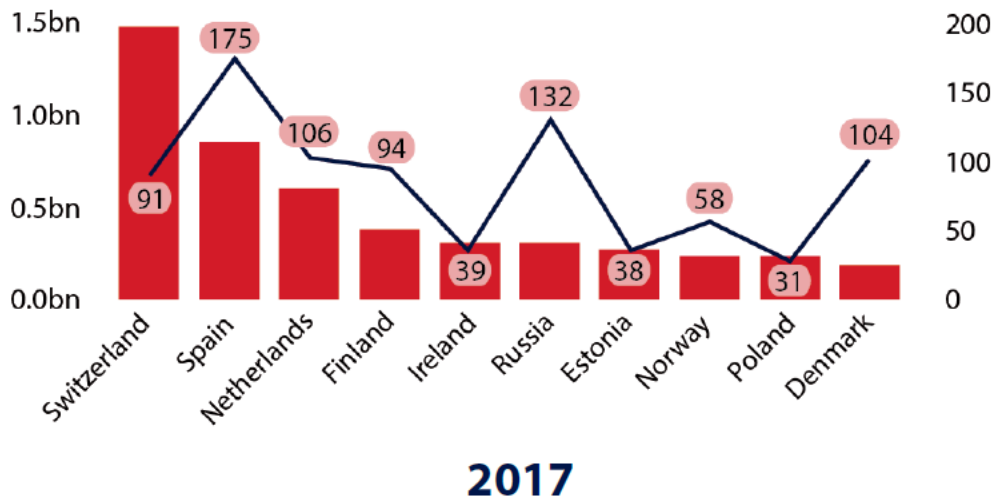
## FUNDING BY COUNTRY



The UK once again held top place for funding in 2017, with a record €7.1 billion raised, a 115% YoY increase. Six startups in the UK raised over €200 million throughout the year.

## FUNDING ANALYSIS

# FUNDING BY COUNTRY IN DEVELOPING ECOSYSTEMS



Smaller, developing tech ecosystems in Europe show clear signs of maturation since 2014, though they don't show the same growth trends as the top 5 countries. In part, this is because the countries are smaller or less wealthy, and have less resources and VC funding available, but can also be attributed to brain drain - or entrepreneurs and startups migrating to stronger ecosystems where there are more opportunities for raising capital and networking, especially the UK.

In most cases, overall funding is correlated with a country's population and wealth. For example, the UK, France, and Germany have the highest populations in Europe, excluding Russia and Turkey, which have very low per capita GDPs.

## FUNDING PER CAPITA 2014 - 2017

Country	Total funding 2014-2017	Population	Funding per capita
Sweden	€4.85 billion	10 million	€485
Estonia	€545 million	1.3 million	€419
Switzerland	€3.1 billion	8.4 million	€369
United Kingdom	€17 billion	65 million	€262
Finland	€1.1 billion	5.5 million	€200
Germany	€10.9 billion	81.5 million	€134
Netherlands	€2.2 billion	17 million	€129
Denmark	€781 million	5.7 million	€137
France	€7.9 billion	67 million	€118
Belgium	€744 million	11.4 million	€65
Austria	€516 million	8.7 million	€59
Latvia	€93 million	2 million	€50
Spain	€2.3 billion	46 million	€50
Lithuania	€92 million	3 million	€31
Italy	€536 million	50.5 million	€9
Poland	€355 million	38 million	€9
Russia	€1.14 billion	144 million	€8
Czech Republic	€38 million	10.5 million	€4

# Say hello to VentureEU, a €2.1 billion funds-of-funds programme that will back VCs across Europe



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# 2017 THE STATE OF EUROPEAN TECH

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23,837%

## THE RESEARCH

3.1 Europe's tech ecosystem is fed by a strong pipeline of world-class talent [Save](#) ☆ [VIEW](#)

3.2 Europe's tech workforce and developer population is booming [Save](#) ☆ [VIEW](#)

3.3 The presence of tech giants in Europe is changing the dynamics of the region's talent pool [Save](#) ☆ [VIEW](#)

3.4 The UK is Europe's dominant destination for migratory tech talent [Save](#) ☆ [VIEW](#)

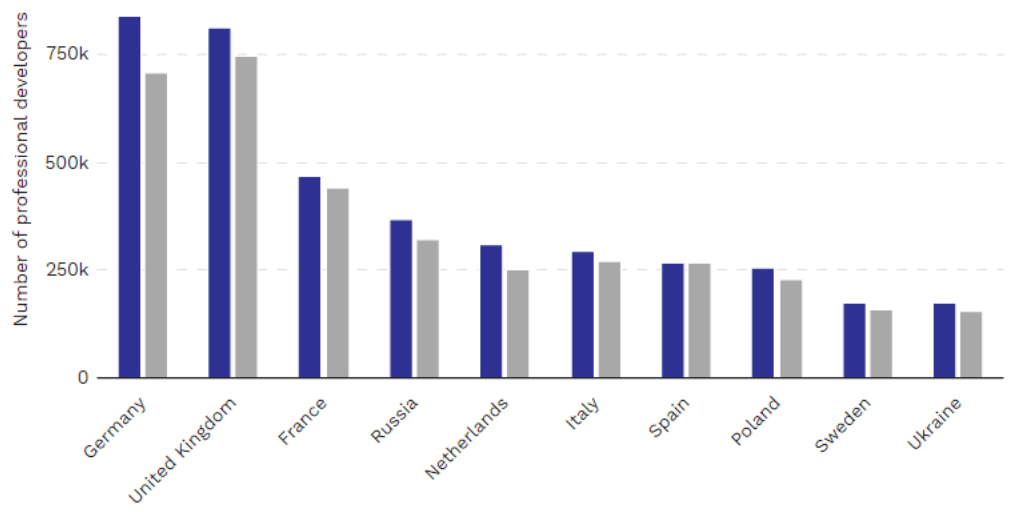
# 3.2 Europe's tech workforce and developer population is booming

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There has been rapid growth in the size of the professional developer populations in most European countries

Number of professional developers by country

Dataset Top 10



● 2017 ● 2016

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THE RESEARCH

4.1 Save ☆

Europe's growing and highly-engaged tech communities

VIEW

4.2 Save ☆

As tech eats Europe, every city is becoming a tech city

VIEW

4.3 Save ☆

Despite burgeoning local ecosystems, founders continue to move between countries to start-up

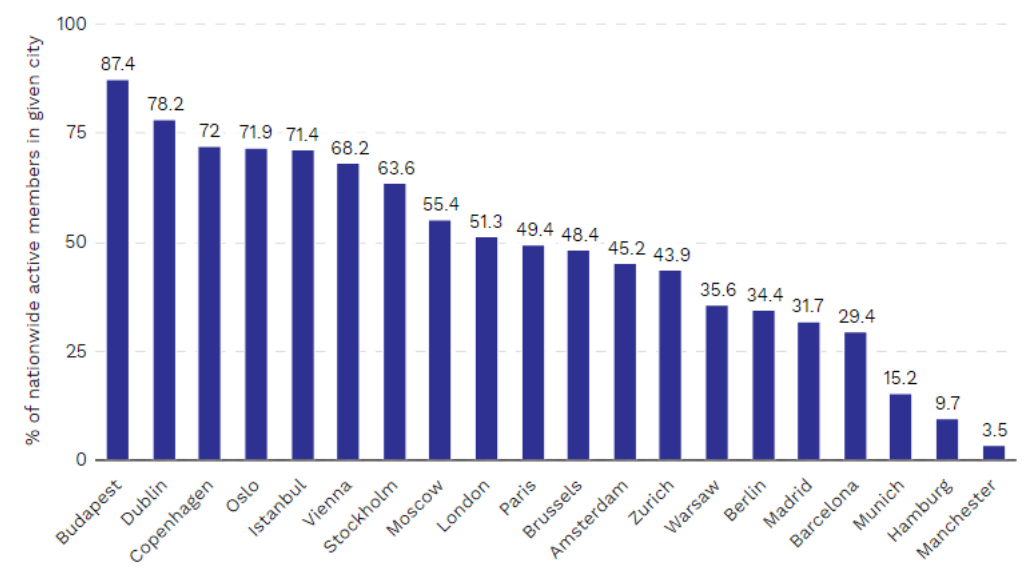
VIEW

# 4.2 As tech eats Europe, every city is becoming a tech city

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The density of concentration in primary tech hubs varies significantly between countries, especially as new hubs spring up and prosper with a country

Share of active members of tech Meetups in a given city



● % of nationwide active members

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**CAPITAL FLOWS**

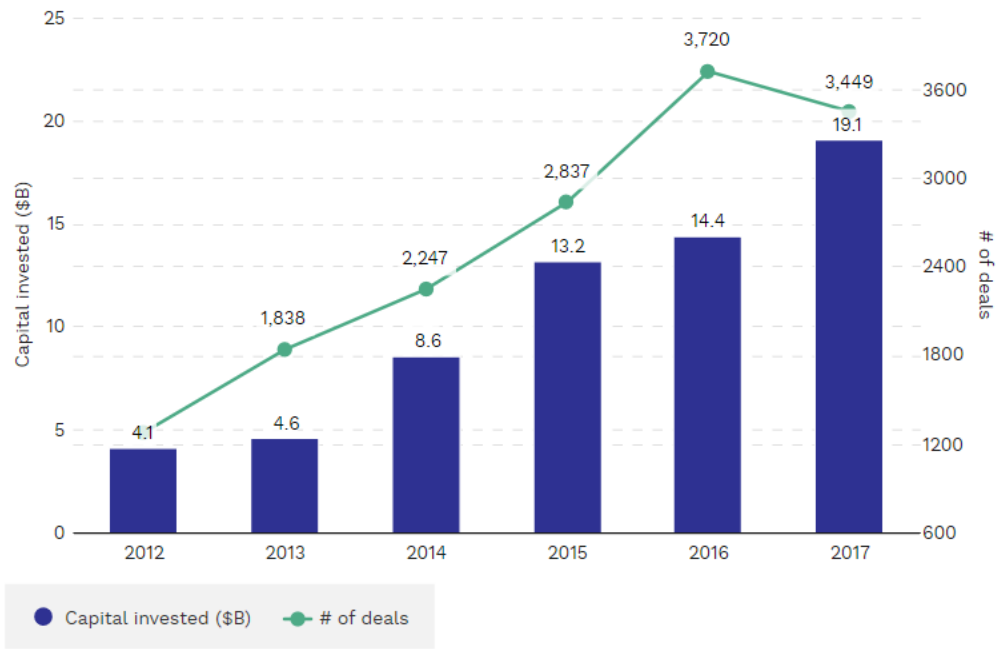
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- 5.4 2017 has seen another strong year of fundraising for European VCs [VIEW](#)
- 5.5 There is still work to be done to further diversify the

# 5.1 Another record year for European tech investment

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### Total capital invested into European tech in 2017 will comfortably exceed the record-breaking levels of 2016

Capital invested (\$B) and # of deals, annual, 2012 to 2017



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Note: All Dealroom.co data excludes the following: biotech, secondary transactions, debt, lending capital, grants. Please also note the data excludes Israel. 2017 based on 9M to September 2017 and projection.

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- 01 DEEP TECH
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## THE RESEARCH

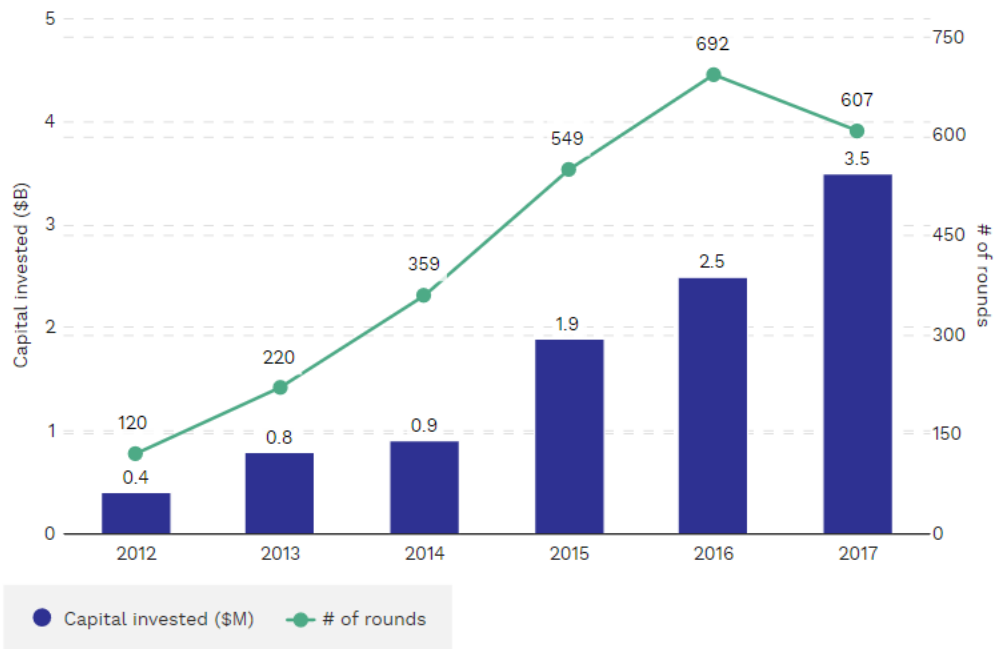
- 6.1 [Save ☆](#)  
European deep tech continues to attract large investment  
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AI & crypto are seen as major opportunities for European tech leadership on the global stage  
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Europe is home to the world's leading AI research community  
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Europe is well-positioned to play a key role in crypto space  
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- 6.5 [Save ☆](#)  
Europe leads the race to

# 6.1 European deep tech continues to attract large investment

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Europe is on track for \$3.5B to be invested into deep tech companies in 2017 across more than 600 deals

Capital invested (\$B) in and # of deals closed by European deep tech companies



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Note: 2017 based on 9M to September 2017 and projection for Q4 2017 based on Q3 2017

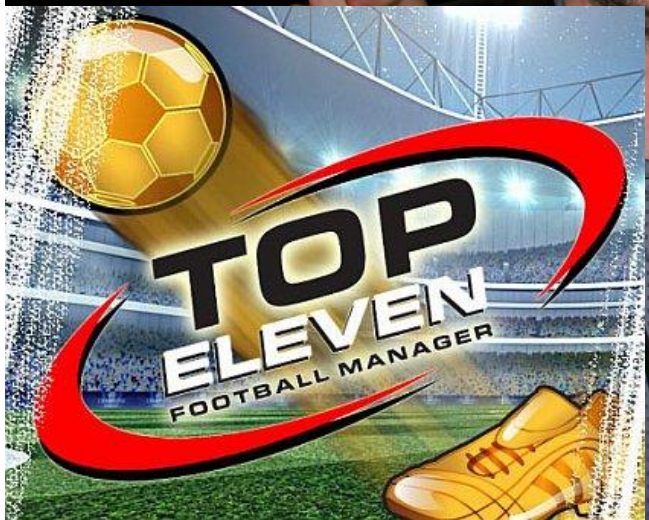
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# How are we doing in 2018?

- European VCs invested €4.4 billion across 571 rounds in the first quarter of 2018, nearly matching last year
- Deal count, however, saw a 49% decrease YoY, marking the fifth consecutive quarter deal count has trended downward.
- With 18 vehicles closed by European VCs totaling €2.1 billion in commitments, 2018 appears to be on track to just fall short of 2017's fundraising metrics.
- VC-backed exits started off slowly in the first quarter of 2018, with €1.5 billion of value exited across only 64 deals.
  - (source: PitchBook.com)



**WORLD OF TANKS**

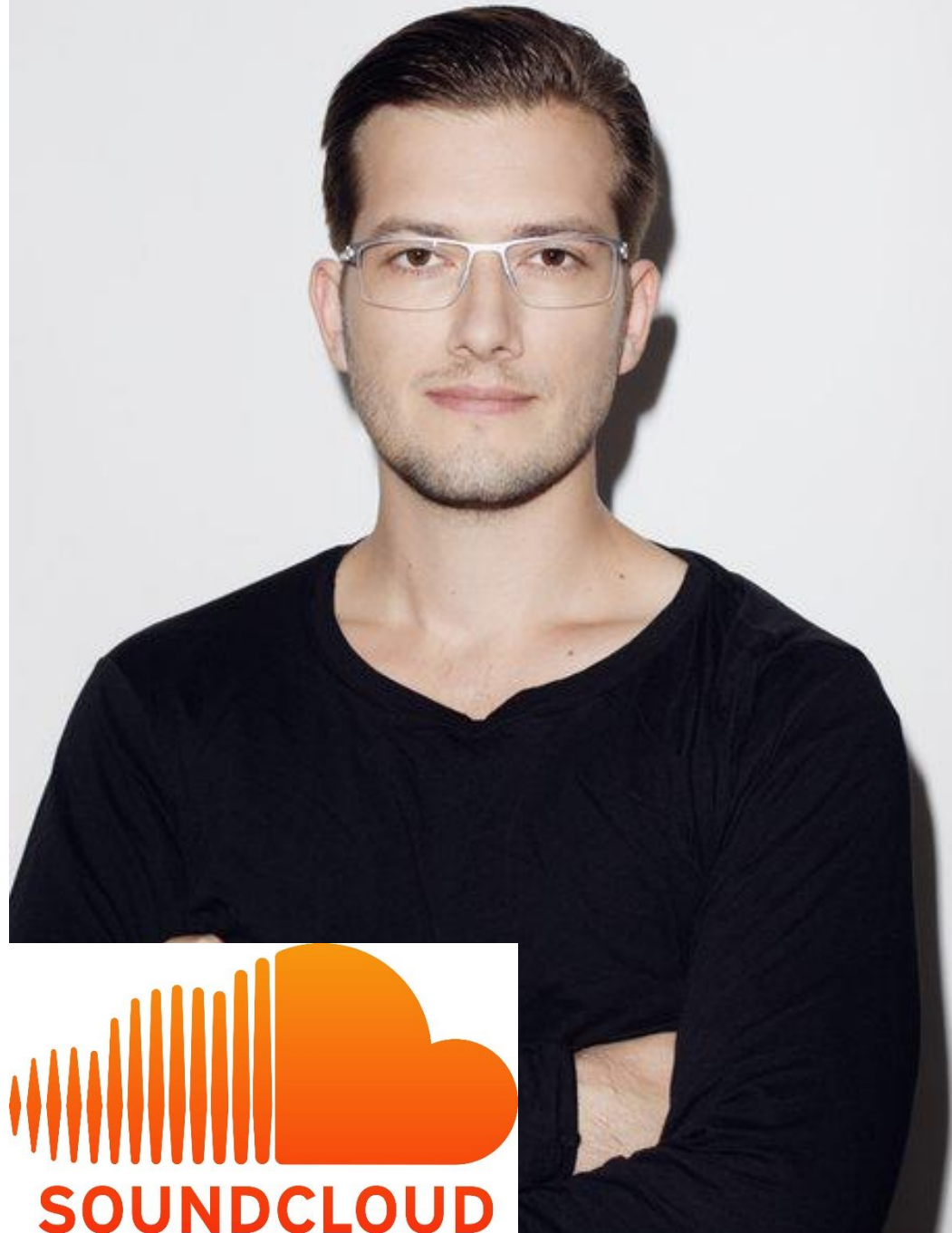




**CLASH**  
of **CLANS**













$$21. 9x - 7 = 13 - 4x$$

chairs sells  
price of the

0. The table  
find the price

$$x = \frac{20}{13}$$

Steps →

PhotoMath  
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„Black Magic from  
the Devil!”





 **TransferWise**

# What do some of the players say?

- Q: What should European policy makers do - or not do - to support the growth and success of European high tech? In particular - should they do anything different than what they are already doing?

# Herty Tammo, Startup Wise Guys, Tallinn

- Make ICO-s legal in EU so that other entrepreneurs can come to EU and do it there.

# Stefan Glaenzer, Passion Capital

- More visa for techies, accepting that digital is changing societies quicker than previous stuff, i.e. Change from agrarian to industrial. Faster access to the net. More deep tech university centres. More money invested in both education and start ups

# Siim Sikkut, Gov't CIO, Estonia

- I am biased - but they should do all of this:
- [https://www.eu2017.ee/sites/default/files/2017-10/TallinnDigitalSummit\\_Conclusions\\_0.pdf](https://www.eu2017.ee/sites/default/files/2017-10/TallinnDigitalSummit_Conclusions_0.pdf)



# Tom Wehmeier, Atomico

- I think the biggest shift is to move into 'offence' mode and to start viewing regulation as an opportunity to derive competitive advantage at the country and regional level. If you look at all of the key new technologies that will transform our economy over the next 5-10 years (autonomous vehicles, crypto/blockchain, AI (applied in health and other verticals), intelligent robots, drones, VTOL aircraft, genomics, etc), they all require updates to our existing regulatory frameworks in order to enable full commercial deployment. We should look at how we can use regulation as a means to capture the opportunity - in terms of increased investment into these technologies and an accelerated commercialisation timeline - that these technologies present, not just in terms of investment, employment, but also in terms of the role they'll play in tackling major global societal challenges, whether that's climate change, healthcare access and outcomes, sustainable food production, congestion or other.

# Robin Wauters, Tech.eu

- A lot of them are doing good work, some aren't doing anything, some are doing harm. What I'd like to see them do more is communicate between each other, learn from best practices, bring data and examples to the table, and come up and implement policies that encourage entrepreneurship across borders.

# Christian Thaler-Wolski, Investor, Advisor

- Align regional, national and EU programs that they seamlessly tie into one another, limit redundancy and competition among one another. Hire former entrepreneurs and investors to run those programs.

# Alex Barrera, Tech.eu

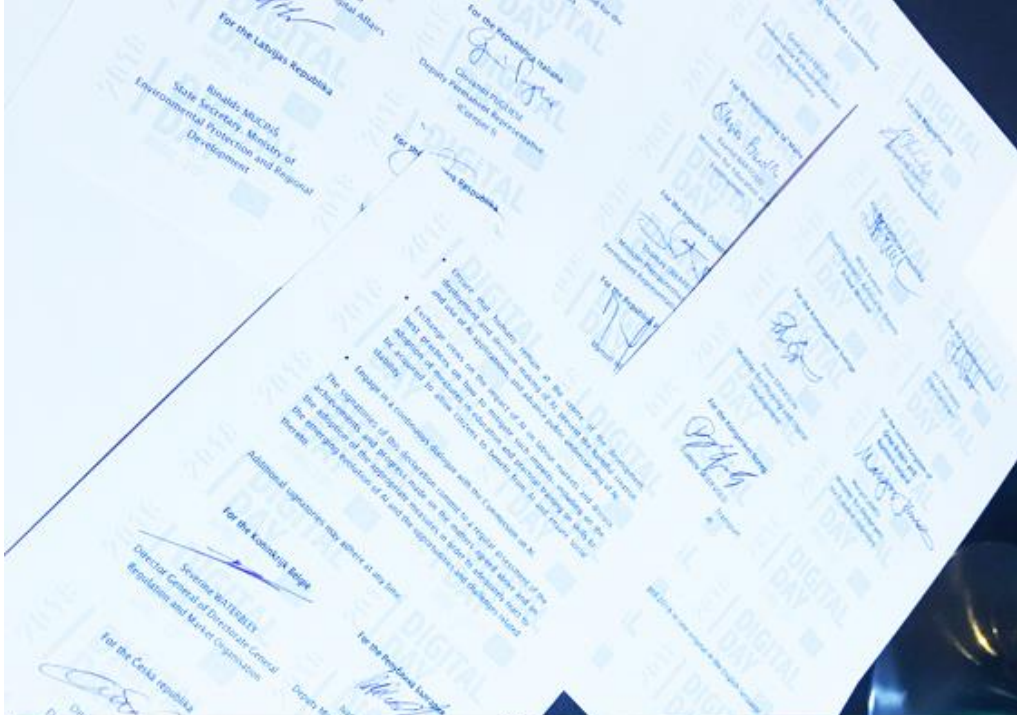
- Europe needs to do a big push promoting and training capable people in Artificial Intelligence and Machine Learning methods. The lack of available talent is putting EU startups at a disadvantage with others elsewhere.

# Max Kelly, Techstars London

- Scaling companies need: a) money, b) talent, c) customers. So keep funding open with the EIF and make sure there are good tax incentives for early stage investors. Make sure free movement of talent is encouraged. And enable large companies to work with small ones (trade missions, support programs etc). And on a separate note, stop Brexit.

# Digital Day – AI Declaration

- „On 10 April 25 European countries signed a Declaration of cooperation on Artificial Intelligence (AI). Whereas a number of Member States had already announced national initiatives on Artificial Intelligence, they now declared a strong will to join forces and engage in a European approach to deal therewith. By teaming up, the opportunities of AI for Europe can be fully ensured, while the challenges can be dealt with collectively.”



# Digital Day – Blockchain Declaration

- „22 European countries have signed a Declaration on the establishment of a European Blockchain Partnership. The Partnership will be a vehicle for cooperation amongst Member States to exchange experience and expertise in technical and regulatory fields and prepare for the launch of EU-wide blockchain applications across the Digital Single Market for the benefit of the public and private sectors. This should ensure that Europe continues to play a leading role in the development and roll-out of blockchain technologies.”





„I think artificial intelligence will disrupt all the different business models and it's the next disruption to come. So I want to be part of it. Otherwise I will just be subjected to this disruption without creating jobs in this country. So that's where we are. And there is a huge acceleration and as always the winner takes all in this field. So that's why my first objective in terms of education, training, research, and the creation of startups is to streamline a lot of things, to have the adaptable systems, the adapted financing, the adapted regulations, in order to build champions here and to attract the existing champions.”

Emmanuel Macron, „Wired” interview, on investing €1.5 billion in AI



# Where is Croatia in all this?

- There are actually *two* Croatias
- „Croatia 1” is the tech ecosystem, successful companies *in spite* of everything around us – startups, CISEx, gamers, blockchainers
- „Croatia 2” is the Government – clueless enough to miss out on even such simple steps as joining strategic initiatives
- In the long term, the biggest issue for the tech industry is the low standing, and in particular low internationalization, of the public universities, particularly Zagreb University

# Croatia 1

- Microblink
  - Bellabeat
  - Repsly
  - Rimac
  - Memgraph
  - Oradian
  - Amodo
  - STEMI
  - ... and many others
- ZIP
  - Osijek Software City
  - CISEx
  - Code Club
  - Step.RI
  - Shift Conference
  - DUMP Days
  - CRANE
  - ... and many others

# Croatia 2

## Dramatičan pad zagrebačkog sveučilišta na svjetskoj rang listi

Nenad Jarić Dauenhauer  
Prije 4 dana

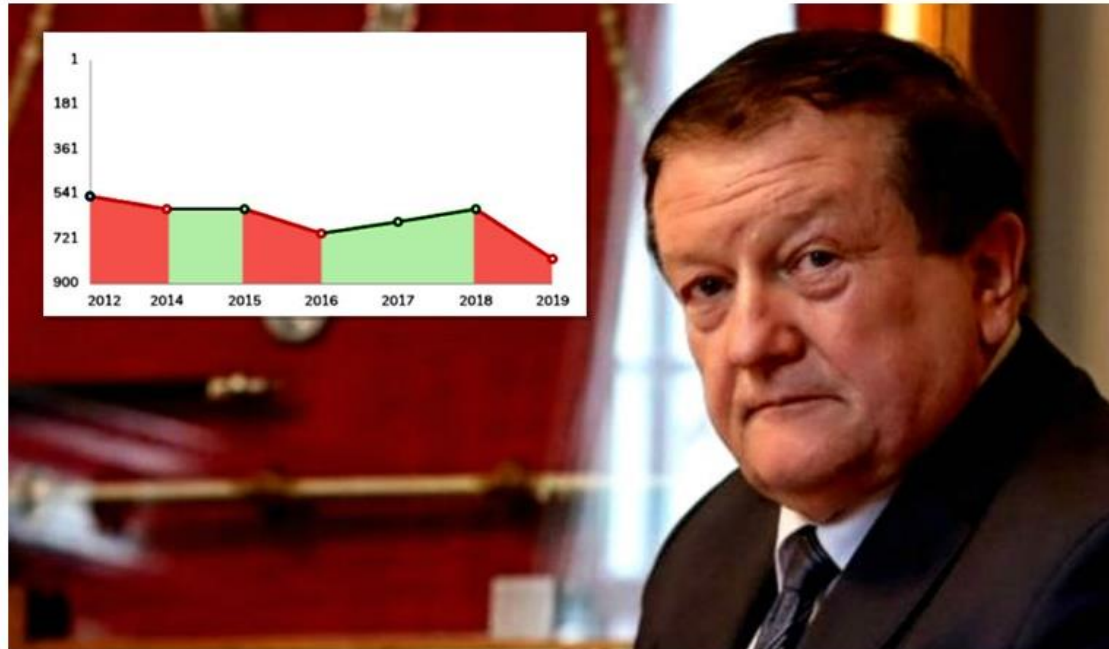


Foto: QS

VEĆ SMO navikli na vijesti da Sveučilište u Zagrebu iz godine u godinu pada na svim uglednijim rang listama najboljih svjetskih sveučilišta, no ove se godine na jednoj od najpoznatijih doslovno strmoglavilo.

f 28 <

**Too Much Trampolin sa zaš...**  
Trampolin je odlična sprava za vježbanje pomoću koje ćete poboljšati svoju ravnotežu, ko...  
1 105 Kn  
**KUPI »**

**Whiskas jastučići, govedin...**  
Whiskas jastučići s okusom govedine za mačke.  
197,90 Kn  
**KUPI »**

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NAJNOVIJE NAJČITANIJE VEZANO

**25 min** Policija, ronioci, HGSS i dron danima tražili mladića, a on krao po istarskim kampovima

**29 min** Njemačka televizija upozorava da Plitvice smrde jer su pune smeća iz kanalizacije

**49 min** Grčki i makedonski premijer opet pričali o imenu Makedonije

# What about SEE?

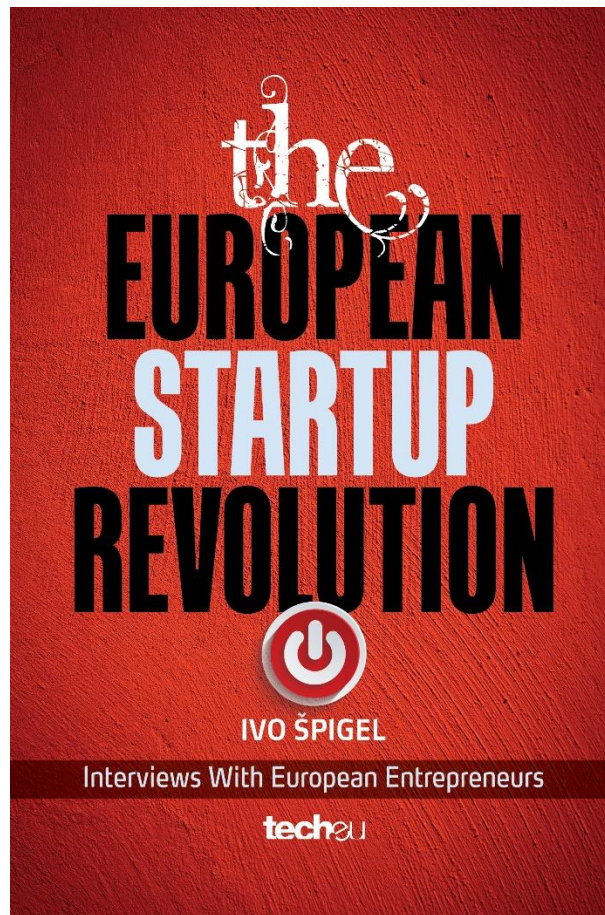
# We need to push our politicians

- By and large, SEE politicians and policy makers are way behind EU when it comes to digital topics.
- YES I know they are preoccupied with more „down to earth” issues but STILL we need to push for change, to make the digital NOW and the digital FUTURE happen in SEE

# We also need to break away

- The SEE tech ecosystem is in the „bubble“. Our startups speak the same lingo, have the same problems („can't find a tech cofounder!“) as their brothers and sisters in Nordics, France, UK, DACH etc.
- We need to encourage them to embrace the virtues of a borderless Europe / world while we work hard in the background to make things better for the next generation of digital mavericks – the next Talking Toms, Wargamers, Top Elevens and Skypes





- [www.europeanstartuprevolution.com](http://www.europeanstartuprevolution.com)

AND FAKEGRIMLOCK SAY

# TIME TO BE



# AWESOME

Ivo Špigel

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