



ATOMLEAP



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**STARTUP
INTELLIGENCE**

**STARTUP
ACCELERATION**



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STARTUP INTELLIGENCE



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50m startups forming each year.
1.35m high-tech startups.



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Which startups are relevant?

Which ones are good & which are bad?

What are major trends?

How many startups operate in my industry?

What is their business model?

Do we know anything about their technology?

Which startup should I talk to?

And which one should we look out for?

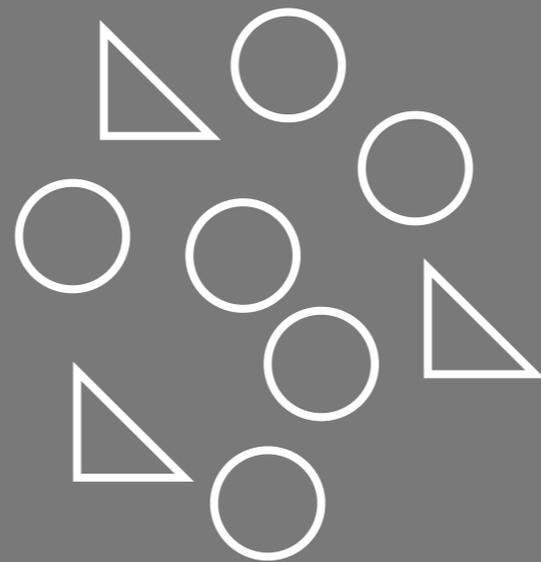
And which one should we copy?

How does all this connect to my digitization strategy?



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WHY WE DO IT

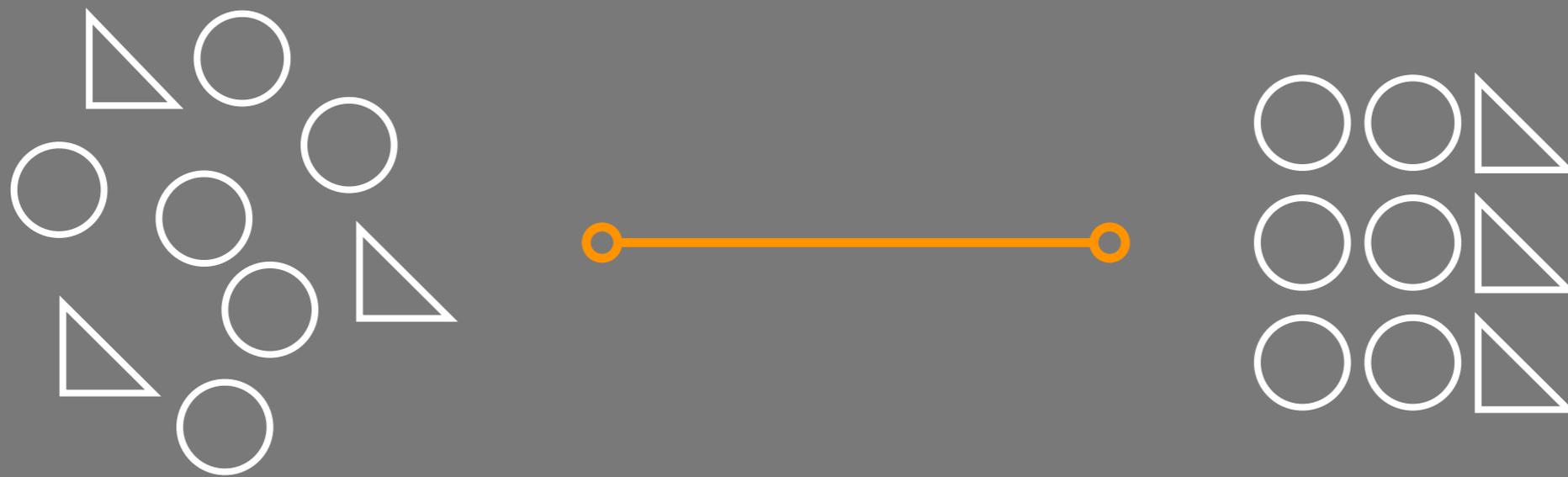


Startups & technologies are
hardly comprehensible.



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HOW WE DO IT



From noise to order.



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HOW WE DO IT

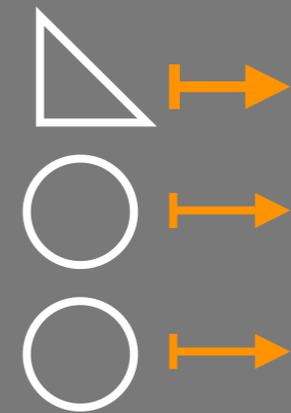


From order to relevance.



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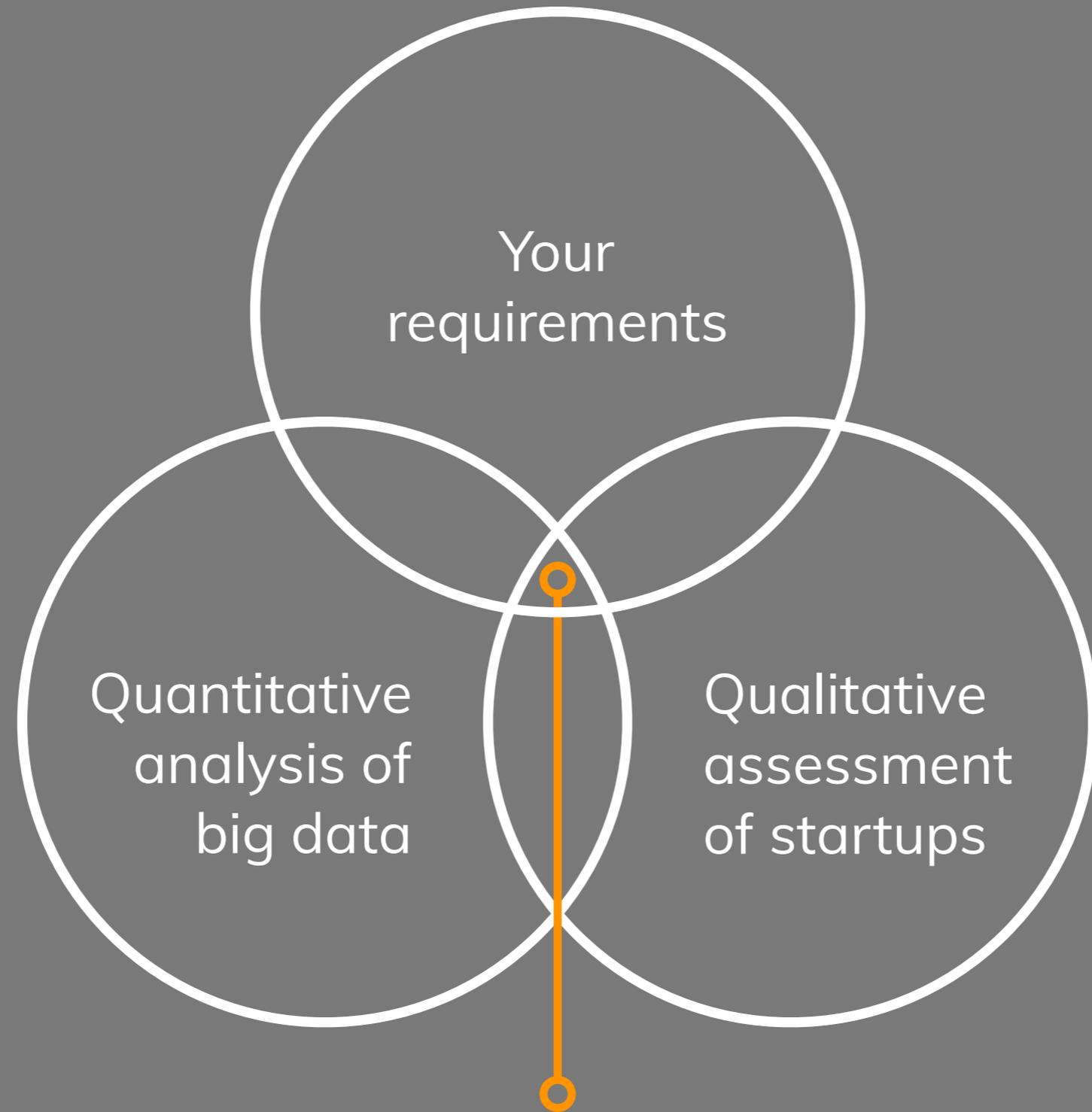
HOW WE DO IT



From relevance to insights & action.



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Your highly customized insights.



1.2m

startups
in our global
database

140k

tech startups
founded
after 2010

900

startups per
sector



ATOMLEAP

Accelerator program

for high-tech startups

Allows us to
screen & assess
startups

Based at
IoT Factory
in Berlin

**Free
advise**
for business,
technical, legal,
design issues

62
startups were
screened &
participated

3 day
bootcamp



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STARTUP ACCELERATION



ATOMLEAP

Smart Textiles & Wearables

accelerator program

All applications
are screened &
assessed

Based at
IoT Factory
in Berlin

6 startups
are selected and
supported

3 day
bootcamp

Free advise for
business,
technical, legal,
design issues



WHAT YOU GET IN A NUTSHELL

INDIVIDUAL
WORKSHOPS

€ 10.000
PRIZE MONEY

ACCESS TO
INVESTORS

COWORKING
SPACE

TOOLS &
MACHINERY

NETWORK
EVENTS



WHAT WE CAN HELP YOU WITH

**USER &
USE CASE**

**BUSINESS
MODEL & VP**

**TECHNOLOGY &
PRODUCT**

**LEGAL &
FOUNDING**

**MARKETING &
SALES**

**HR &
CULTURE**



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Smart Textiles & Wearables

accelerator program

Smart gloves
for assembly line
applications

Wearables
for fitness
tracking

Gesture control
wearables for
industry
maintenance

VR
headset for
stress
reduction

Smart
bandages for
wound healing



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Join our accelerator program.
Apply at www.collidercamp.com.



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**EMBEDDING
STARTUP TACTICS
IN DIGITIZATION
STRATEGIES.**

**EMBEDDING
NEW VENTURES
IN ESTABLISHED
ECOSYSTEMS.**



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**STARTUP
INTELLIGENCE**

**STARTUP
ACCELERATION**



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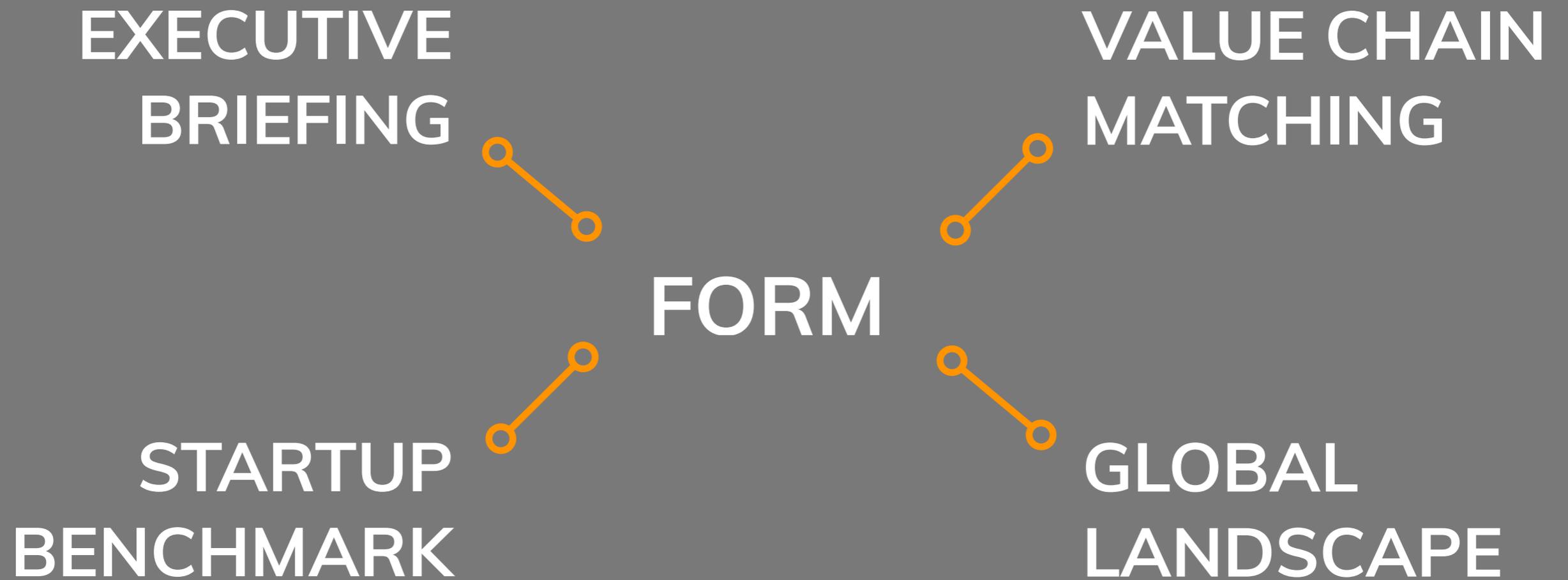
KONSTANZE NEUMANN

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BACKUP



THE OUTPUT YOU NEED



EXECUTIVE BRIEFING

Automotive cybersecurity & on-chip encryption



An estimated 100 million connected cars will roam the road by 2025. Lives will be saved when the emergency system eCall opens a communications channel capable of transmitting vehicle data. But it will also be yet another potential gate into the car's systems for hackers. Latest news of Volkswagen's vulnerabilities, for example, show that ignition and locking software systems of millions of cars are flawed and can be hacked. But it's not just software, special purpose hardware is needed too to increase **automotive security**. It comes at no surprise that investments in cybersecurity startups—both hardware and software based—are on a steep rise (fig. 1).

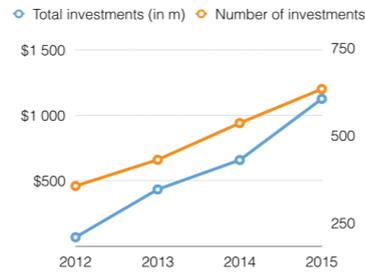


Fig. 1 Cybersecurity startup investments

Auto-ISAC published best practices highlighting the importance of integrated hardware cyber security features. Comprehensive car security entails **communications** and OTA management as well as **embedded module protection**— including single board computers, body control and sensor modules, the chips driving the modules, and the bus protocols connecting them. The hardware supports secure boot or credential storage, and accelerates the **execution of the cryptographic algorithms** to meet the performance requirements of applications. For this brief, we identified three startups for you that will be vital in making connected cars more secure.

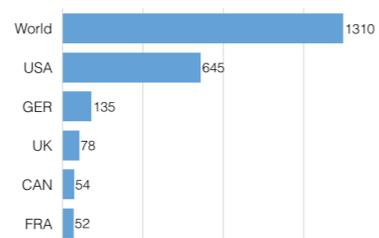


Fig. 2 Where cybersecurity startups are from



Karamba Security is based in Tel Aviv and emerged from stealth mode in 2016. The startup offers endpoint security to protect cars by hardening Electronic Control Units (ECUs). Software shields the factory settings of each controller and prevents alien code and processes running on controllers.

Technology score | 3
Business score | 4



Rubicon Labs was founded in 2007 and recently revealed a breakthrough product. The so-called TLS Amor couples software on device and hardware at semiconductor level. The hardware security platform protects and accelerates the execution of high-value cryptographic SSL/TLS keys in untrusted data centers.

Technology score | 5
Business score | 3



Lab Mouse Security will soon unveil a product that is based on DARPA and GSMA funded work. It will enable developers to use the security model and learnings which kept the GSM network secure for decades. The hardware provides a trusted root for endpoint devices and improves the security of their communication channels.

Technology score | 4
Business score | 3



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BRIEFING

Trends

Sub-trends

Representative and relevant startups for particular topics



BioCollection

Upcycles plastics with genetically modified bacteria

Founded in 2015, BioCollection already raised more than \$ 380k to advance their plastics upcycling technologies. The San Jose-based startup claims to “upcycle unrecyclable plastic waste into valuable compound rhamnolipid for textiles”. It uses genetically modified bacteria to achieve this transformative process. BioCollection hopes to disrupt the textile industry and fight the global plastic pollution crisis.

Tech scores

At this point, the startup’s technology is difficult to assess. It stands out that the team is highly tech-focused though. From their website: The “technical co-founders [...] have worked on the science behind the invention for the past four years and currently hold two provisional patents for this technology.” BioCollection also looks for a senior genome engineer and a senior chemical engineer. And they’re currently working out of “UPenn Chemical and Biomolecular Engineering Lab to complete the wet lab prototyping”, underlining the team’s technological orientation and R&D stage.

Business scores

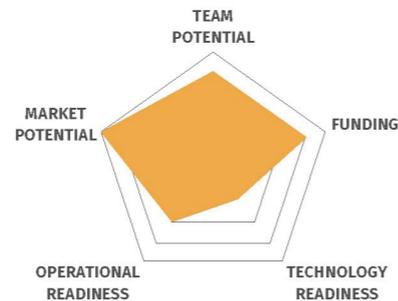
Though BioCollection is dominantly tech- and research-driven, it also intends to further develop its business side. The “management team receives mentorship from world-class experts in science, scale-up, and business development, and has investors from USA, China, and Europe”, and received the Wharton Entrepreneurship Woods Award for “substantial growth and significant progress” in early 2016. The team also recently raised a convertible note of \$ 190k from three international investors in May 2016. This increases the total funding BioCollection received to date to \$ 380k. It is likely that the money will be used to fund new hires and advance the technology. As one of the investors explicitly supports “game-changing startups with potential in China” a market entry focus seems obvious.

Disruptivity index

8.5

Tags

sustainability, waste management, textiles, biotechnology



Founded
May 2015

HQ Location
San Jose, CA, United States

Team Size
1 to 10

Funding
\$ 380,000

Key Investors
China TBE Capital Partners,
Dorm Room Fund, Indie Bio, SOSV

Website
www.biocollection.com



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BENCHMARKING

In-depth analyses

Benchmarking startups against each other

AtomLeap disruptivity index



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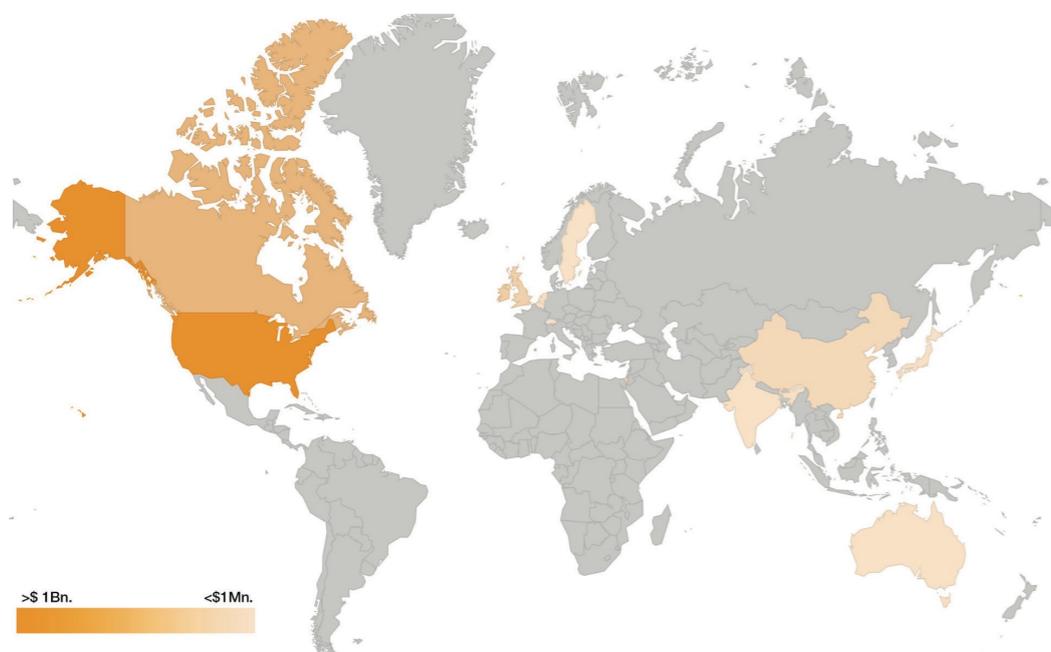
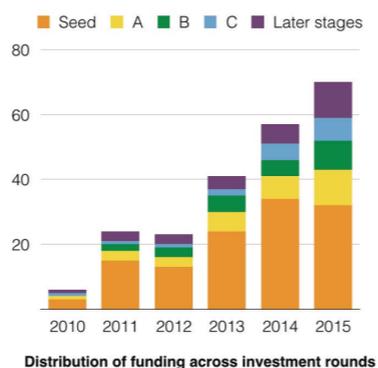
GLOBAL LANDSCAPE

Funding trends

Global distribution & hotspots

The waste management startup sector is dominated by the United States, Canada and Great Britain, followed by healthy developments in the Netherlands, Germany, Israel and Australia. In the developing world, India and China are leading the way with startups trying to address the impact pollution has had over the last decades.

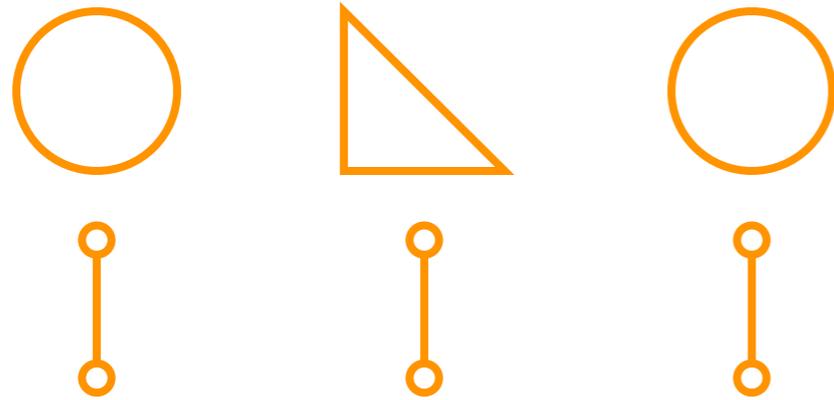
Total investments and number of successful rounds have consistently increased since 2010. There was an early spike in 2011 where we saw a number of very large investments and acquisitions as well as a significant boost in early stage grants and investments. The last one and a half years saw a cooling off of these investments, with 2016 now on track to a similar number of deals as 2015.



Where the money goes: Startups investments of more than \$ 500,000 per investment in the last five years



VALUE CHAIN MATCHING



3

Startup matching

Identify future value chain

2

Future value chain

Matching startups along the future value chain

1

Current value chain



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Laydrop

2015 — LAYDROP



2016 — AUGLETICS