

2023 INVESTMENT, INNOVATION HUBS & TRENDS REPORT ON THE STATE OF THE EUROPEAN FOODTECH ECOSYSTEM



 DigitalFoodLab

with  Nestlé

HELLO,

We are DigitalFoodLab's founders, Jérémie & Matthieu. We are:

- **Food entrepreneurs**, founders of one of the first French FoodTech startups (2010-16), which we successfully exited
- **FoodTech experts**, co-founders of DigitalFoodLab
- **Angels, coaches and board members** of FoodTech startups

But above all, we want to accelerate the emergence of the future of food.



DIGITALFOODLAB

WE WORK WITH LEADING ORGANISATIONS TO HELP THEM NAVIGATE THE FUTURE OF FOOD

STRATEGY CONSULTING WITH CORPORATIONS TO BUILD THE FUTURE OF FOOD



CONTENT

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INVESTMENT IN STARTUPS

les **miraculeux** **GOURMEY**
archie **Sync** **bolk**



DIGITALFOODLAB

OUR MISSION IS TO HELP YOU NAVIGATE THE FUTURE OF FOOD

EDUCATION - What is happening with FoodTech?

Through formats such as workshops or an executive watch, we help you to have a better understanding of what is happening and avoid missing opportunities.

SOLUTIONS - What innovations can solve your challenges?

Identify the best innovations and partners all over the world to solve your current challenges.

VISION - Are you future-proof?

We work with you to plan what you should do right now to take advantage of all the opportunities (and threats) created by the future of food.



SPONSOR

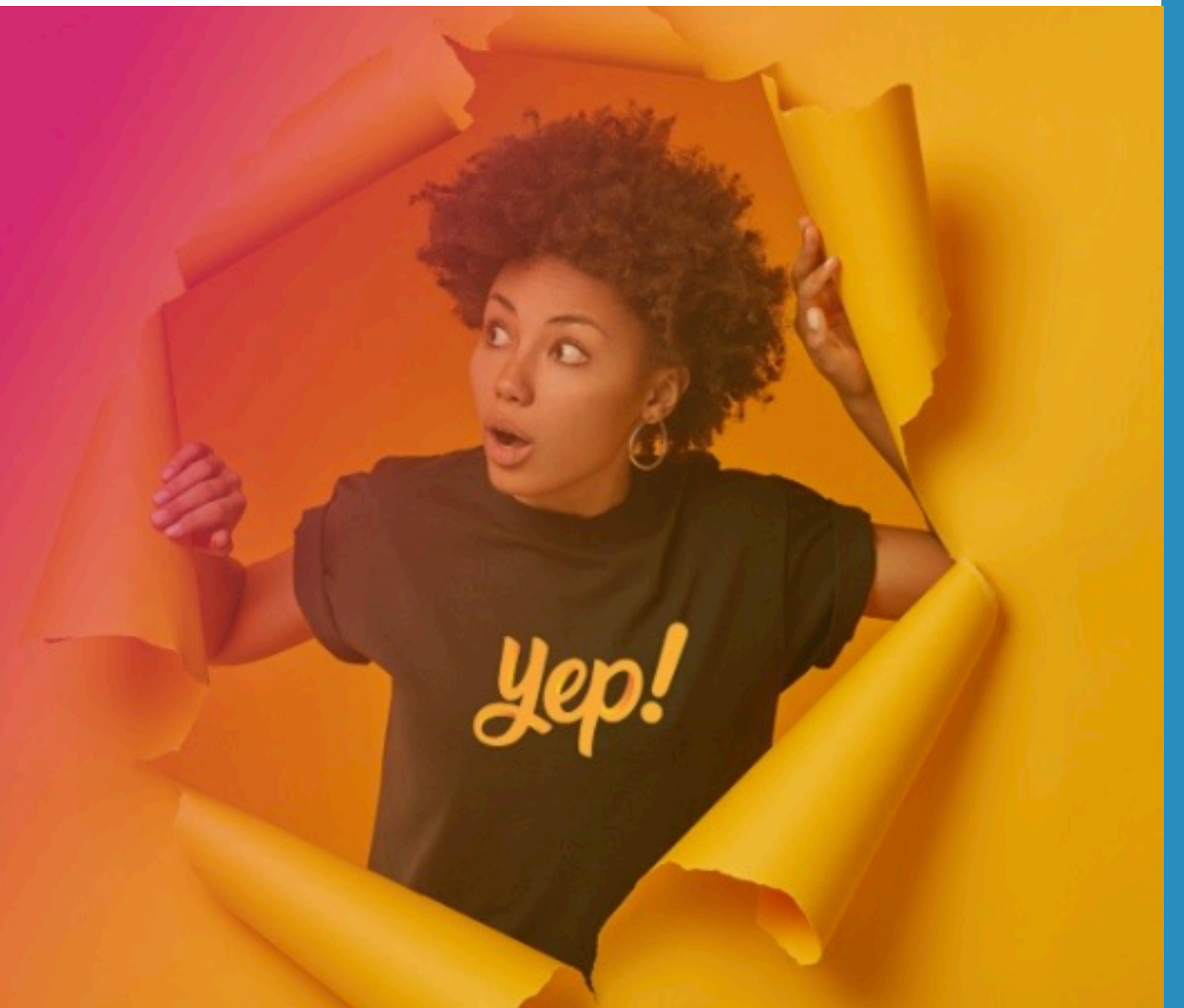
We are grateful for the help provided by our sponsor, **Nestlé**



Nestlé is the world's largest food and beverage company, with more than 2000 brands. At Nestlé, we constantly explore and push the boundaries of what is possible with foods, beverages, and nutritional health solutions to enhance quality of life and contribute to a healthier future. We focus our energy and resources where unlocking the power of food can make the greatest difference to the lives of people and pets, protect and enhance the environment, and generate significant value for our shareholders and stakeholders alike.

Nestlé recently launched its [Youth Entrepreneurship Platform \(YEP\)](#), a new digital platform for young innovators and entrepreneurs who want to learn new knowledge and skills, test an idea or grow their businesses, in areas ranging from food science and technology to the development of products and services - including regenerative agriculture and sustainable packaging.

Key programs available on Nestlé's Youth Entrepreneurship Platform include [Nestlé R+D Accelerator](#), [Purina Unleashed](#), and numerous Nestlé market initiatives.



HELLO,

After a boom year, investments are decreasing, but things are still looking quite good for the future of Europe's FoodTech.

First of all, we thank you for reading this report. This is the sixth edition of our yearly focus on the state of European FoodTech.

After a boom year, **FoodTech investments decreased by 36% between 2021 and 2022.** Still, €5.9B were invested in European FoodTech startups in 2022, **almost twice as much as in 2019 and 2020.**

In such a context, one could think that investments would concentrate in a handful of big and already profitable startups. And indeed many startups without any realistic prospect to reach profitability were left behind. These will have a hard time financing themselves in 2023 and beyond. As some already have, **we expect many of them to simply go bankrupt.**

On the other hand, the number of deals and the amounts invested in early stage startups decreased only slightly. In short, this means that investments in **the « future of the ecosystem » are preserved**, with many new ventures being well-financed. Even more importantly, this also means that investors, many of them corporate VCs, are still seeing FoodTech startups as long-term profitable bets.

Investments declined by 40%, but when delivery is excluded, they actually rose by 21%.

2021's boom was mainly correlated to the explosion of grocery delivery startups. It is no surprise then that this has been the **most affected FoodTech category with a 68% decline in investments in delivery startups** (with still almost €2B invested in these startups).

On the other hand, 2022 has been positive, almost surprisingly so given the context, for other FoodTech categories. Indeed, **investments in the FoodTech ecosystem rose by 21% when delivery startups are excluded**. This increase has notably been driven by investment in AgTech, foodservice, and supply chain startups.

As for categories, not all countries were affected to the same extent. While the British and French ecosystems kept growing and confirmed their position as leading hubs of European FoodTech, investments in German startups were severely affected with a decline of almost 90%.

The investment boom stretched over 5 quarters and ended in Q1 2022. Since then, investments have continued to decline quarter after quarter. Hence, the question now is how deep the bottom will be, when we'll reach it, and how strong an eventual rebound could be. Considering all the positive indicators displayed in this report, we think that we may not be too far from it and that the rebound could be quite powerful.

BUT FIRST... WHAT IS FOODTECH?

DEFINITION

DigitalFoodLab's definition is: **“FoodTech is the ecosystem made up of all the agrifood entrepreneurs and startups (from production to distribution) innovating in terms of products, distribution, marketing or business model.”**

Below are the definitions of the six categories in which DigitalFoodLab sorts all FoodTech startups. A further list of the 32 sub-categories can be accessed on DigitalFoodLab's website.

Food science: startups developing new ingredients and food products.

AgTech: startups disrupting agriculture. They come up with solutions to improve farming output and quality using drones, sensors and farm management software. AgTech is also about new farm products, next generation farms and urban farming.

Consumer tech: startups developing services and devices to help consumer cook, identify the best foods for them and help them reach their personal goals.



Supply chain: startups developing solutions for the food supply chain and food retail industry, from digitalisation to automation.

Delivery: startups developing services to order and deliver groceries and meals.

Foodservice: startups reinventing the hospitality industry. They improve the management of out-of-home businesses today. They also create the conditions for the restaurant of the future with robotics and cloud kitchens.

WHY IS FOODTECH IMPORTANT?

1 - MEGATRENDS ARE SHAPING THE FUTURE OF FOOD

Many trends indicate that our food system is not working as well as it should:

- **Climate:** agriculture is a major contributor to climate change, and in turn some unavoidable consequences will impact food production.
- **Demography:** The world's population is getting both richer and older, which is creating a lack of workers in the food system and putting pressure on food companies to make healthier products.
- **Inequality:** food, and the value it creates, is unequally distributed.



WHY IS FOODTECH IMPORTANT?

2 - TECHNOLOGIES & CAPITAL ARE NOW AVAILABLE TO ENABLE A FOOD REVOLUTION

- **Technologies, such as AI or synthetic biology, are now available and ready to scale.** Used for agriculture or food applications, they are the drivers of a (new) food revolution.
- **More and more capital (financial and political) is available** to fight climate change while disputing our current food system.
- As for many industries, established agrifood businesses have outsourced their long-term R&D with mixed results. **Disruption is now coming from small and agile players.** Hence, DigitalFoodLab's motto: **Foodtech is the future of food.**

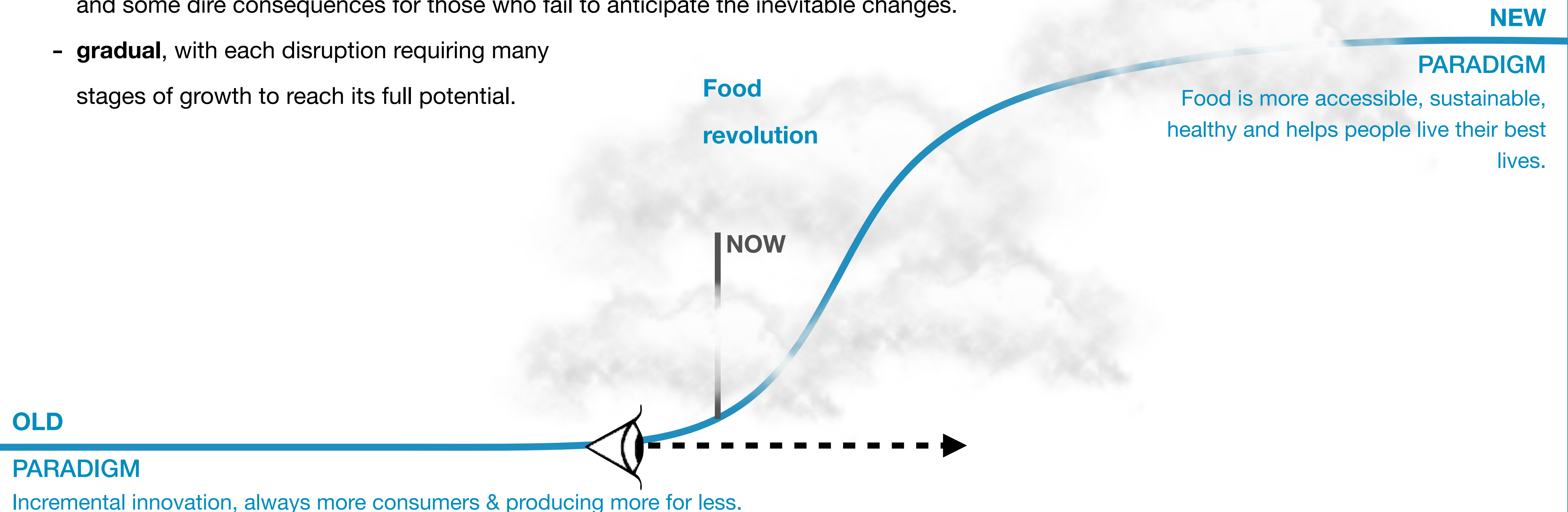


WHY IS FOODTECH IMPORTANT?

3 - THE EVOLUTION WILL NOT BE SLOW; IT WILL BE GRADUAL AND MESSY, BUT FAST... AND IT HAS ALREADY STARTED

A food revolution which will lead us to a new food system has already started. It won't happen all at once, but it will be:

- **fast**, notably for food itself, where innovation has historically meant incremental improvement (as seen below).
- **messy** with many disruptions happening simultaneously, both hypes and busts, and some dire consequences for those who fail to anticipate the inevitable changes.
- **gradual**, with each disruption requiring many stages of growth to reach its full potential.



WHERE IS THE DATA COMING FROM?

AND OTHER QUESTIONS ON THE SCOPE OF THIS REPORT

WHERE DOES THE DATA COME FROM?

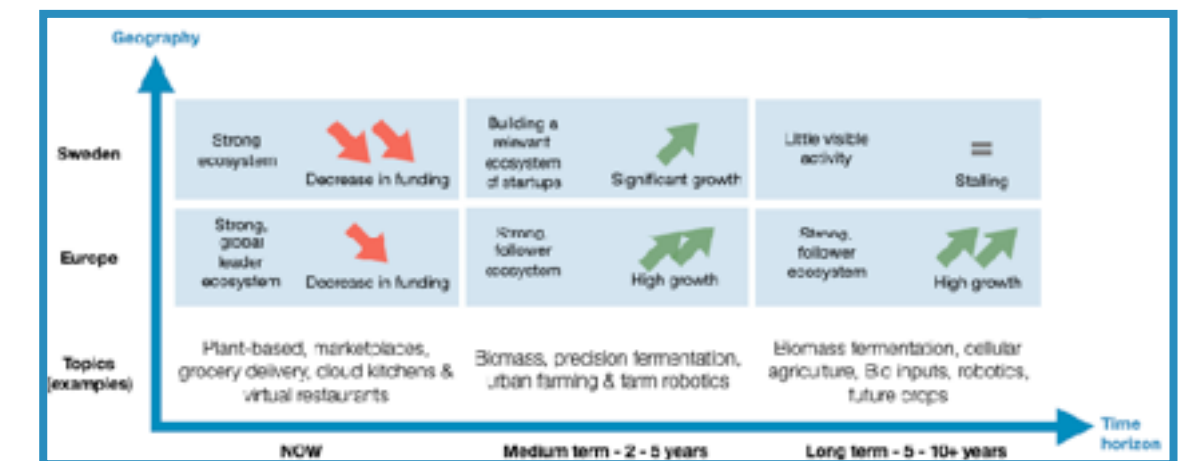
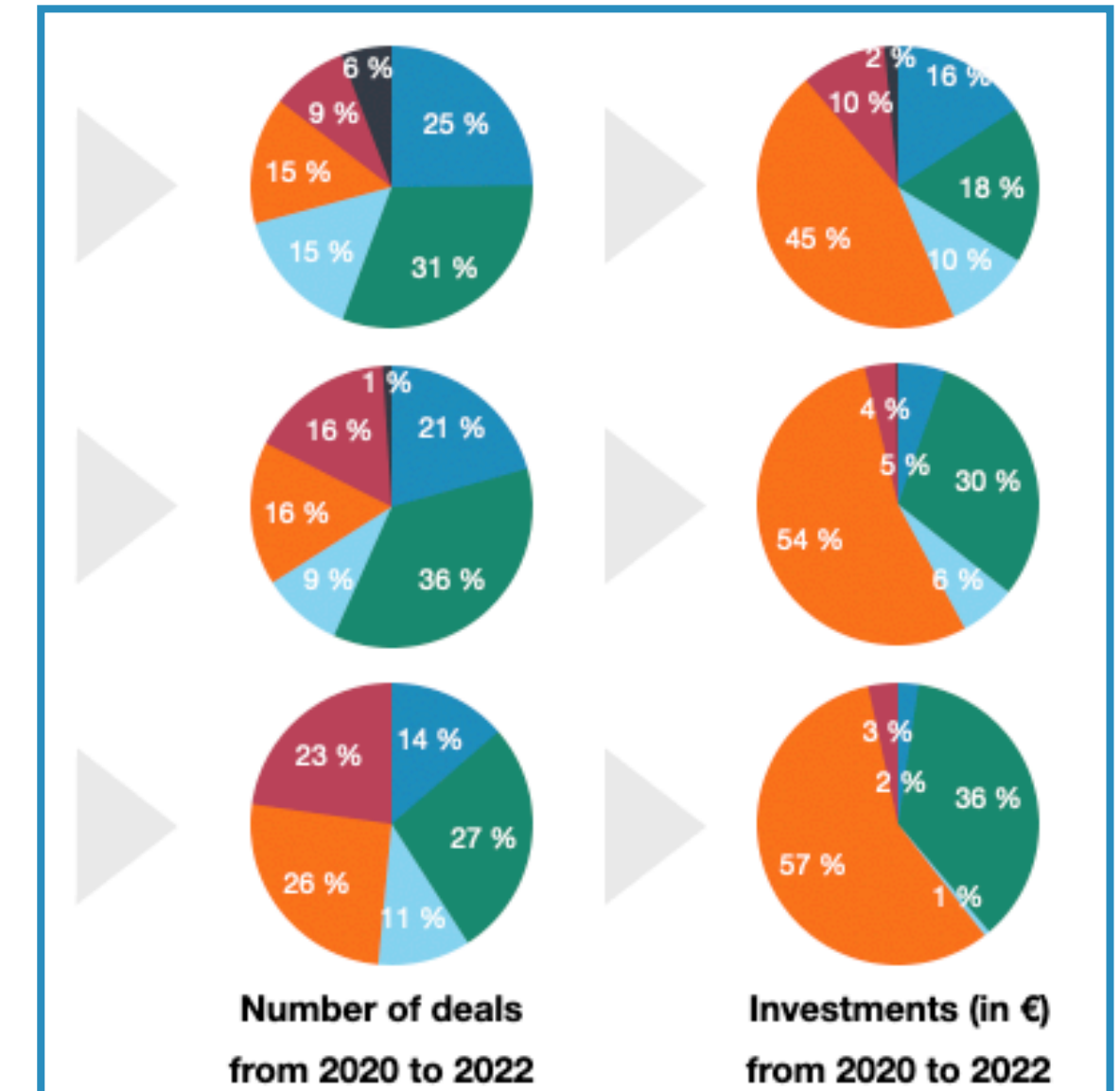
This report is based on DigitalFoodLab's proprietary database. It contains the most comprehensive data about FoodTech startups and investors. We gather data all year long with machine learning tools and with our network of partners all over the world. This report displays investments in euros with currency conversions made at the time of the deals' announcements.

CAN I HAVE ACCESS TO THIS DATA FOR A SPECIFIC REPORT?

Yes, we are already working with multiple food companies, banks and investors. We **provide them ad hoc or regular reports on the state of specific markets (regions or areas of innovation) at a global, European or local level.** To know more, contact us here: contact@digitalfoodlab.com

WHAT REGIONS ARE COVERED?

Defining Europe's borders can be tricky. For this report, we have included all of continental Europe, the British Isles and Iceland, while excluding all of Russia and Turkey.



CHALLENGER OR LEADER?
 We could divide European countries in four buckets depending on the influence of their FoodTech ecosystem:
 1. **leaders** (The UK, France, Germany: a comprehensive ecosystem made of unicorns and smaller startups active in all of the six categories)
 2. **challengers** (countries such as The Netherlands, Sweden, Finland, and Spain with a strong ecosystem, often one leader, and a presence in at least 2 or 3 FoodTech categories),
 3. **single-startup-ecosystems** (countries such as Czech Republic and Estonia, defined mostly by one startup)
 4. **followers** (countries with smaller ecosystems).
 Except for 2022, Sweden's FoodTech is clearly in the challenger ecosystem with a strong presence in foodscience and delivery. It also has a growing ecosystem of startups in other parts of the value chain. Now, when the Nordics countries are taken together, which is often the case when considered from outside, it creates a clear leading ecosystem (the 2nd or 3rd in size in Europe). Reinforcing the integration of the different sub-ecosystems and their specialization could be a winning strategy.

FOODTECH IN EUROPE IN 2023

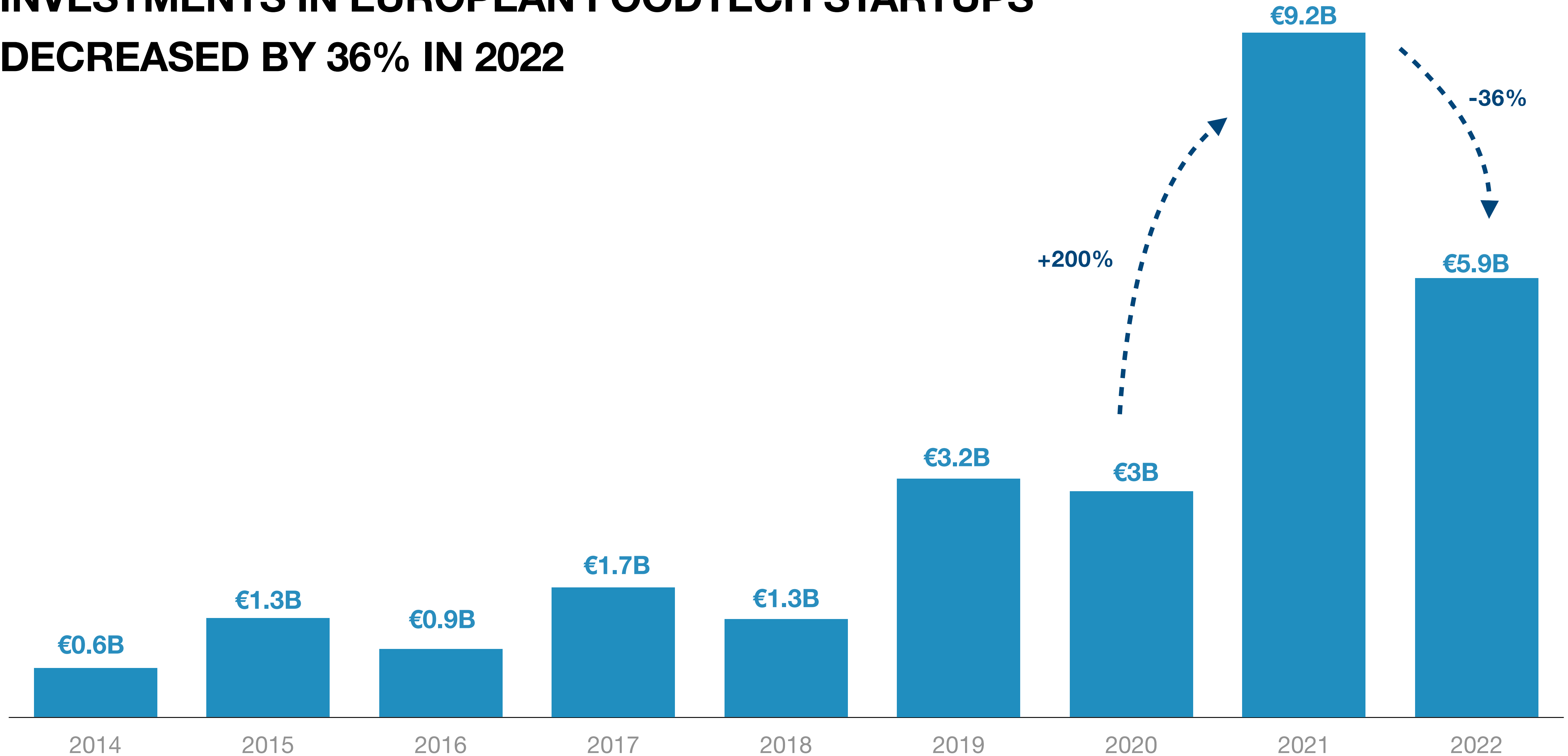
I - STATE OF THE ECOSYSTEM



STATE OF THE ECOSYSTEM

INVESTMENTS IN EUROPEAN FOODTECH STARTUPS

DECREASED BY 36% IN 2022

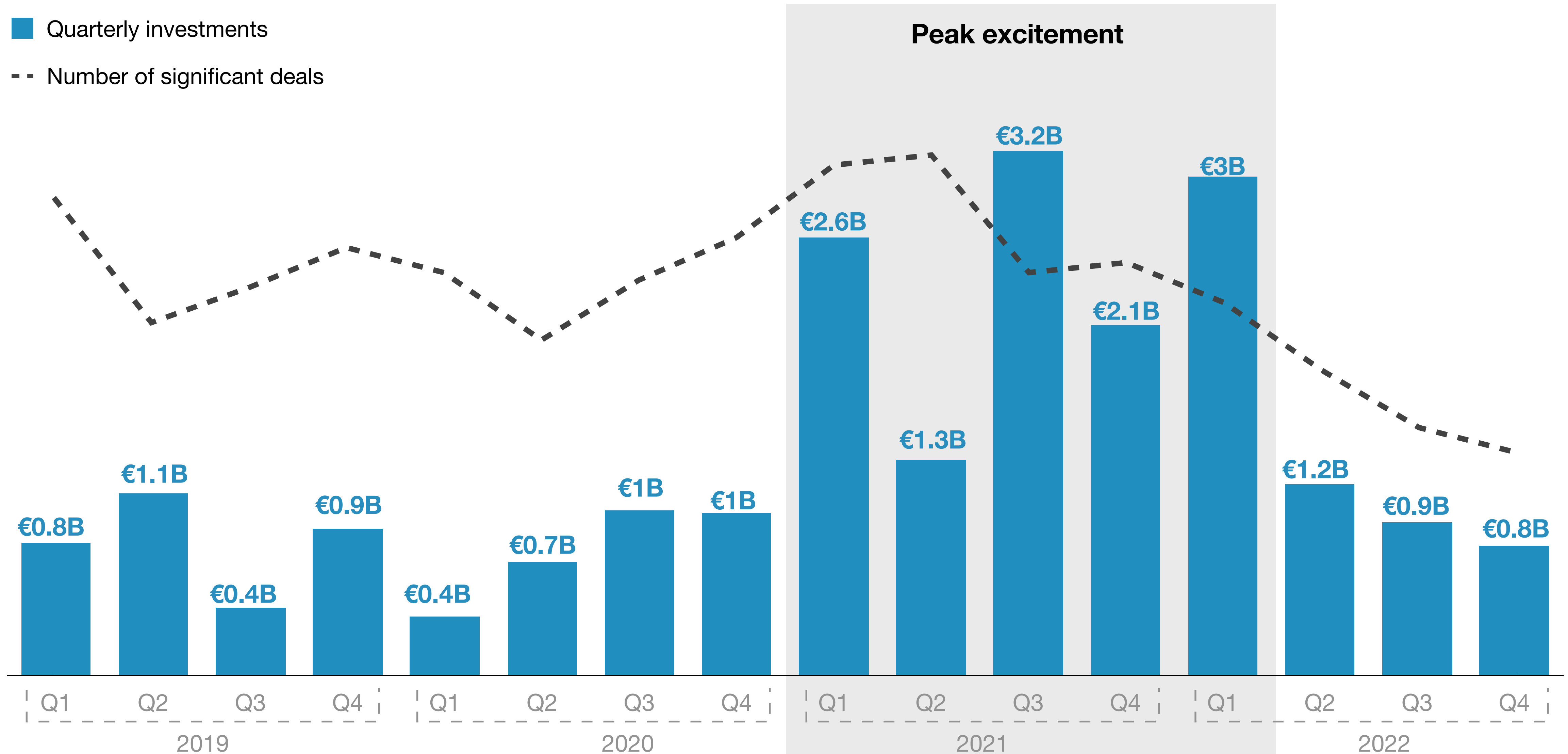


STATE OF THE ECOSYSTEM

A SOFT LANDING AFTER A PEAK OF EXCITEMENT

■ Quarterly investments

- - Number of significant deals



STATE OF THE ECOSYSTEM

A SOFT LANDING AFTER A PEAK OF EXCITEMENT

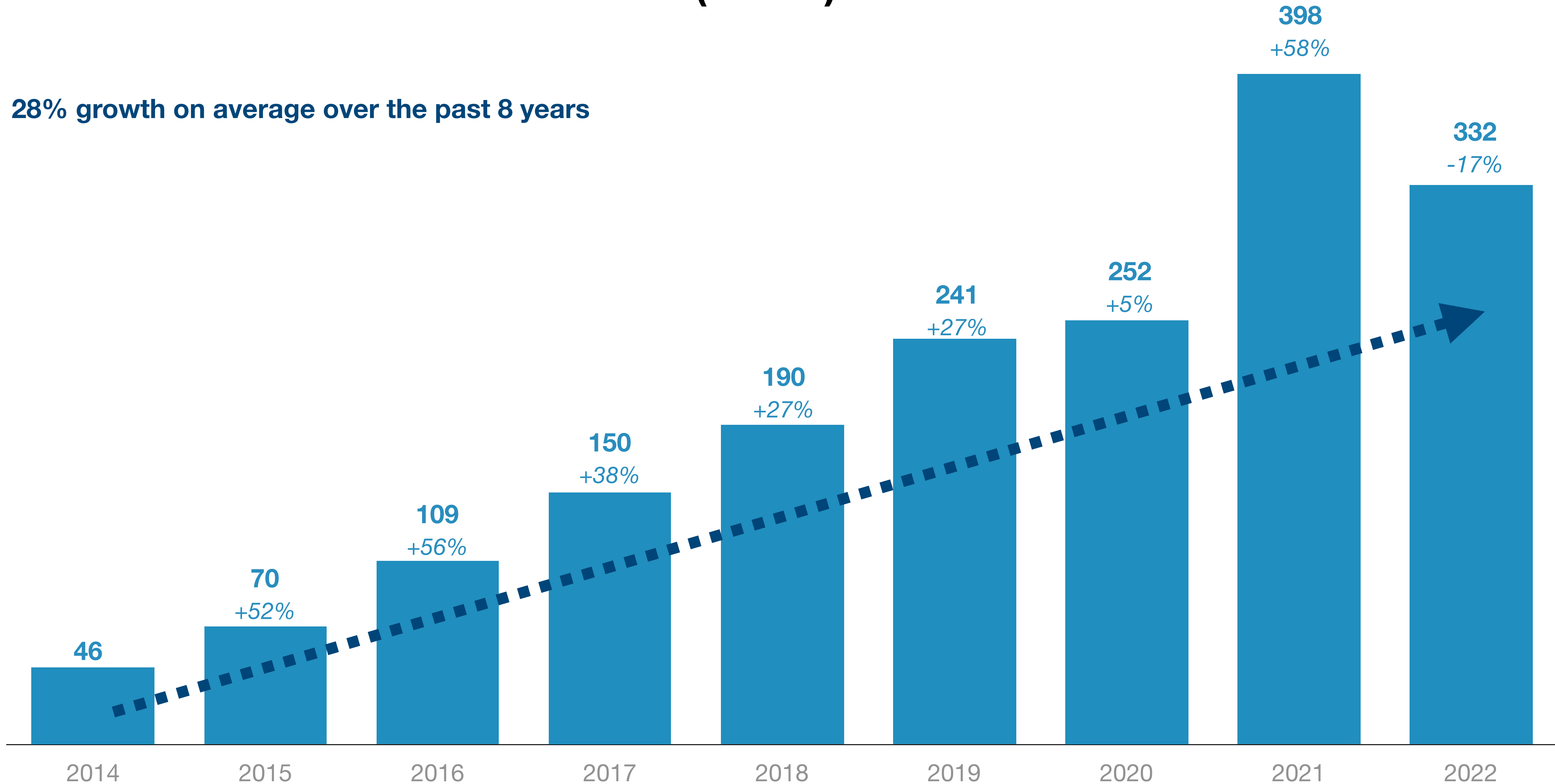
- As can be seen in the graph on the previous page, we are coming to more of a **soft landing than a hard one**. After **18 months of excitement (from Q1 2021 to the end of Q1 2022)**, investments are dropping quite steeply, but **not this is not (yet) a crash**. This period is very much embodied by a quartet of quick-commerce startups in Europe: Glovo, Gorillas, Flink and Wolt. They raised billions in 2021. Now, only one (Flink) is not 100% owned by another company.
- 2023 will be a really important year to see when and where (both in terms of countries and categories) investments bounce back**. As we'll see in this report, not all categories were similarly affected. Some even grew in 2022 and are attracting a lot of investments in early 2023.



STATE OF THE ECOSYSTEM

NUMBER OF SIGNIFICANT DEALS (>€1M)

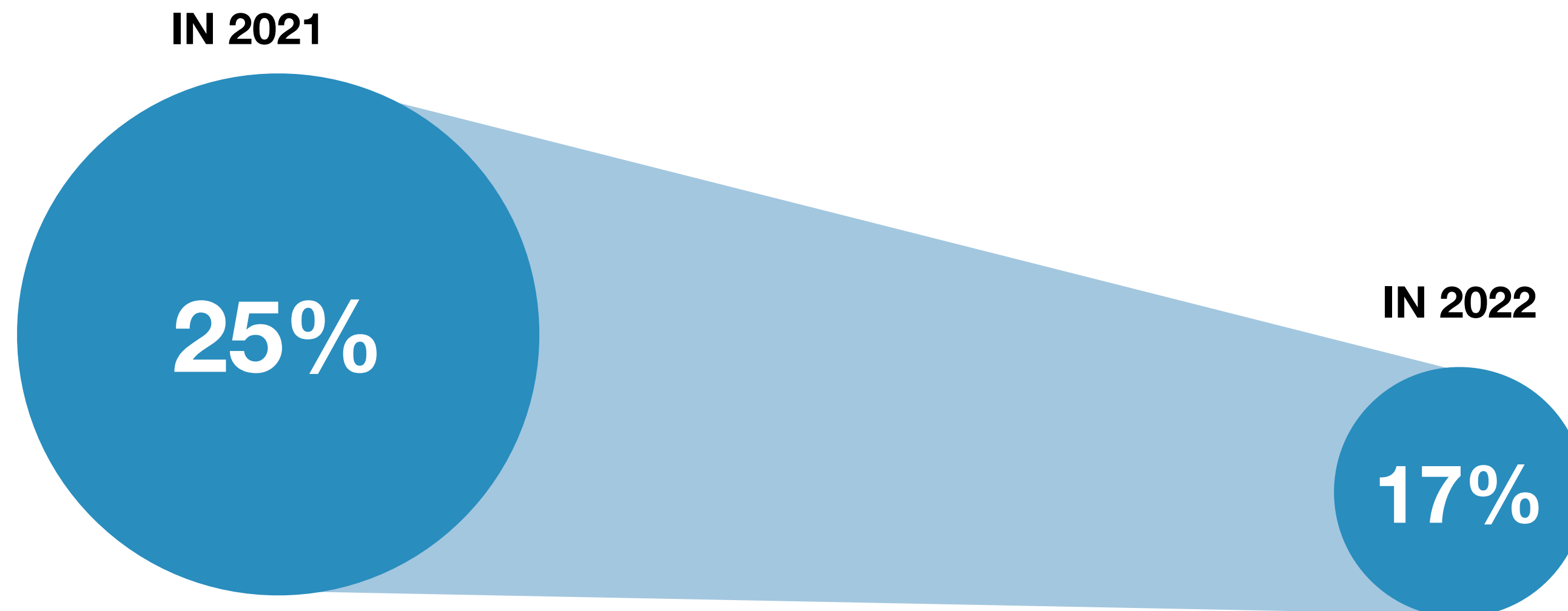
28% growth on average over the past 8 years



STATE OF THE ECOSYSTEM

IT IS GETTING HARDER TO RAISE FOR THOSE WHICH HAVE ALREADY RAISED.

- Share of startups that raised money in 2021 and 2022, which had already raised more than €1M previously.

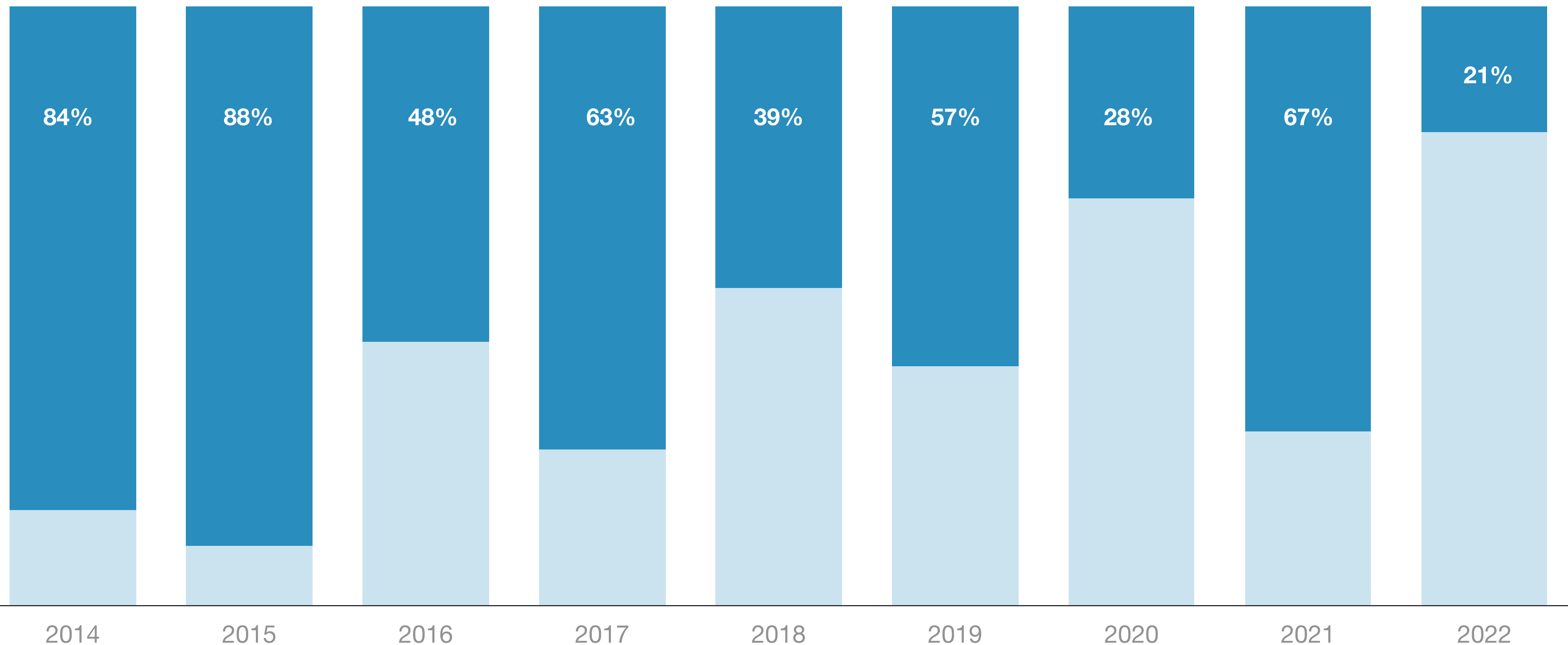


- As we can see on the previous page's graph, significant deals still happen. Investment in the future of food has not stopped.
- The opposite graph also shows that startups that had already raised more than €1M received less funding in 2022 than in 2021. Only 17% of them raised, while it was 25% a year before. **This means that more deals are made in newer startups.** Some investments made in 2020 and 2021 were in companies without a clear path to profitability which are now having a much harder time raising money.

STATE OF THE ECOSYSTEM

THE SMALLEST SHARE EVER FOR DELIVERY STARTUPS

Investments in food delivery startups
Other investments

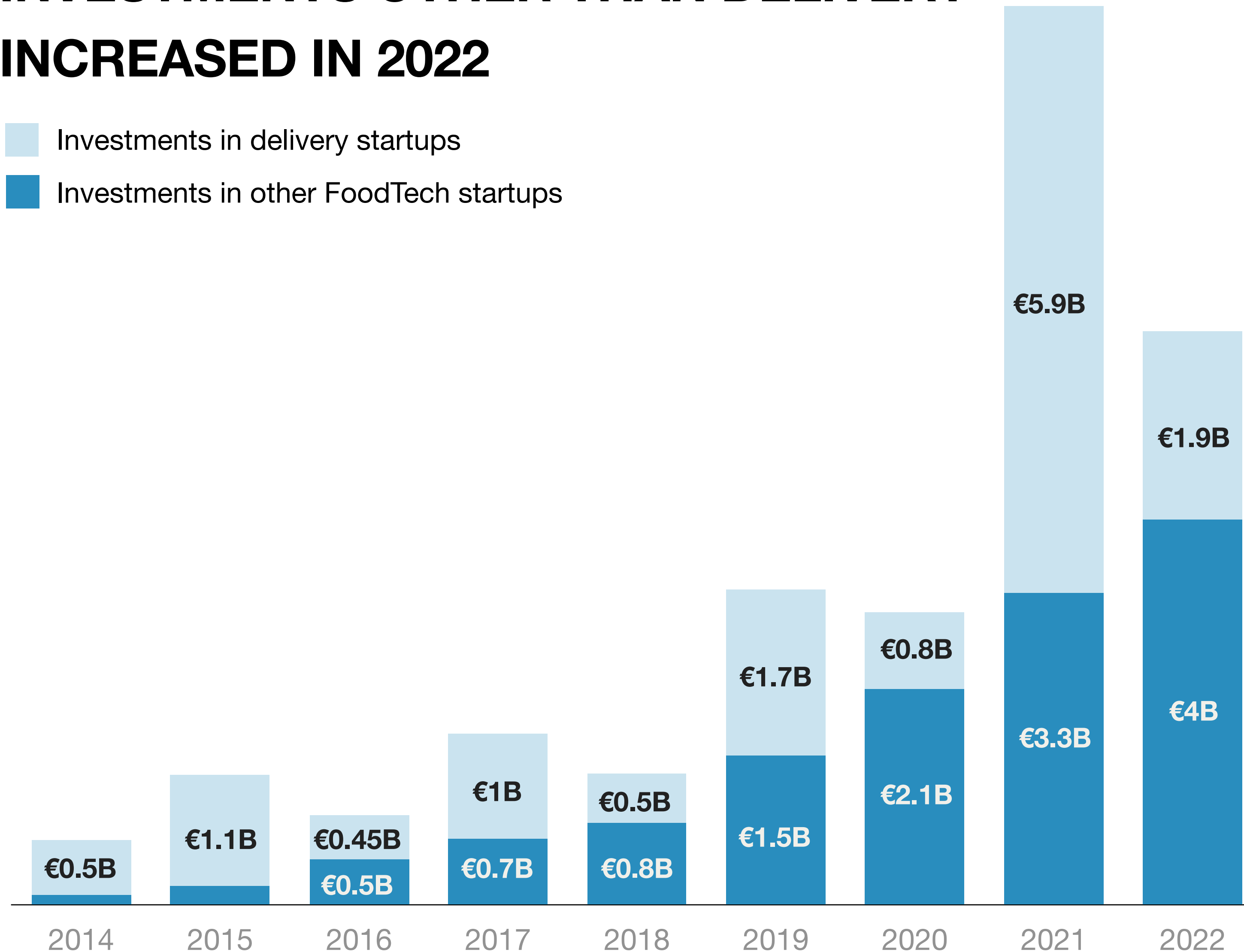


STATE OF THE ECOSYSTEM

INVESTMENTS OTHER THAN DELIVERY

INCREASED IN 2022

- Investments in delivery startups
- Investments in other FoodTech startups



-68%

decrease in the amount invested in **delivery** startups in 2022 compared to 2021.

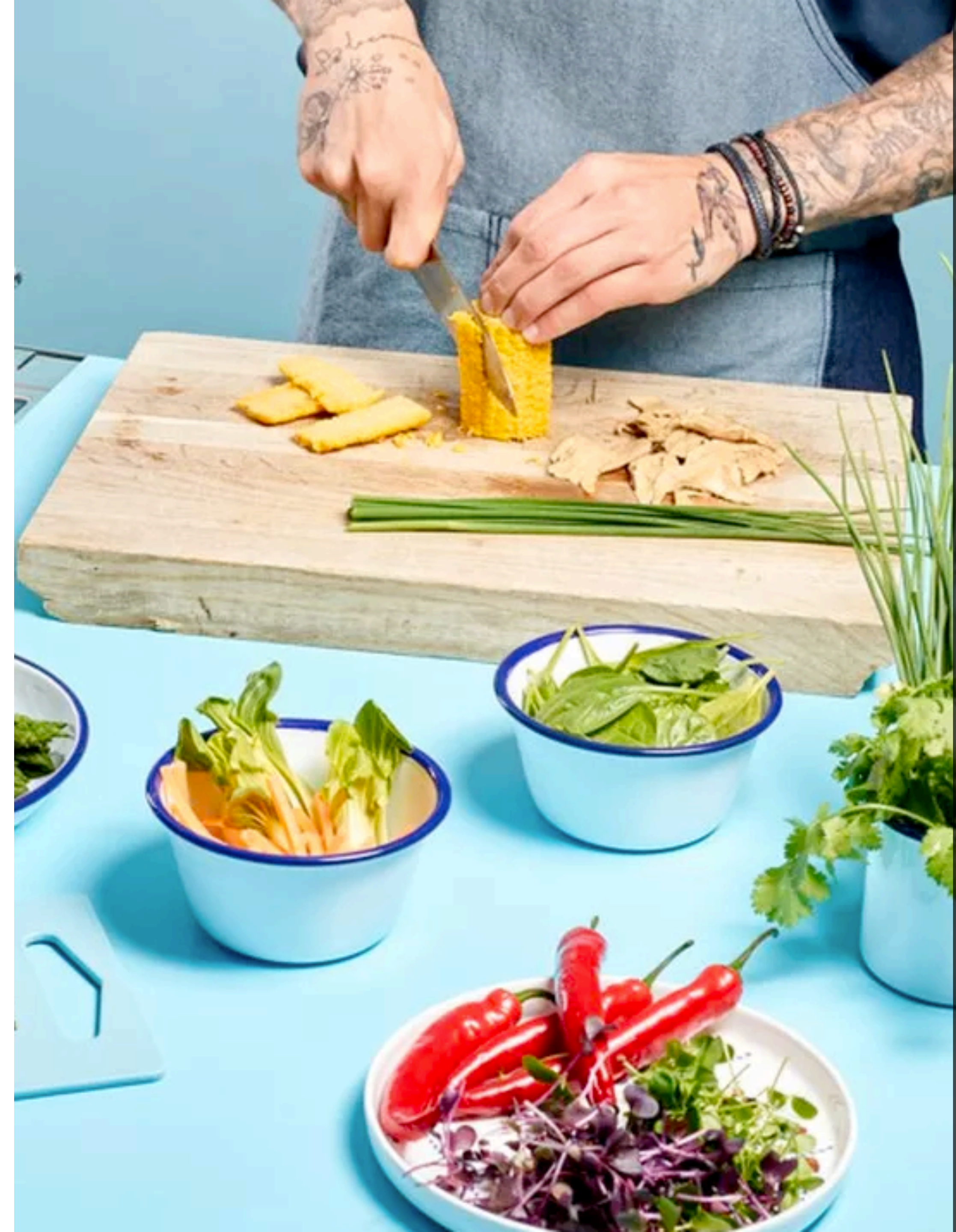
+21%

increase in the amount invested in the **rest of** FoodTech in 2022 compared to 2021

STATE OF THE ECOSYSTEM

A MORE BALANCED ECOSYSTEM

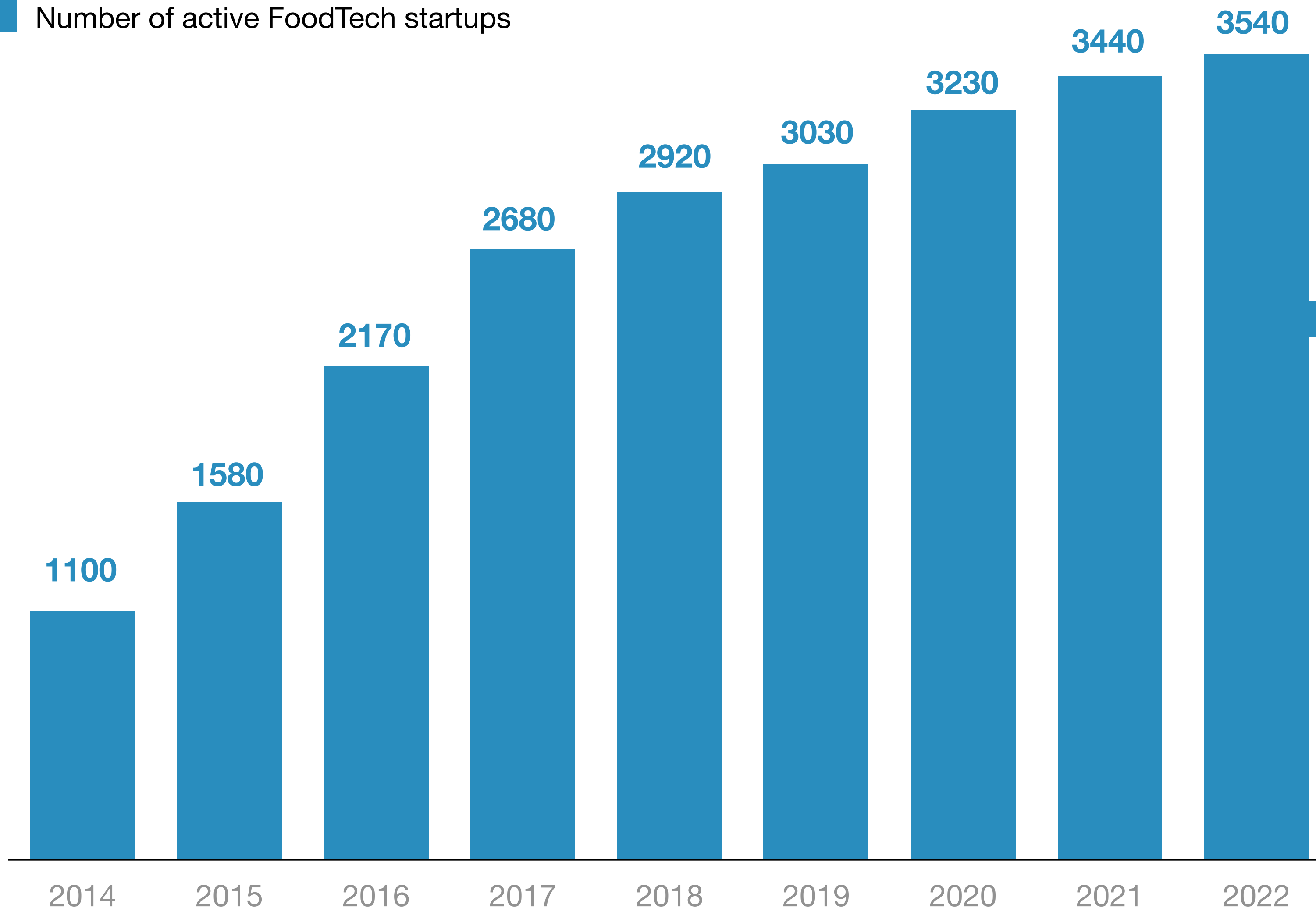
- For years, **delivery** has been at the heart of Europe's FoodTech. In 2022, things changed, and after a swift mood shift, **delivery startups** are now somewhat out of fashion.
- **Investments increased in other categories**, which is a remarkable feat considering that the overall tech ecosystem investments are down. The future of agriculture, food products (notably proteins) and supply chain are seen more and more as areas of growth that will be able to deliver significant returns to investors.
- As we'll see later in this report, **delivery is not over**. Investments in new retailers (such as Picnic or Oda) are still significant and the idea that startups have the potential to disrupt how food groceries (a market bigger than a trillion euros) are made is still alive.



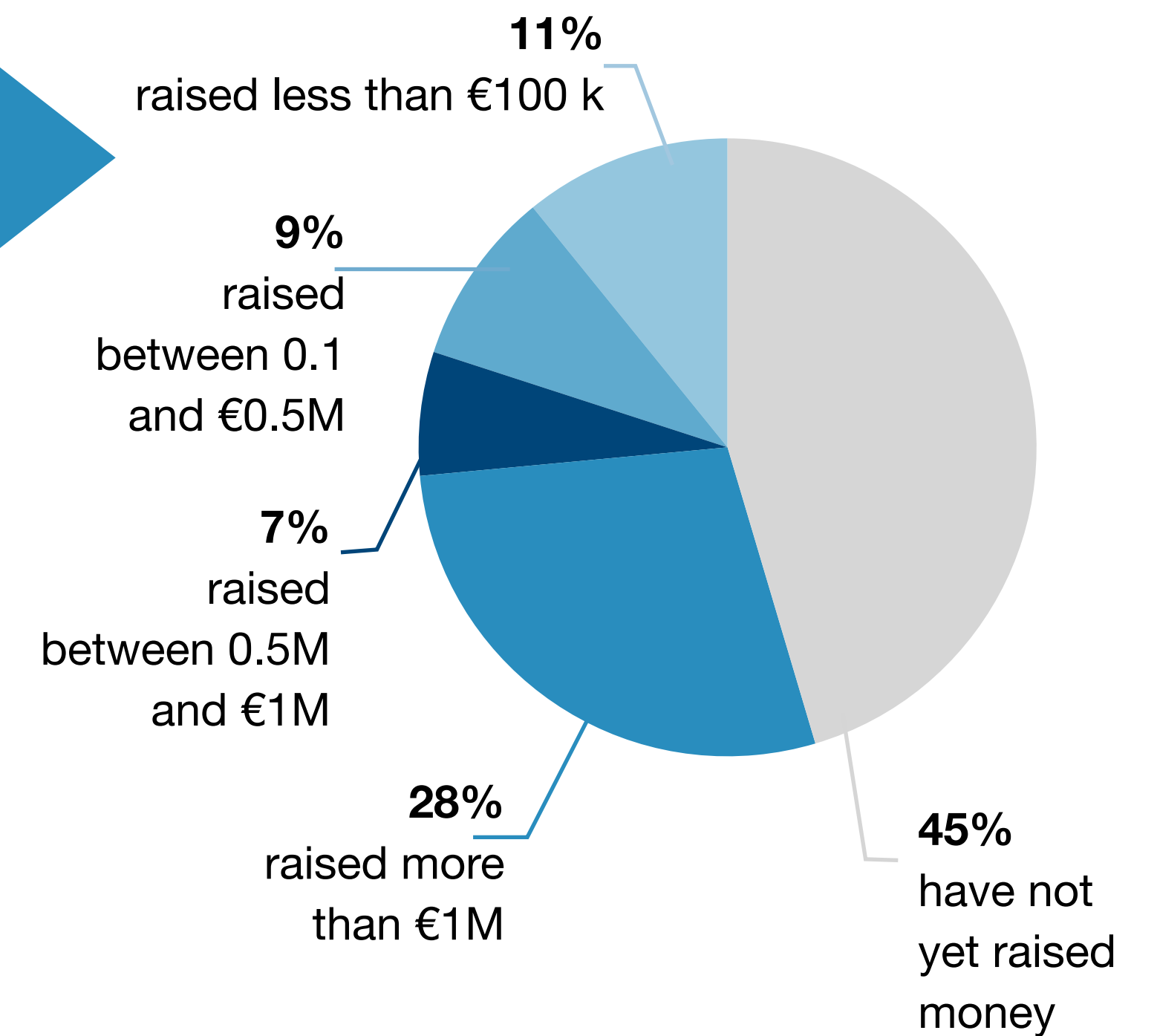
STATE OF THE ECOSYSTEM

THE NUMBER OF ACTIVE STARTUPS KEEPS GROWING

■ Number of active FoodTech startups



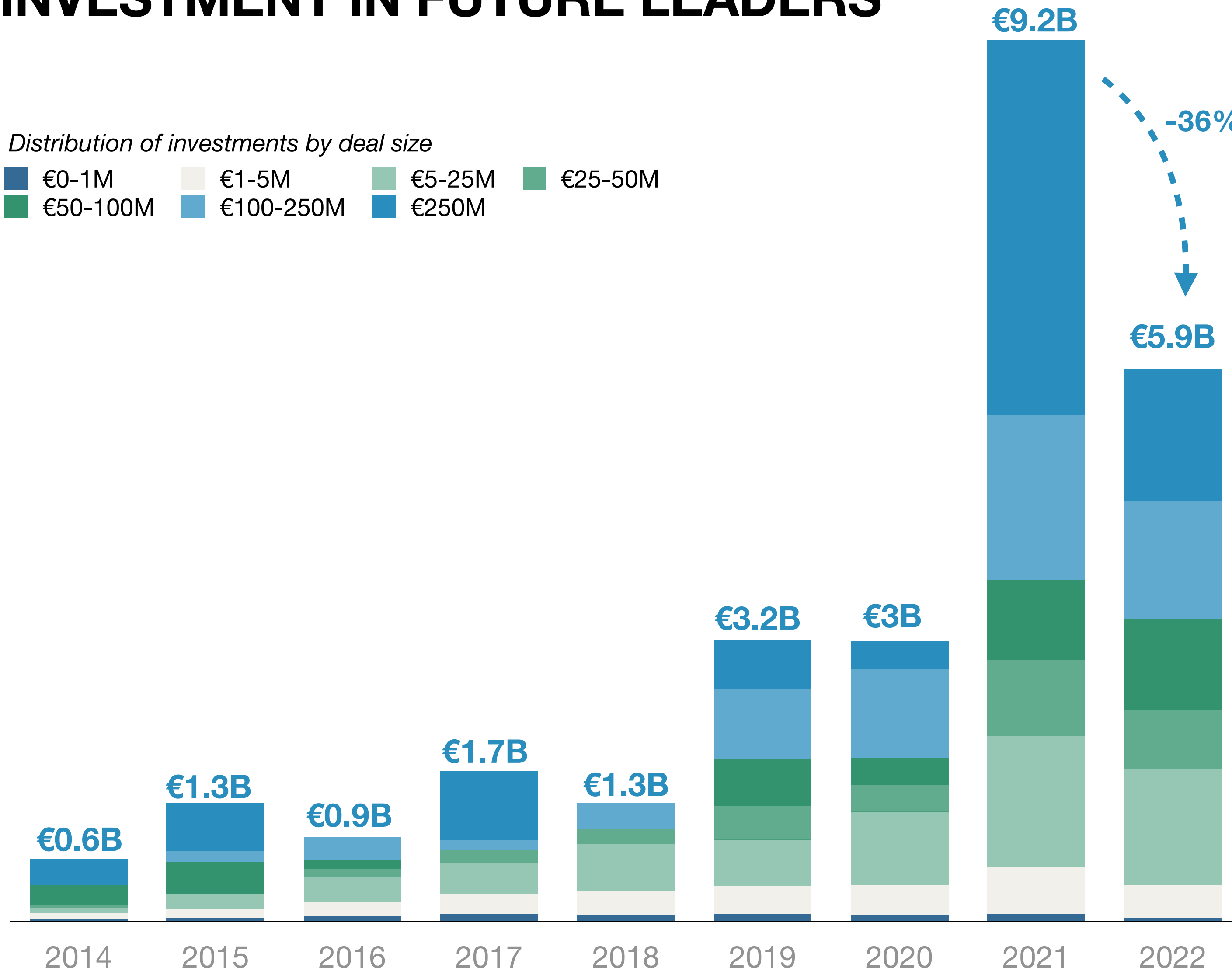
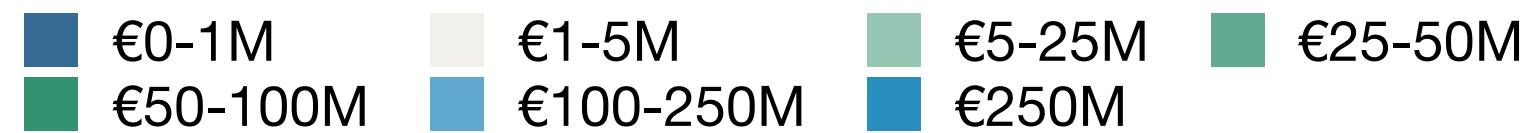
55% of the startups active at the end of 2022 have ever raised capital.



STATE OF THE ECOSYSTEM

INVESTMENT IN FUTURE LEADERS

Distribution of investments by deal size



-54%

decrease in the amount invested in deals bigger than €100M from 2021 to 2022; and a 64% decrease in deals bigger than €250M.

-36%

-12%

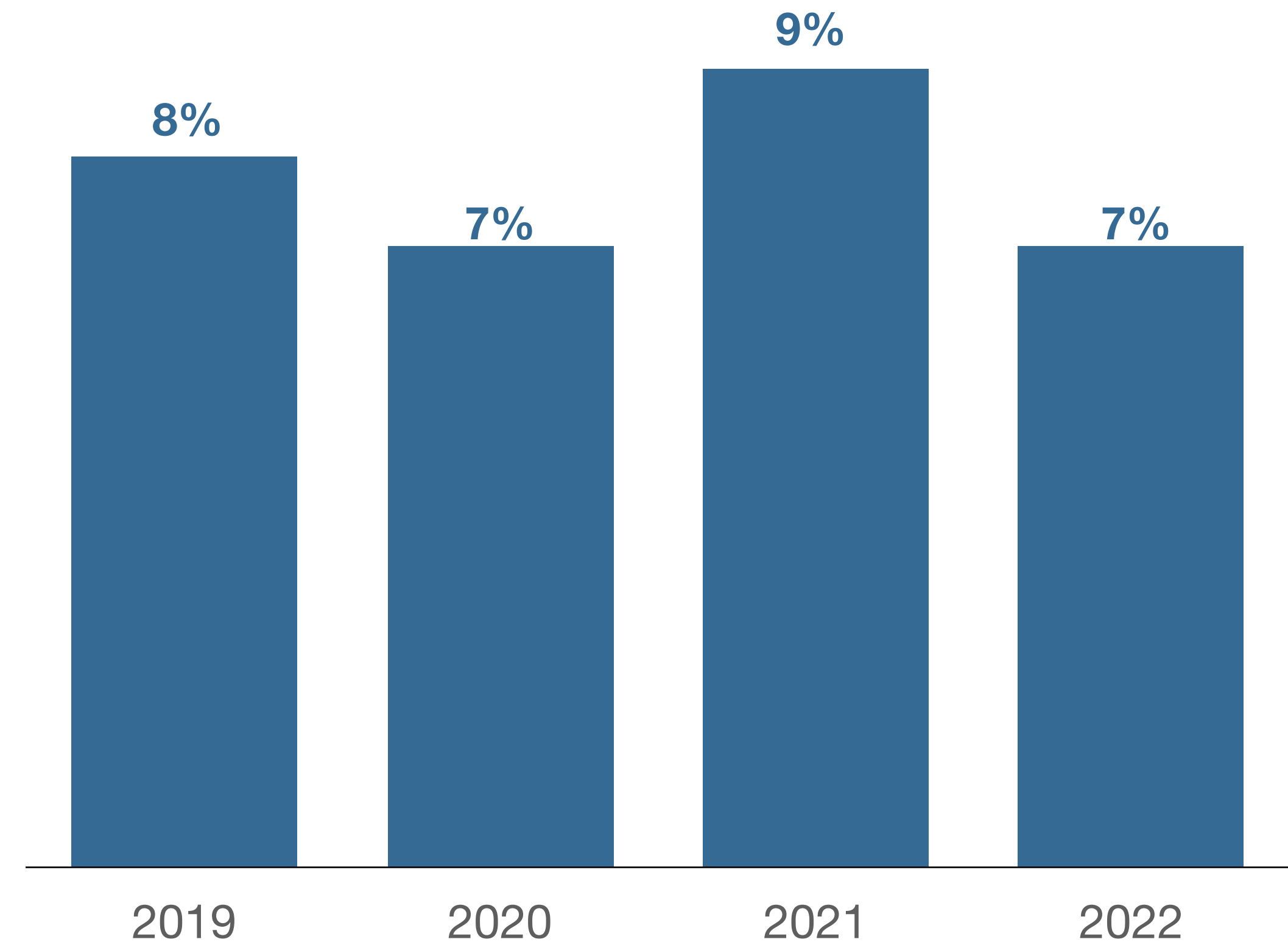
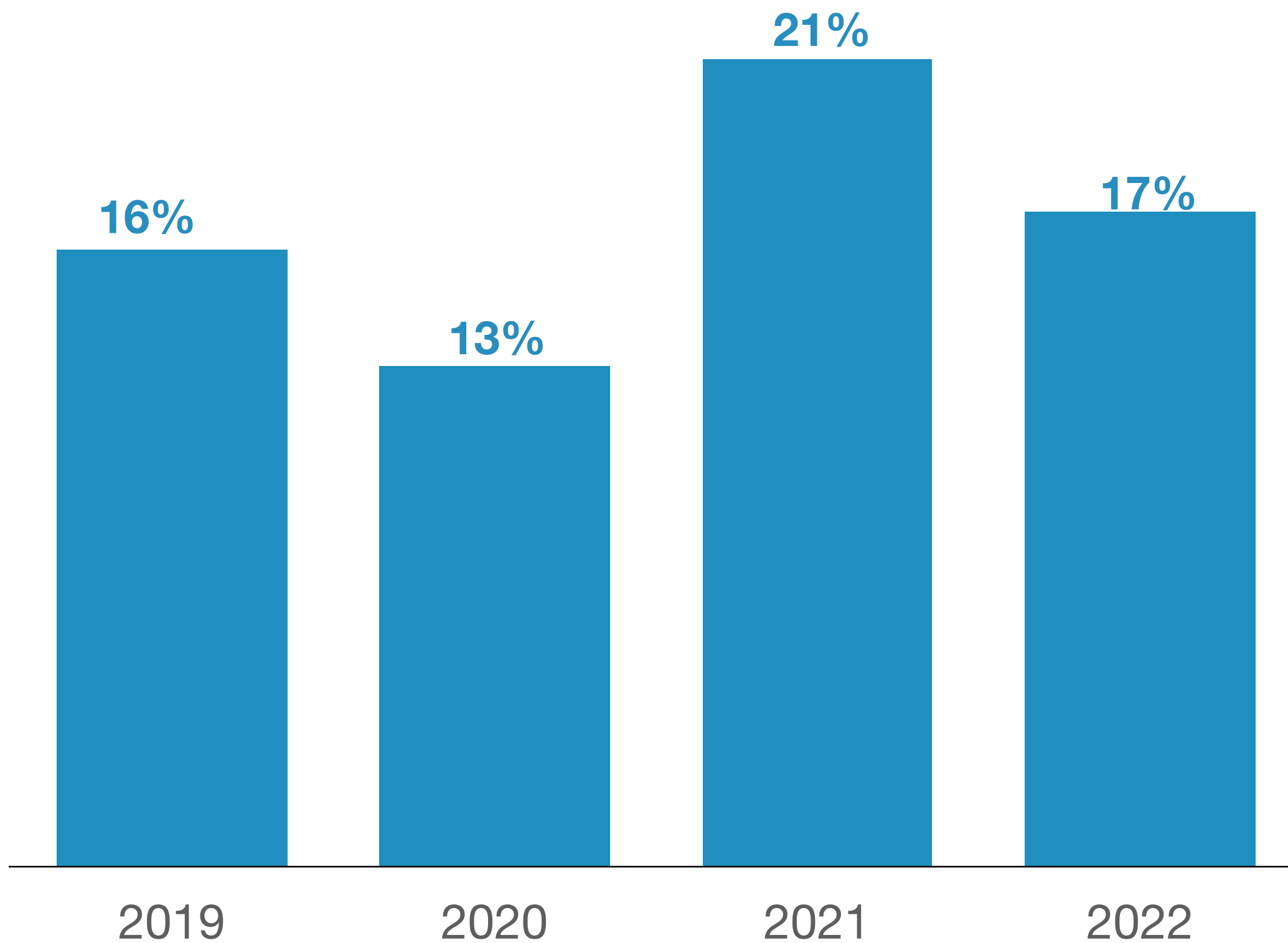
decrease in the amount invested in deals below €100M.

STATE OF THE ECOSYSTEM

EUROPEAN FOODTECH IN THE WORLD AND IN TECH

■ Share of **Global FoodTech investments** made in European startups

■ Share of **European Tech investments** made in FoodTech startups

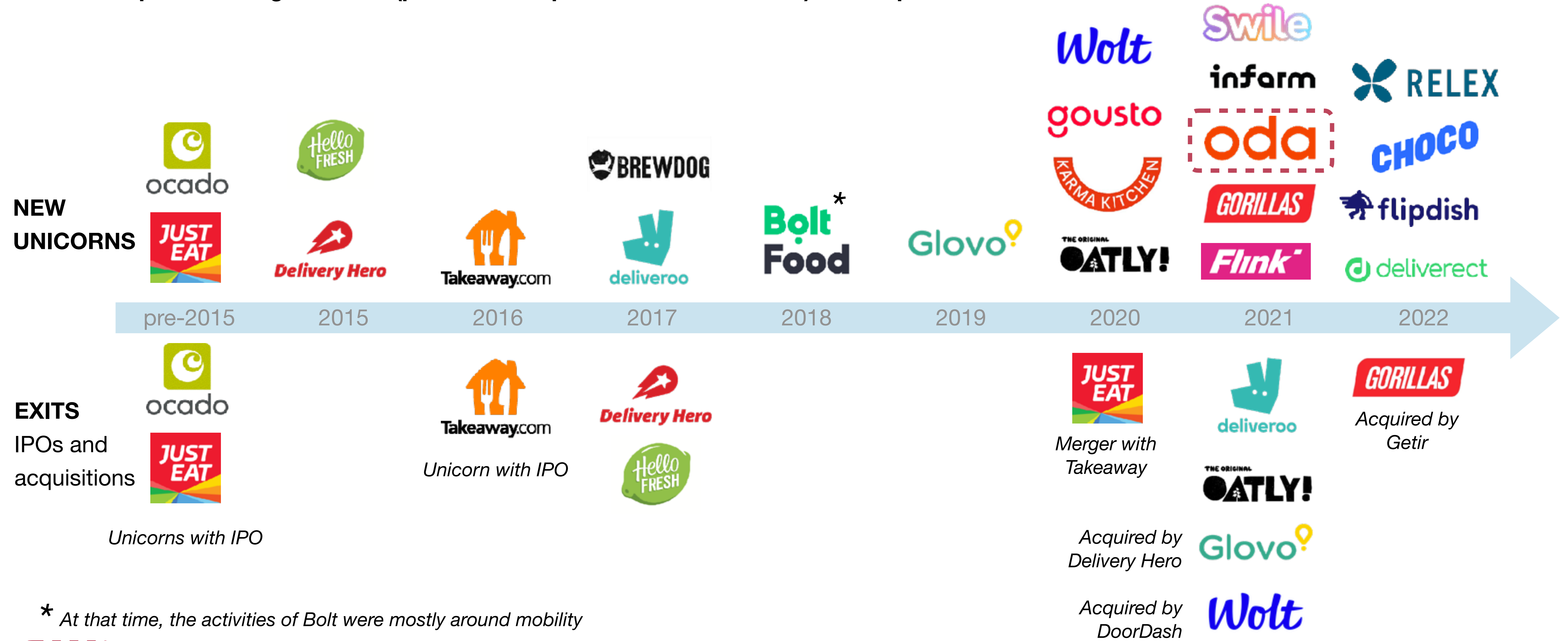


Source: Crunchbase, DigitalFoodLab's analysis

STATE OF THE ECOSYSTEM

UNICORNS: FROM GROCERIES TO DIGITAL

Startups becoming unicorns (private startups with €1B+ valuation) in Europe.



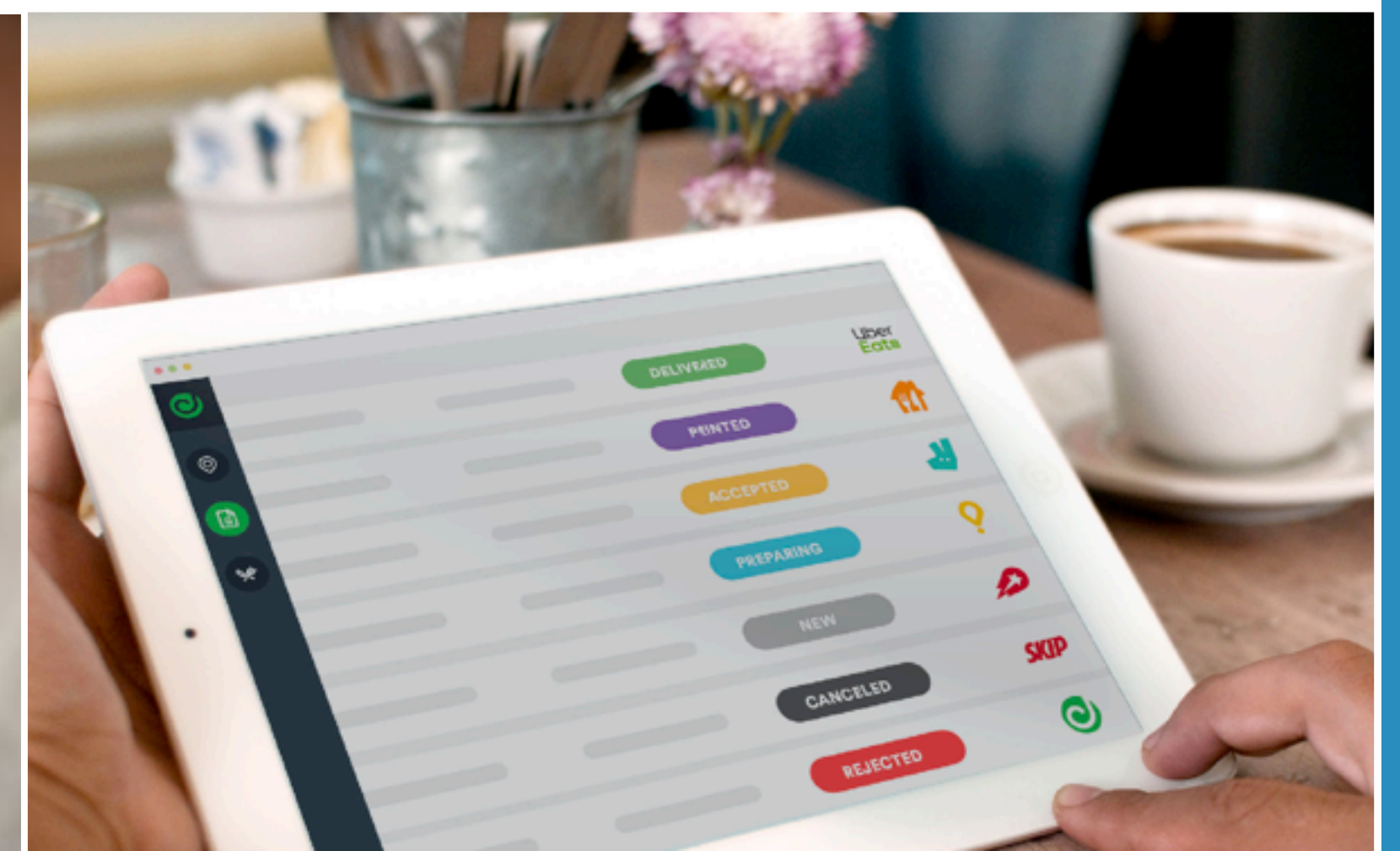
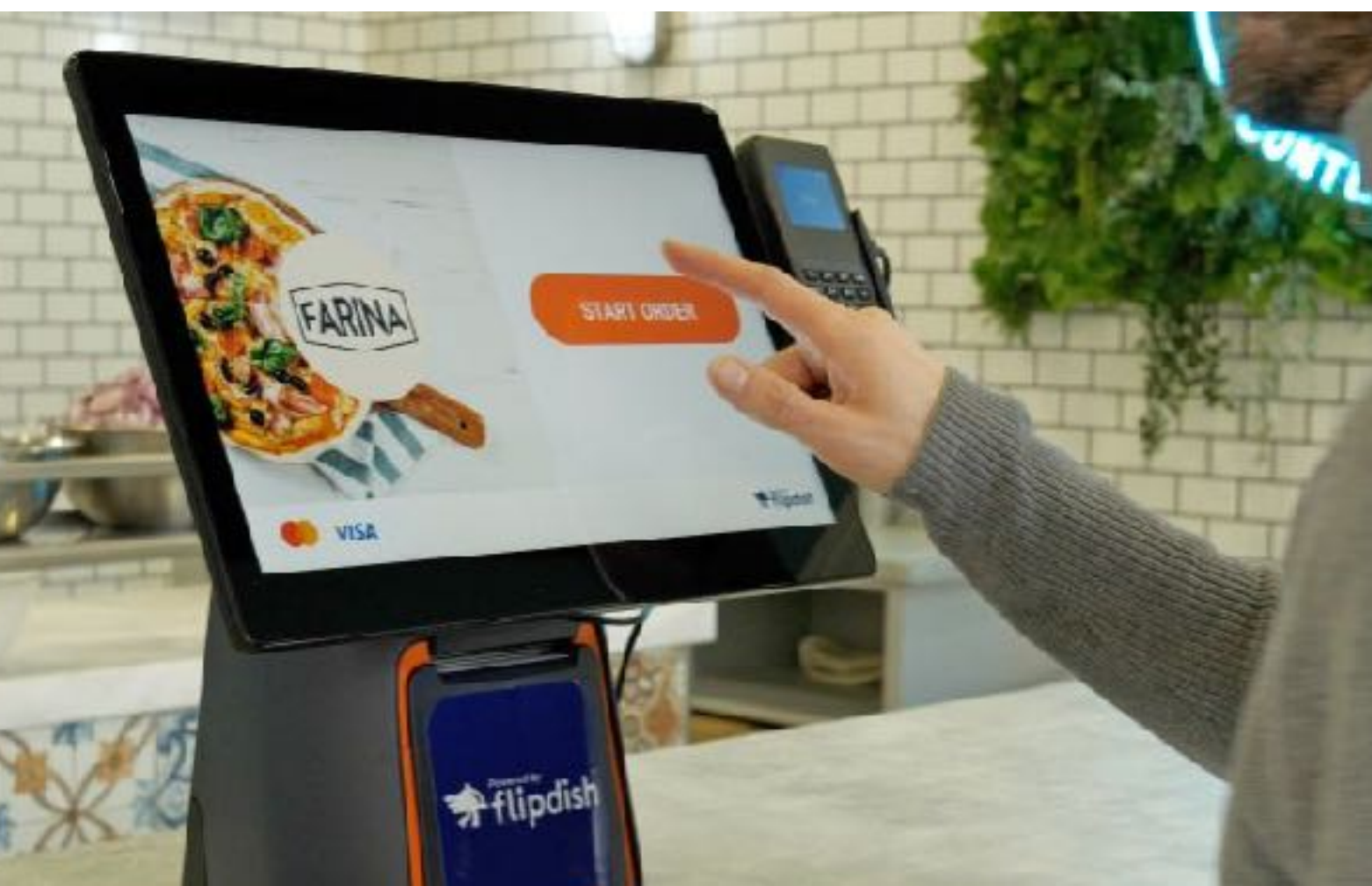
* At that time, the activities of Bolt were mostly around mobility

 Startup that further raised capital at a valuation below €1B, therefore, no longer a unicorn

STATE OF THE ECOSYSTEM

UNICORNS & BEYOND

- In 2022, Europe saw the emergence of four new unicorns, all showcasing the trends of the moment: **Relex, Choco, Deliverect and Flipdish**. All are B2B companies and the last three work around the digitization of the restaurant.
- Gorillas was acquired by Getir, and Oda lost its unicorn status after a downturn (raising again, but at a lower valuation).
- **The potential for new unicorns is still strong in Europe**, even though the current (reasonable) limitations put on valuations growth probably means that we will see more unicorns in 2024 than in 2023.



DIGITALFOODLAB IN ACTION

USE CASE #1: INNOVATION STRATEGY FOR AN INTERNATIONAL FOOD COMPANY

Mission for a FMCG food company to set up a long-term strategy regarding innovation.

What we did:

- educated the board about the different FoodTech trends through a series of workshops
- we identified the opportunities and threats created by disruptive innovation and long-term trends for the clients various businesses'
- sorted these into two buckets: to address now or to follow through a dedicated watch
- we defined an action plan and business cases on the top opportunities and identified potential partners and targets across Europe

Results:

- we developed a consensus across the client board and executives about innovation priorities and how to address them
- we set up a long-term watch to follow up on other priorities
- the client successfully implemented our action plan which led him to make one investment and one internal development of a new product

FOODTECH IN EUROPE IN 2023

II - INNOVATION HUBS



INNOVATION HUBS

LONDON, PARIS, STOCKHOLM

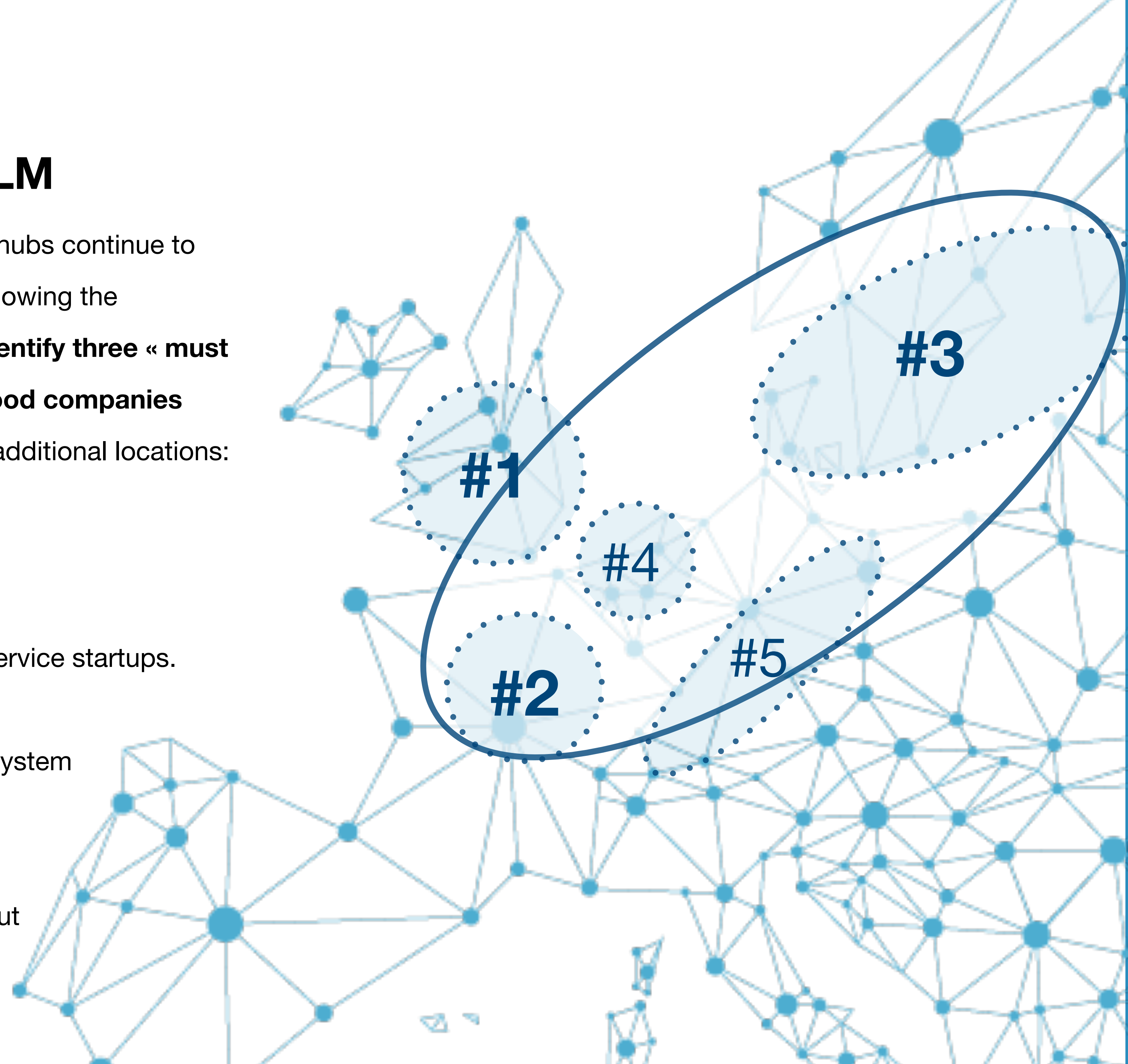
Year after year, a few leading European FoodTech hubs continue to establish themselves more clearly on the map. Following the investments of the last couple of years, **we can identify three « must see » places for investors, entrepreneurs and food companies looking to partner with startups**, as well as two additional locations:

1 - **London**, for its diverse ecosystem.

2 - **Paris**, to find AgTech, Foodscience and Foodservice startups.

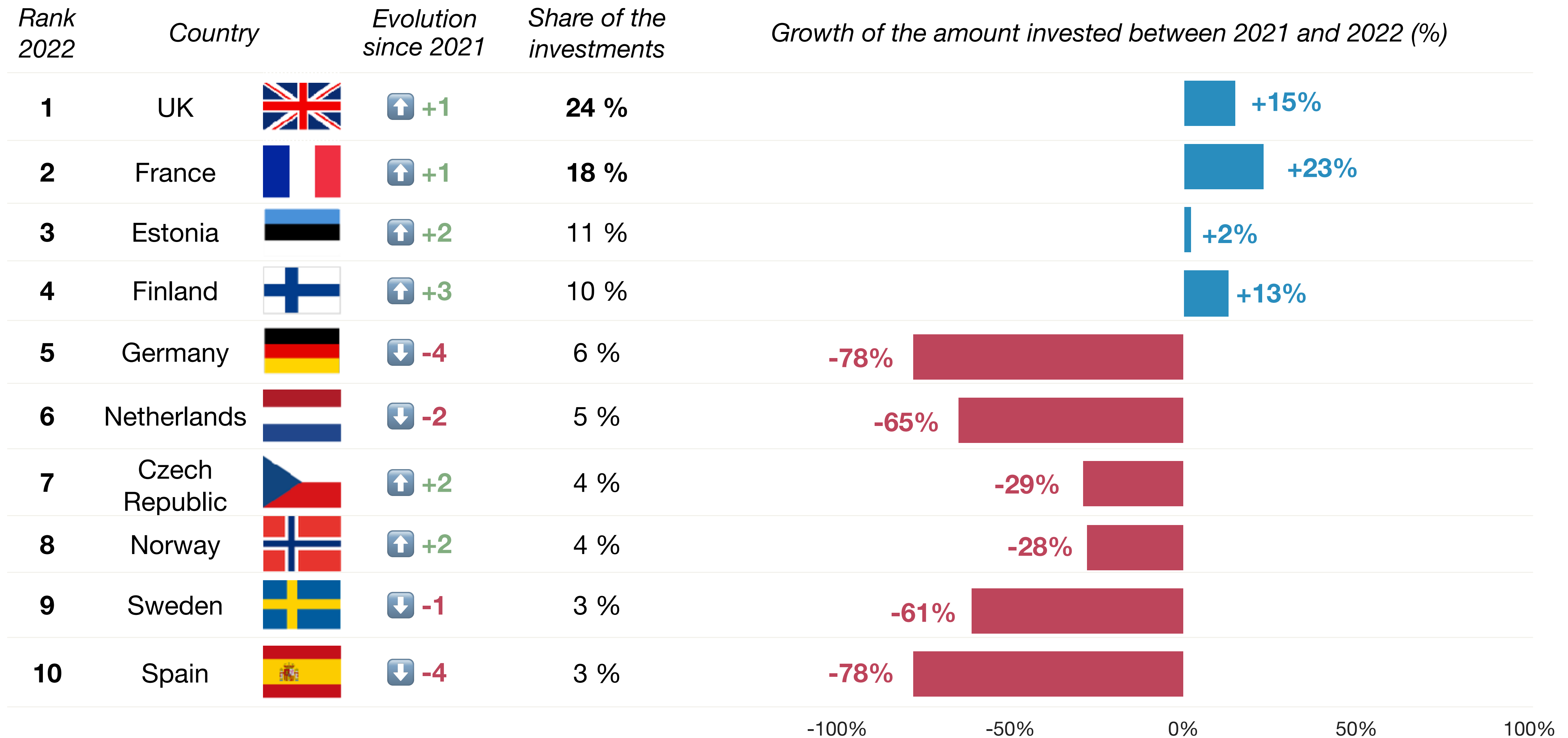
3 - **Stockholm**, to meet with the rich Nordics ecosystem (notably innovation around sustainability).

Berlin, and **Amsterdam** are also potential hubs, but with mixed fortunes over past years.



INNOVATION HUBS

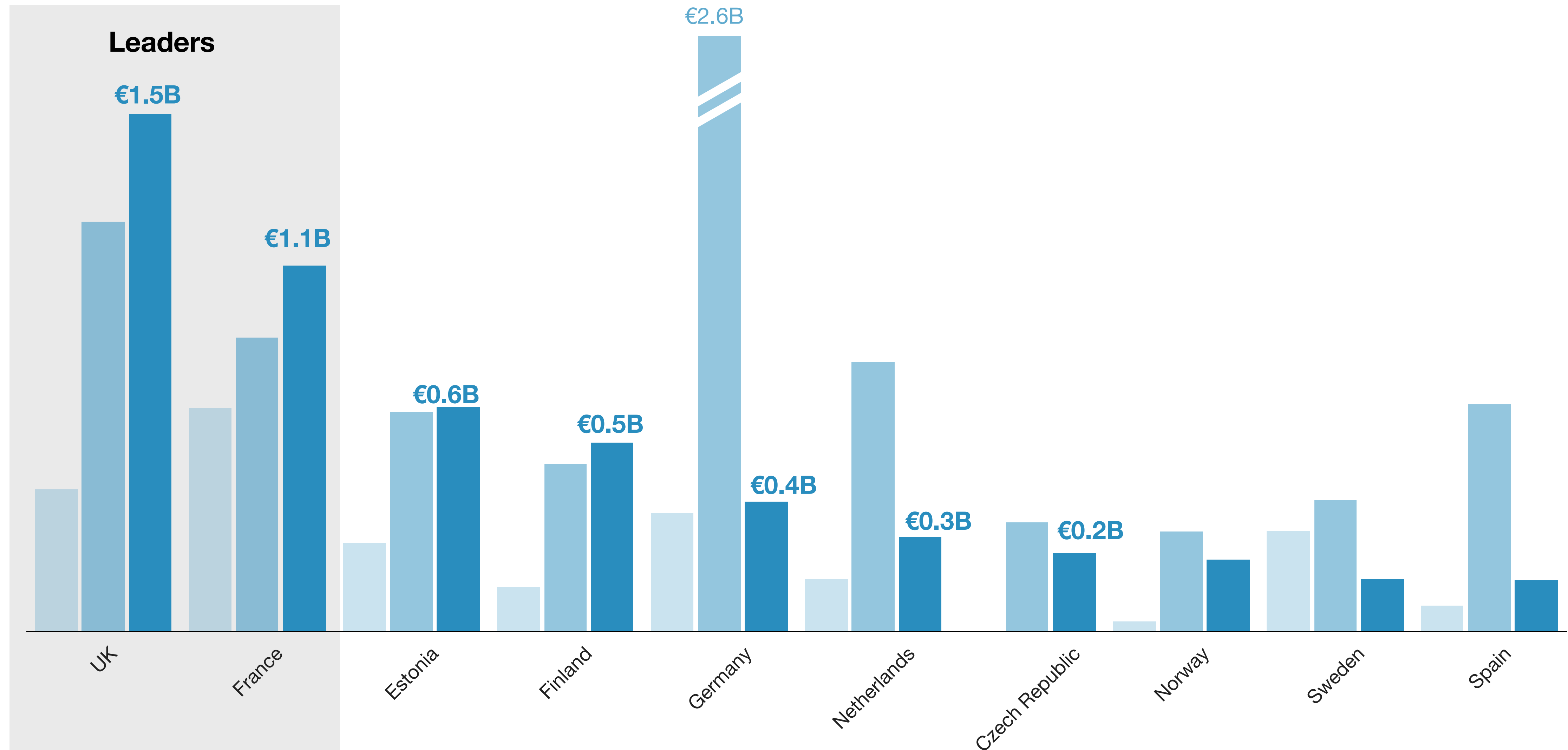
TOP COUNTRIES FOR FOODTECH INVESTMENTS IN EUROPE



INNOVATION HUBS

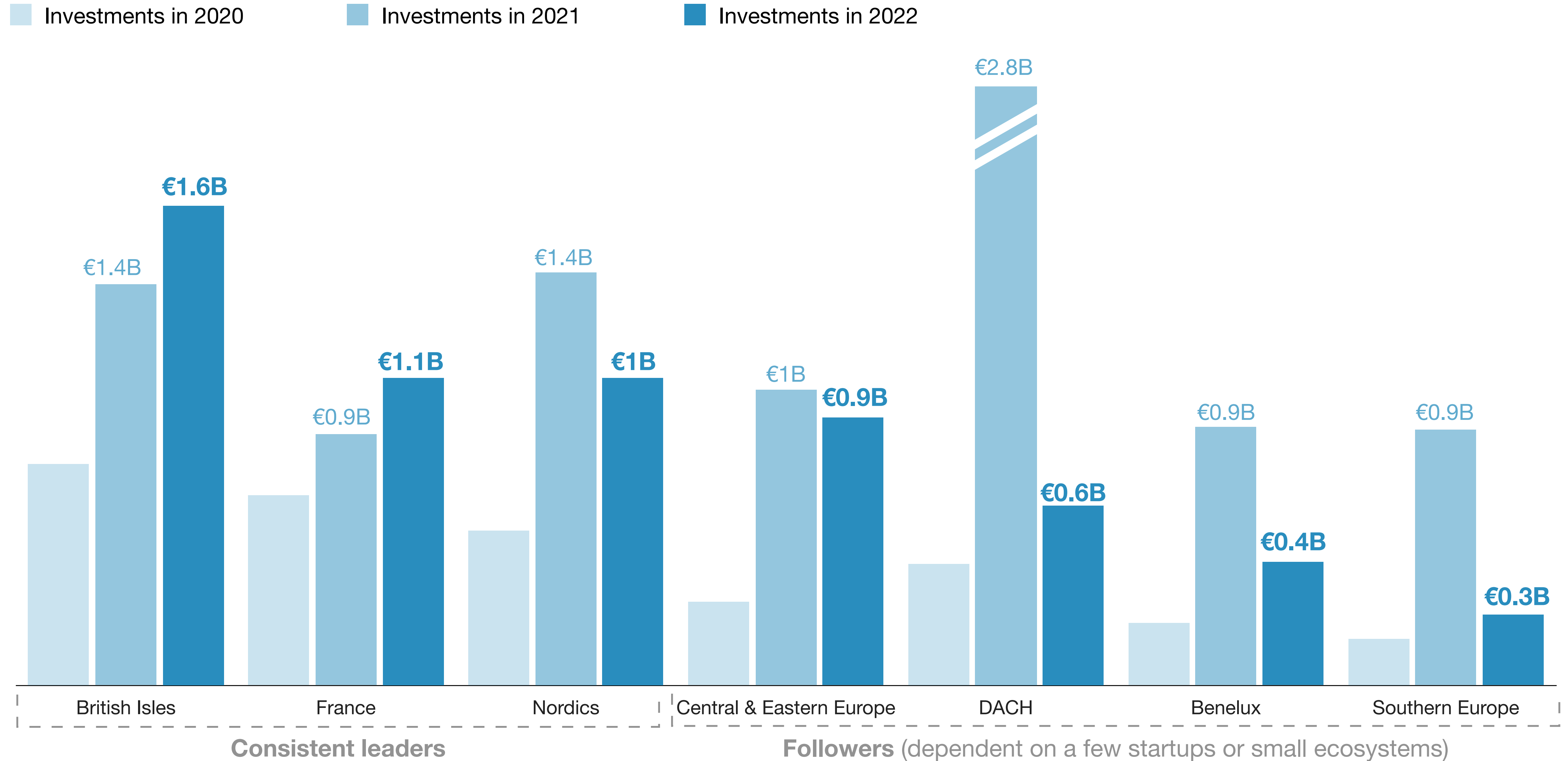
TOP 10 COUNTRIES FOR FOODTECH INVESTMENTS IN EUROPE

Investments in 2020 Investments in 2021 Investments in 2022



INNOVATION HUBS

BREAKDOWN BY REGION: 3 LEADERS, 4 FOLLOWERS



INNOVATION HUBS

CONSISTENT OVER THE YEARS

- For the first time, the same list of 10 countries have remained at the top of European FoodTech for two consecutive years.
- When countries are grouped into investment regions (which we define as an area with similar investors investing in the various countries of the region), we have **a group of 3 leaders (The UK + Ireland, France, and The Nordics)**, and 4 followers with regions depending either on a group of unicorns to gather most of the investments or simply small ecosystems).
- Beyond the main hubs that will be discussed later, the **emergence of Spain's FoodTech** (as we can see here in a dedicated note) has been quite remarkable. We'll have to see if this trend keeps up in 2023.

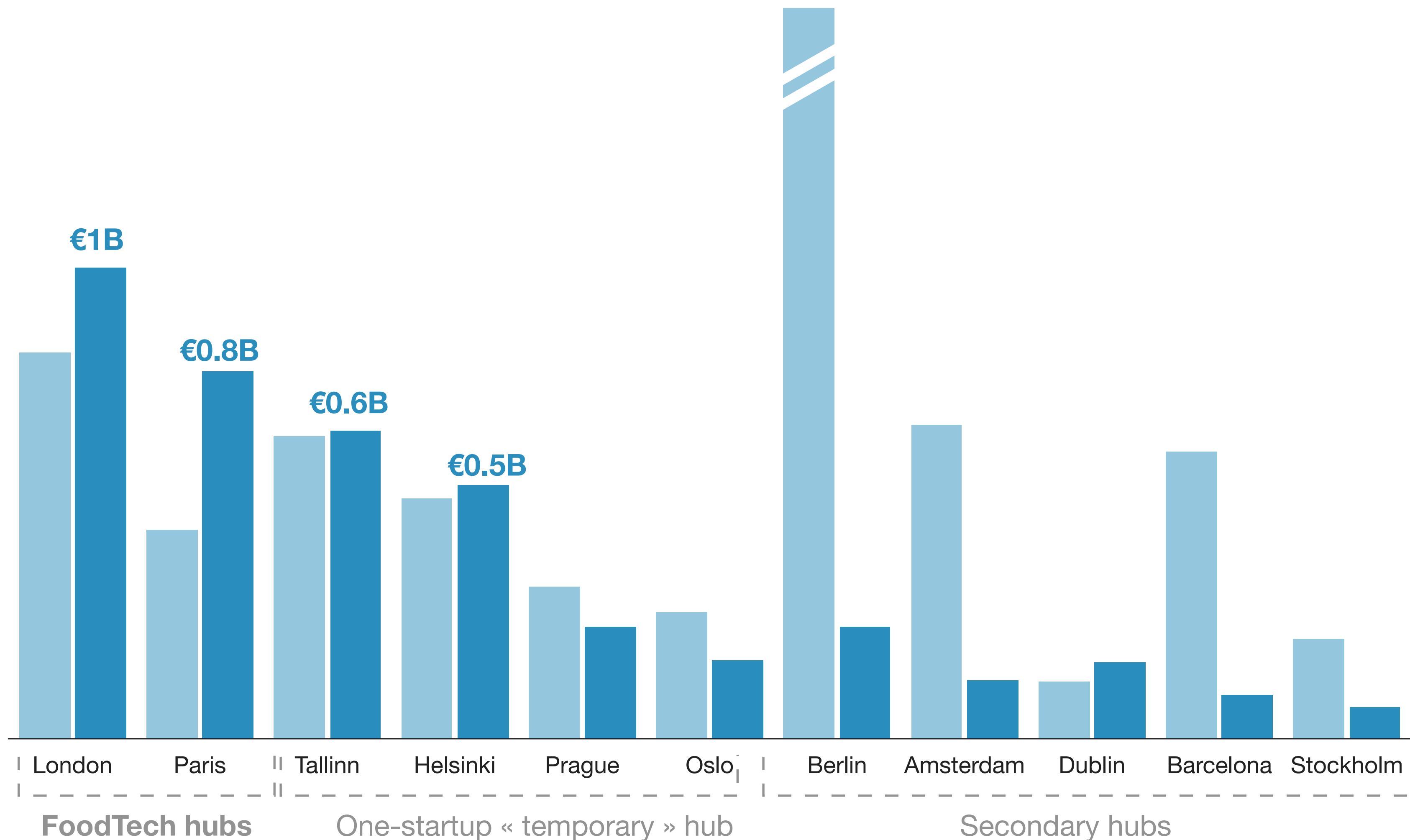


INNOVATION HUBS

LONDON, PARIS, & THE OTHERS

Investments in 2021

Investments in 2022

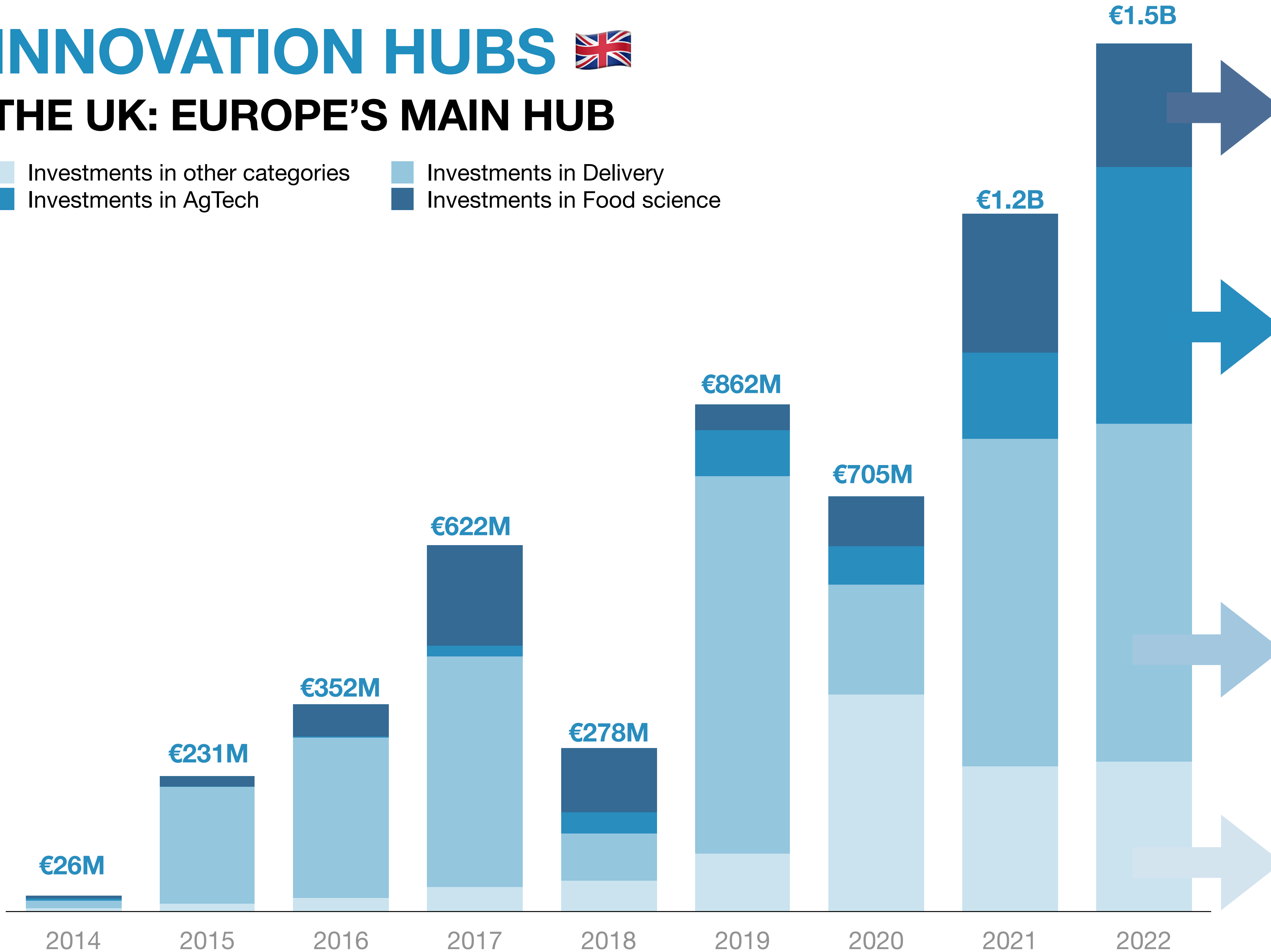


- 11 cities (almost all capital regions) can be labelled as potential FoodTech hubs.
- Among them, we identify two full hubs, where all the categories of the ecosystem are actively represented: Paris & London.
- Four cities' rankings depend on the funding of one or two startups. Here, Helsinki has the highest potential to become a main hub.
- 5 cities have incomplete but promising FoodTech ecosystems. While Berlin has recently decreased in importance, it is still a relevant hub.

INNOVATION HUBS

THE UK: EUROPE'S MAIN HUB

■ Investments in other categories ■ Investments in Delivery
■ Investments in AgTech ■ Investments in Food science



Leaders & rising stars

Better Dairy **Huel**
HOXTON FARMS **ENOUGH**
sustainable protein

growup **moa**
Tropic
EVF EIDER VERTICAL FARMING **IGS**

gousto **Zapp**
modern **milkman**

zoe **KARMA KITCHEN**
vita mojo

INNOVATION HUBS

THE UK: EUROPE'S MAIN HUB

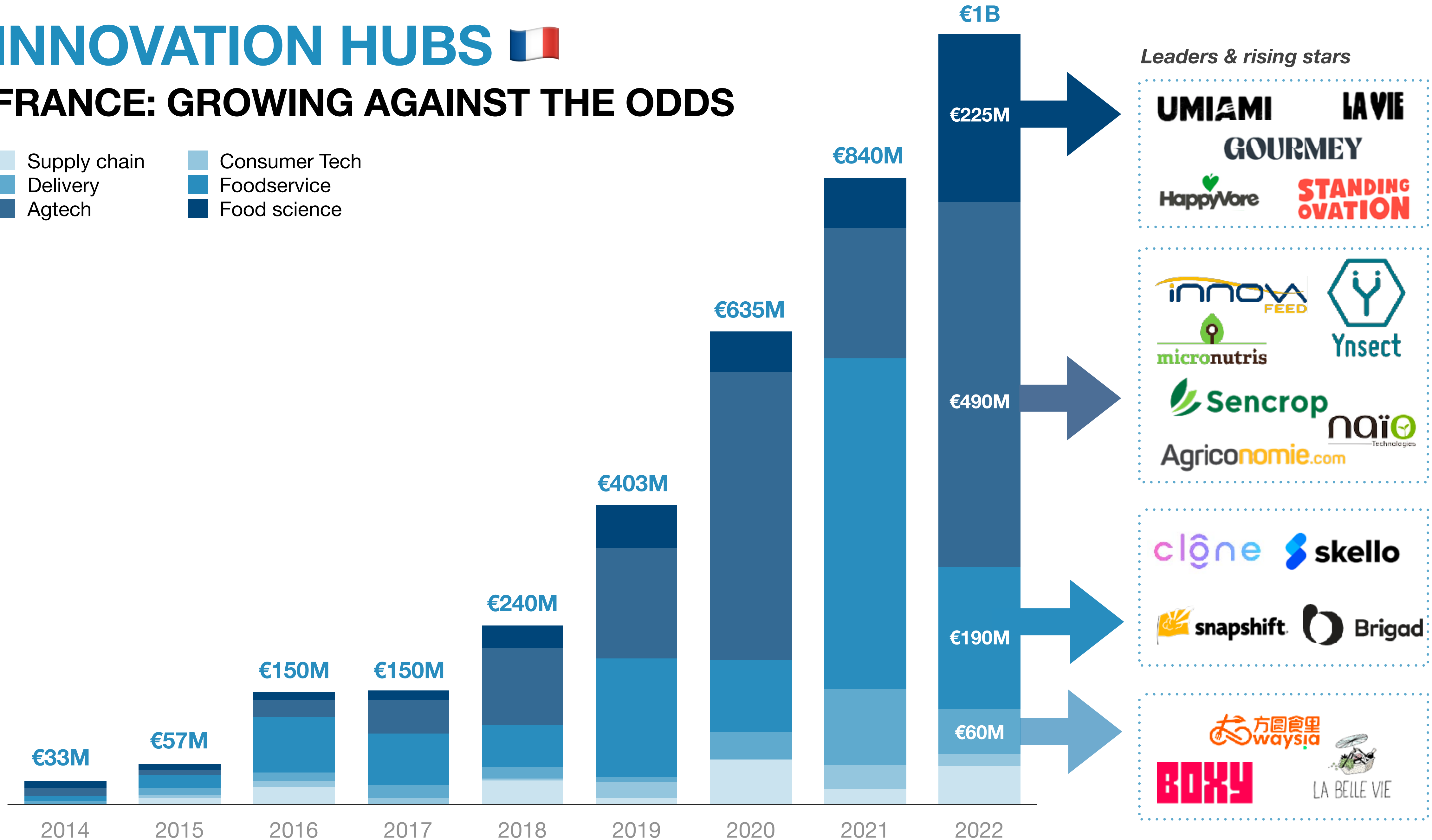
The British FoodTech ecosystem remains **the most diverse and important in Europe** with leading startups in all six of DigitalFoodLab's FoodTech categories.

- **Britain's FoodTech kept growing in 2022.** Moreover, this growth is very sustainable as it is not based on a single startup as in many other countries (even if Zapp and Gousto have both raised massive amounts of money).
- If AgTech, Food science and delivery remain the three main focuses of Britain's FoodTech, it is possible to identify leaders and rising stars in all six categories. We are then very confident in the future of this ecosystem and its ability to grow again in the years to come.



INNOVATION HUBS

FRANCE: GROWING AGAINST THE ODDS



Leaders & rising stars

UMIAMI **LAVIE**
GOURMEY
 HappyVore **STANDING OVATION**

innova FEED **Ynsect**
 micronutris

Sencrop **naii Technologies**
 Agriconomie.com

clone **skello**

snapshot **Brigad**

BOXY **LA BELLE VIE**
 方圆食里 waysia

INNOVATION HUBS

FRANCE: GROWING AGAINST THE ODDS

For years, we have been critical of the development of France's ecosystem, which was absent of the main FoodTech trends observed elsewhere. **Things have changed**, with an impressive catch up: investments have grown thirtyfold in 9 years.

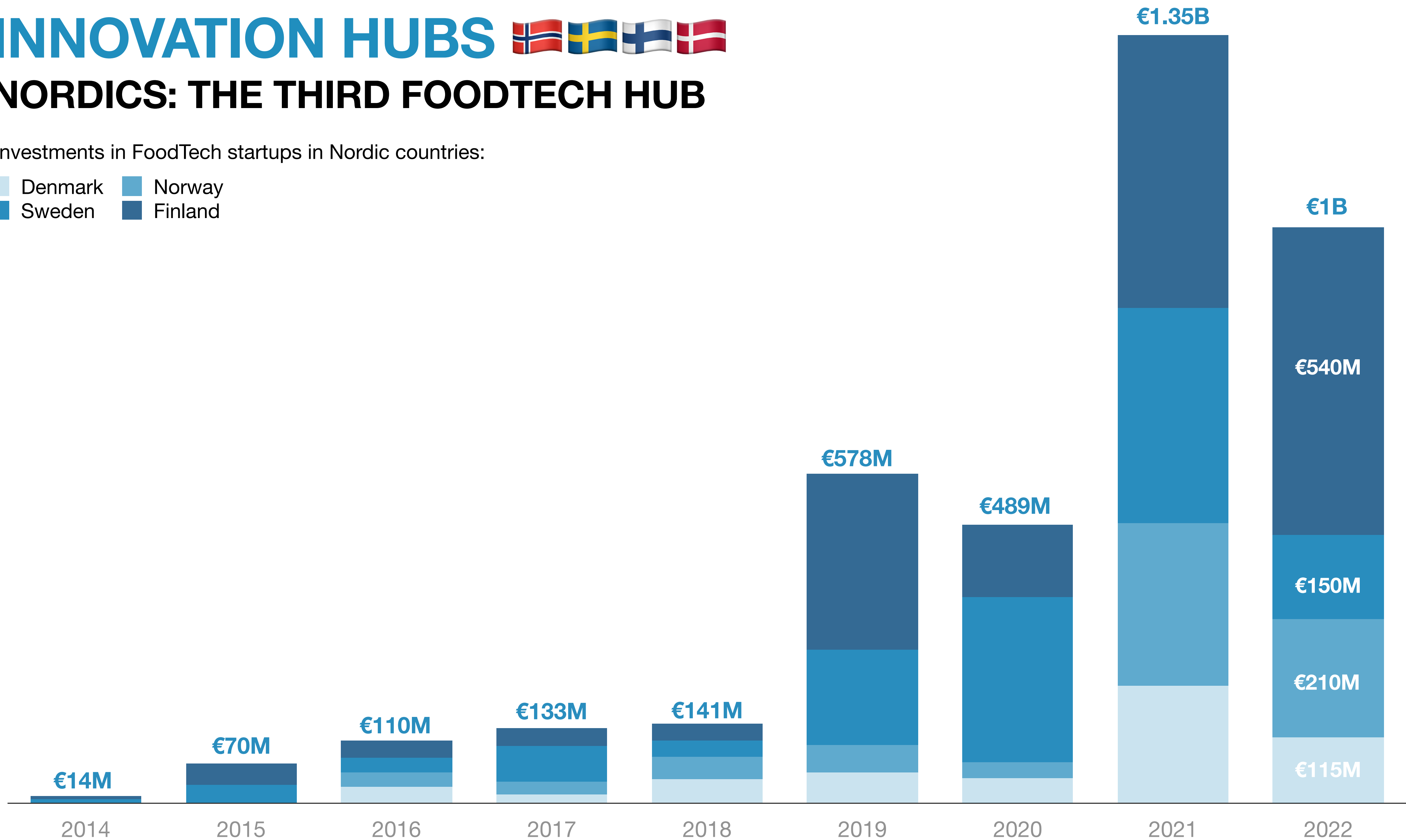
- In 2022, we can notably identify two evolutions:
 - 1 - **the traditional preference of France's tech ecosystem for B2B startups is finally paying off.** Indeed, in tough times, unsexy B2B startups with a proven business model appear much more attractive.
 - 2 - in the meantime, **investments in B2C are finally kicking off**, notably around alternative proteins. This is the case both for short term bets (plant-based alternatives such as La Vie) or long-term ones on technologies such as cellular agriculture and precision fermentation.
- **Internationally, France's FoodTech has begun to be recognized.** International investors and incubators are putting Paris on their map, which is in turn reinforcing the attractiveness of the ecosystem.



INNOVATION HUBS

NORDICS: THE THIRD FOODTECH HUB

Investments in FoodTech startups in Nordic countries:



INNOVATION HUBS

NORDICS: THE THIRD FOODTECH HUB

The growth of FoodTech investments in the Nordics is impressive over the past decade. However, they declined in 2022, although if less steeply than in the rest of Europe.

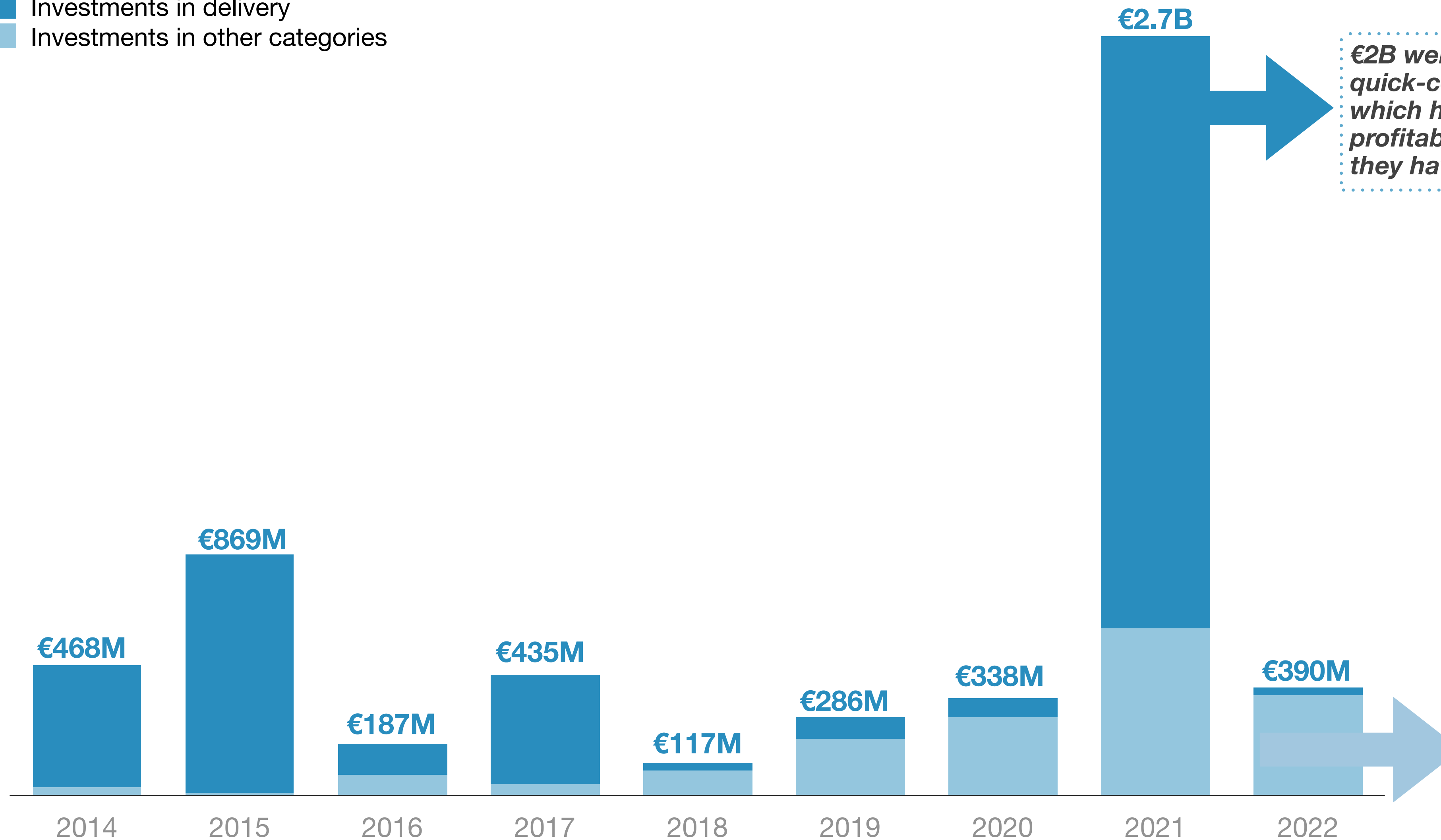
- 🕒 **Investments are still led by Finland**, which again this year has one startup receiving massive investments and becoming a unicorn. In 2021, it was Wolt while in 2022 Relex raised €500M. Finland's ability to create international companies, and now to create attractive university spin-offs out of its VTT institute of research is impressive and should be emulated by all of Europe.
- 🕒 **Sweden has seen the steepest decline in investments in the Nordics** in the absence of massive deals. However, it remains the most diverse and largest ecosystem in terms of number of startups.
- 🕒 **Norway's FoodTech is still very much tied to the health of Oda**, a grocery delivery startup which lost its unicorn status in 2022 (in a downturn where its valuation was slashed).



INNOVATION HUBS

GERMANY: A WASTED OPPORTUNITY?

■ Investments in delivery
■ Investments in other categories



€2.7B

€2B were invested into 2 quick-commerce startups which have not reached profitability as fast as they have spent cash.



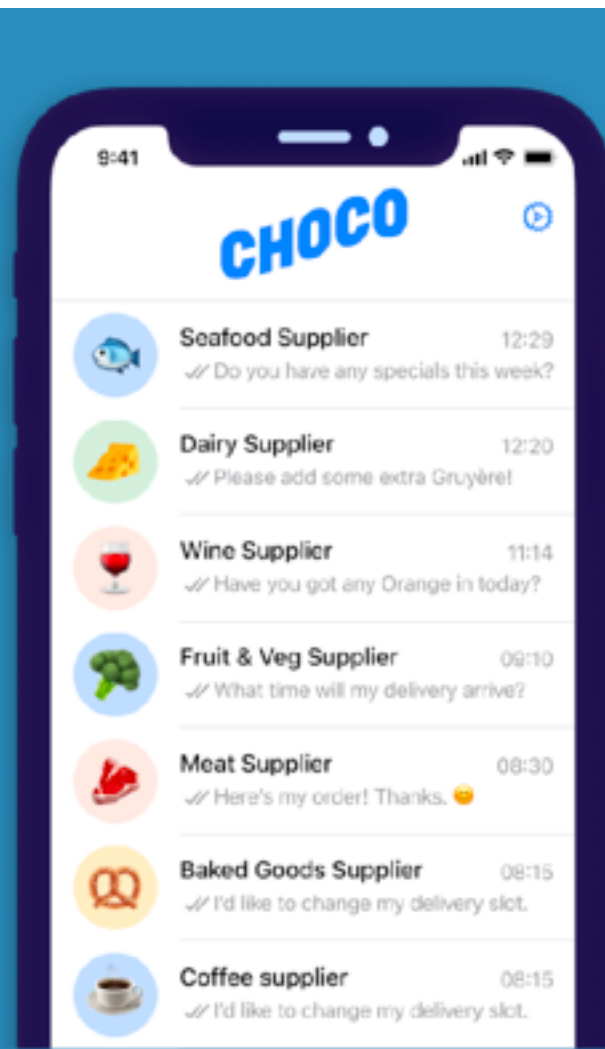
The ecosystem beyond delivery is much less affected with deals bigger than €10M



INNOVATION HUBS

GERMANY: A WASTED OPPORTUNITY?

- Billions were poured into Germany's quick-commerce startups in 2021. On the positive side of things, we can observe that for the first time, European startups were leading the way in a FoodTech trend and were being looked at as the leaders of an exciting new ecosystem. But, at the end of the day, these startups have been either partially or fully acquired, mostly by non-European companies. If eventually quick-commerce becomes a sizable and profitable business, the added value may well leave Europe.
- Beyond this decrease, Germany remains a place where many interesting FoodTech startups are being developed in all FoodTech categories. This is notably the case for B2B brands, digital platforms for restaurants and sustainable solutions for the food supply chain.**



INNOVATION HUBS

WHAT IS LACKING TO GO FROM REGIONAL TO GLOBAL FOODTECH HUBS?

As FoodTech grows, public support also continues to get stronger. From a situation of disinterest only a few years ago, there are now countless projects in Europe around alternative proteins supported by public funds'. However, Europe is still lagging behind on at least two fronts:

- ① **The political and public endorsement of the idea that FoodTech is part of the future of food is still very weak.** Apart from a few countries such as The Netherlands, there is still a total absence of national strategies around this ecosystem and its promise.
- ② **A lack of specialization and national focus for investors: Europe's FoodTech hubs compete more with each other than with the rest of the world.** Additionally investors are much more focused on the startups in their own cities or countries than about what's happening elsewhere in Europe.





DIGITALFOODLAB IN ACTION

USE CASE #2: SETTING UP AN EXECUTIVE WATCH FOR AN INGREDIENT COMPANY

Mission for a leading flavor ingredient company which was looking both to have a watch on disruptive innovation and a forum to discuss the emerging opportunities.

What we did:

- defined with the client which geographies and which topics should be followed (and for each, which level of priority)
- deliver (mission still ongoing) a letter each month with an executive summary of what has happened in the innovation ecosystems (startups, funding, product launch, research, partnerships with established corporations) with analysis focused on the client's business
- set up an online dashboard to track all the companies mentioned in the letters
- organise bi-annual workshops with the client's board to review emerging opportunities through mini business cases (what would happened if the client followed up on this opportunity?)

Results:

- client's board developed a long-term understanding of the innovation ecosystem to guide decision-making
- noise around innovation was significantly reduced

FOODTECH IN EUROPE IN 2023

III - CATEGORIES & TRENDS

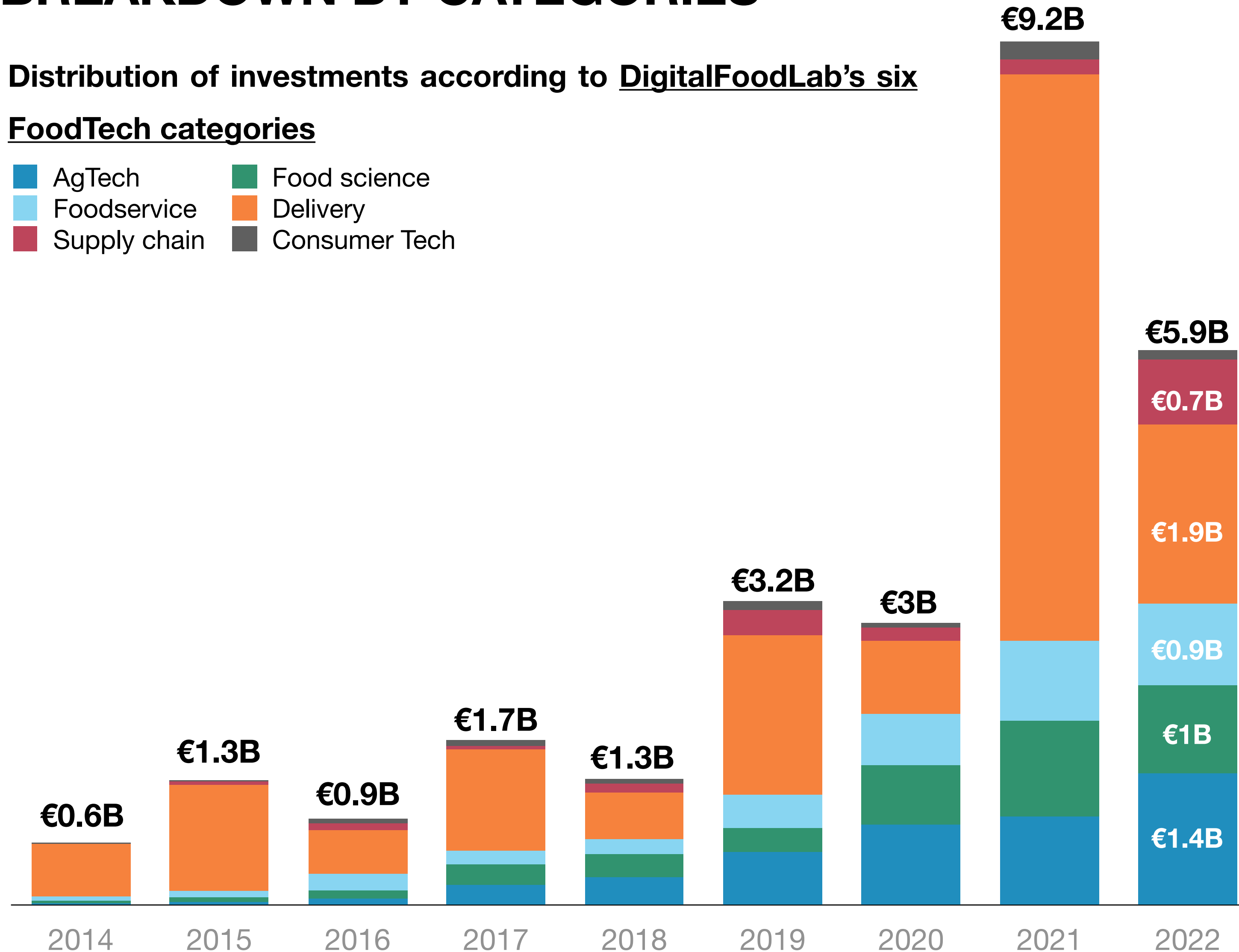


CATEGORIES & TRENDS

BREAKDOWN BY CATEGORIES

Distribution of investments according to DigitalFoodLab's six FoodTech categories

- AgTech
- Foodservice
- Supply chain
- Food science
- Delivery
- Consumer Tech



-68%

decrease in the amount invested in **delivery** startups in 2022 compared to 2021.

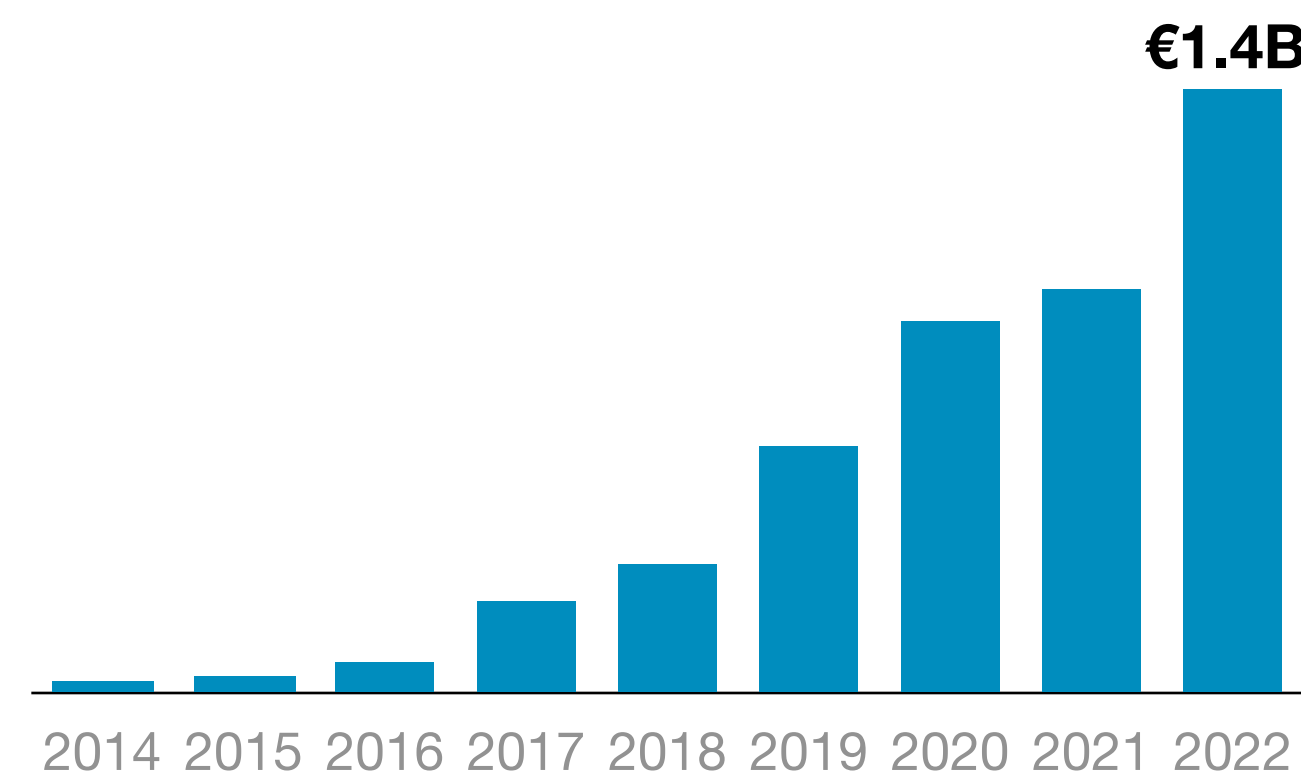
+49%

increase in the amount invested in **agtech** startups in 2022 compared to 2021.

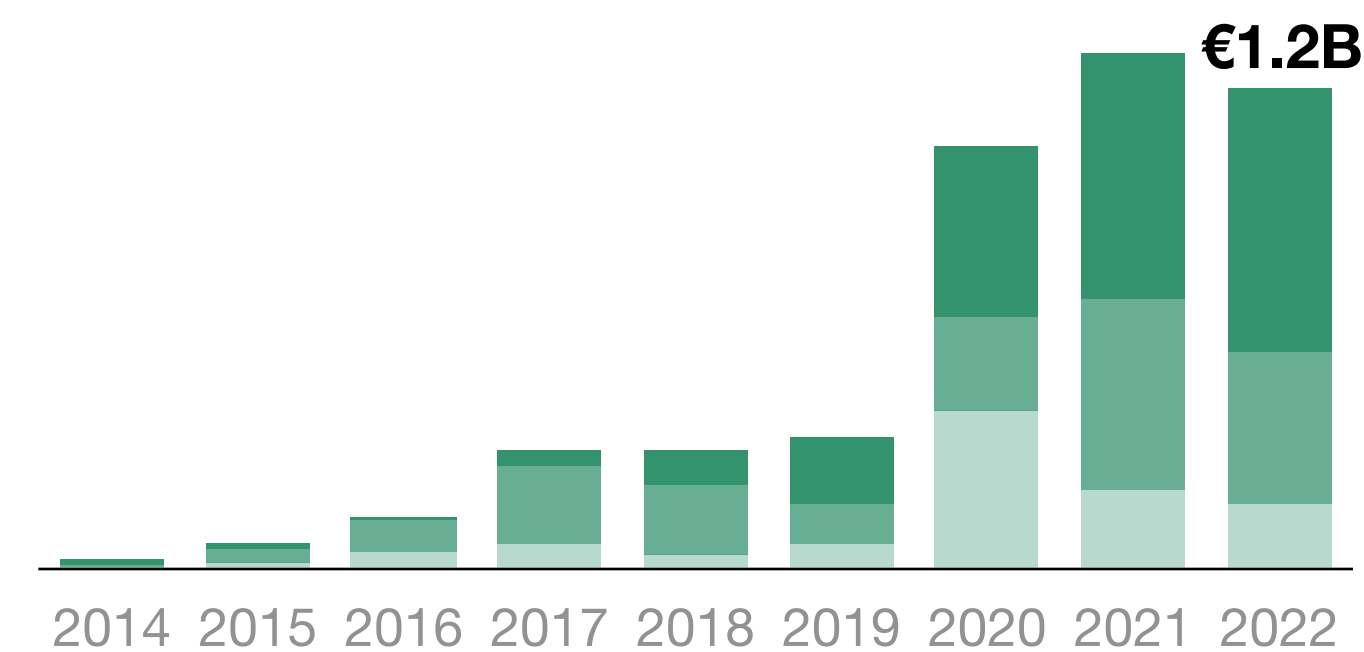
CATEGORIES & TRENDS

INVESTMENTS ACROSS THE VALUE CHAIN

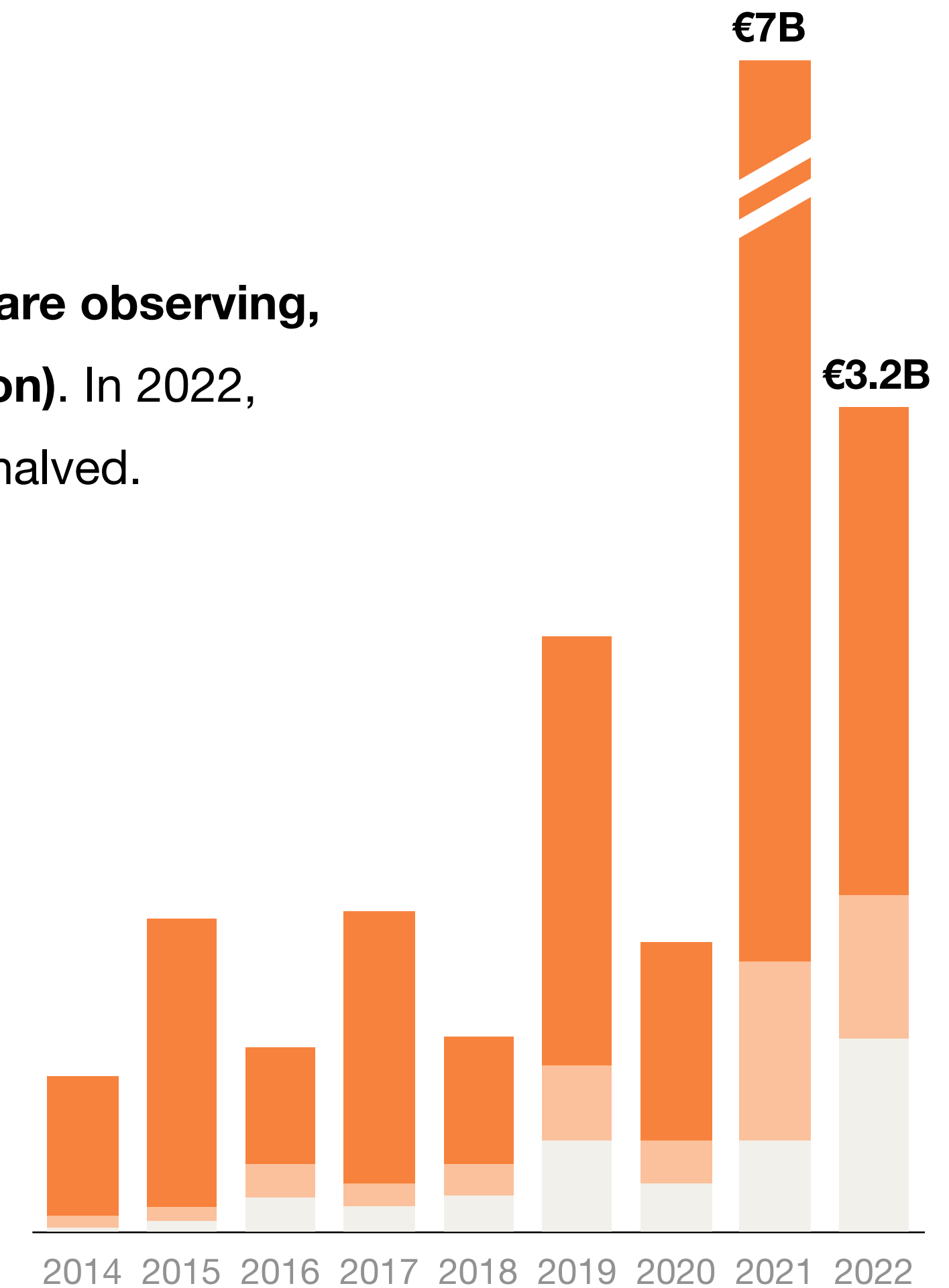
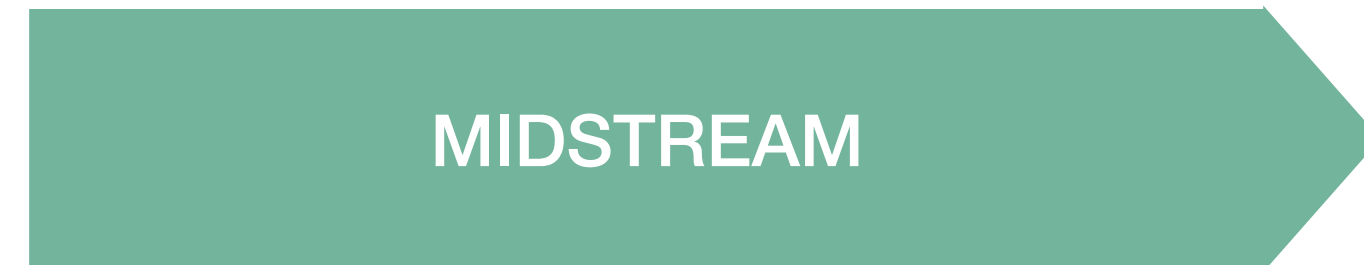
From a situation where almost 90% of the funding was dedicated to downstream startups, **we are observing, year after year, a rebalancing toward upstream (agriculture) and midstream (transformation).** In 2022, this is particularly obvious as upstream investments increase while downstream's were almost halved.



Investments in AgTech startups



Alternative proteins
Non-disruptive new food products (CPG brands, new beverages...)
Cloud & virtual kitchens



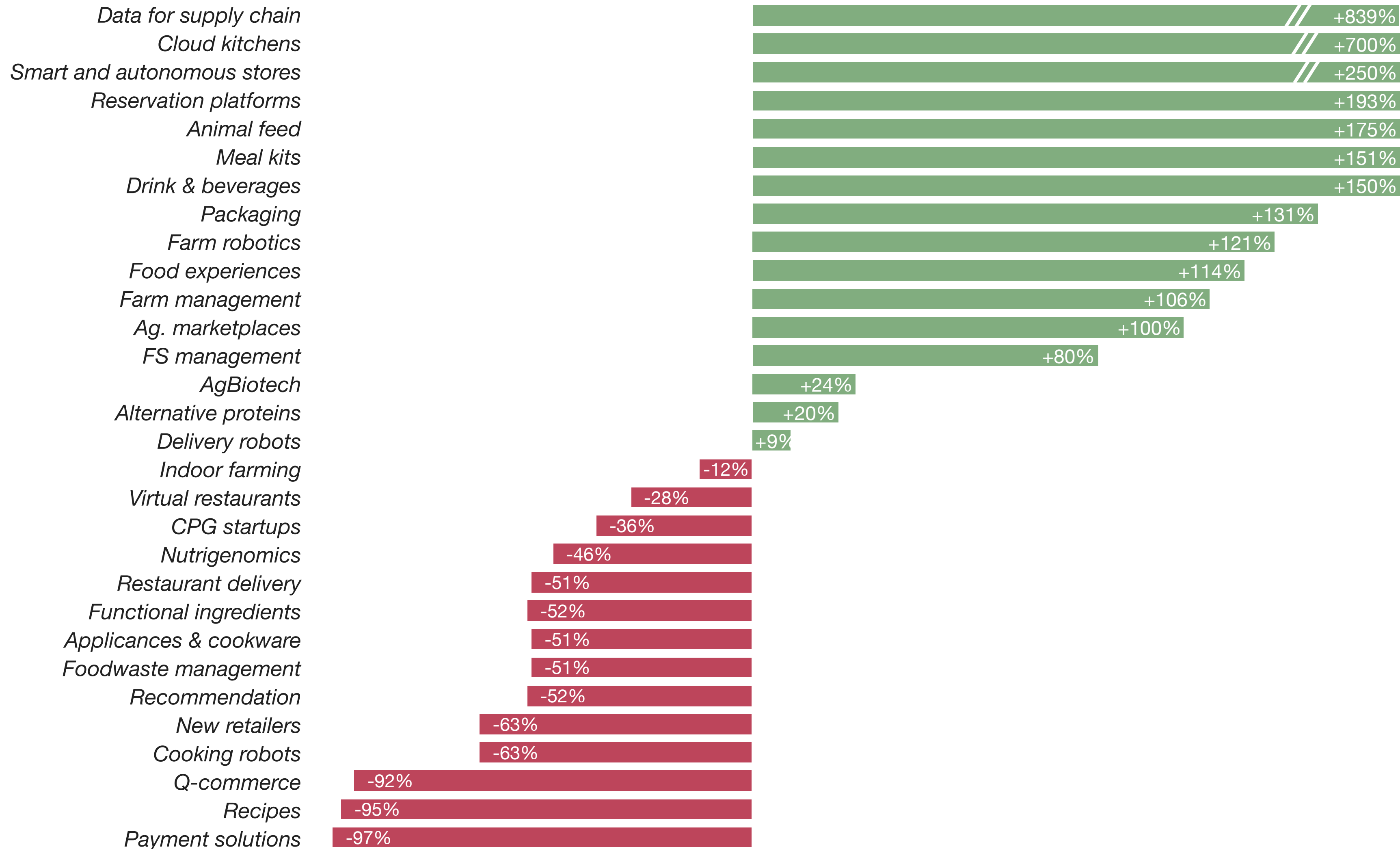
Investments in delivery
Supply chain & Consumer Tech
Other Foodservice



CATEGORIES & TRENDS

VERY DIFFERENT FATES

Growth of the amount invested between 2021 and 2022 (%)



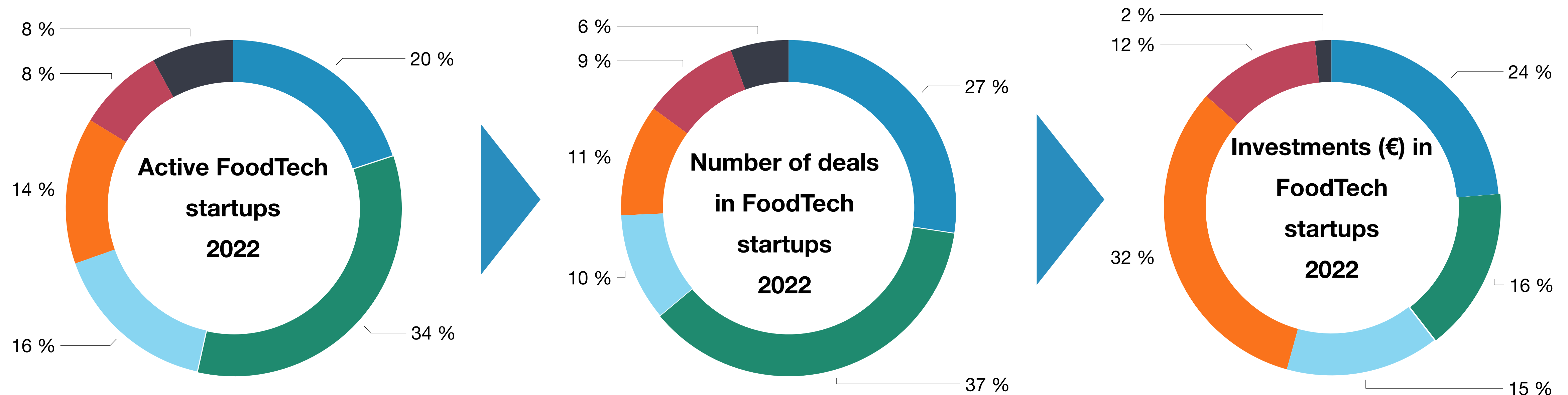
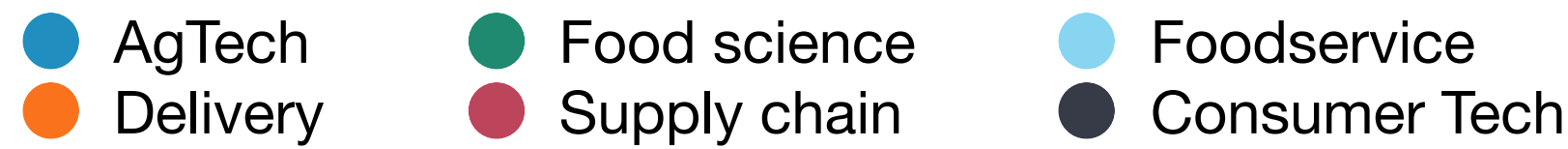
When we look at the level of subcategories ([definitions can be accessed here](#)), we observe that **the situation is indeed very diverse inside the FoodTech ecosystem and inside the categories themselves.**

For instance, while food CPG brands (often Direct-to-consumer startups) are not doing well, beverage brands are doing extremely well.

Many of the hyped trends of 2020 and 2021 are now doing very poorly, notably quick-commerce and other grocery delivery platforms, payment solutions for restaurants (pay-at-table and ePOS), and cooking robots.

CATEGORIES & TRENDS

DISTRIBUTION OF ACTIVE STARTUPS, DEALS, AND INVESTMENTS

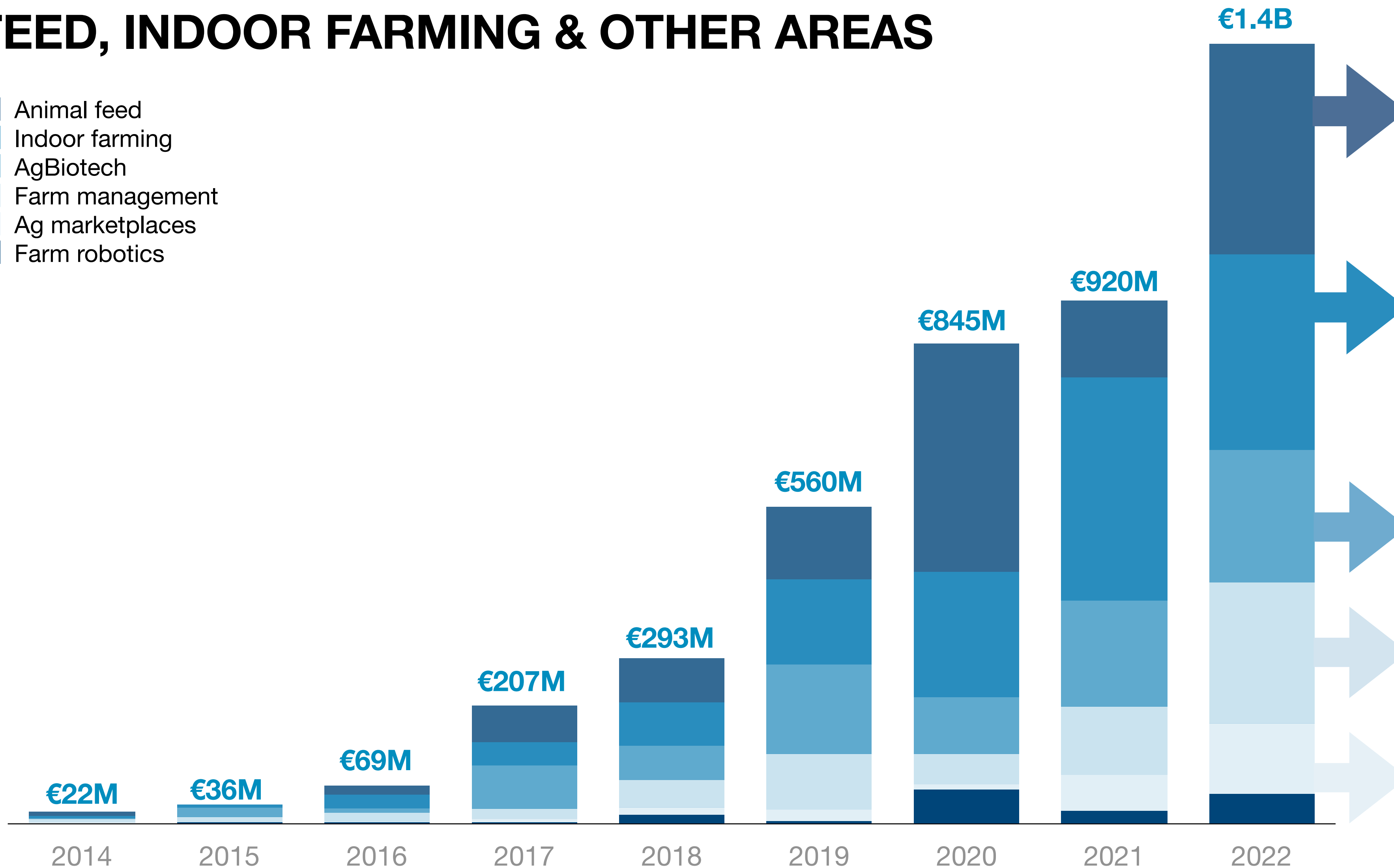


Compared to previous years, the most notable fact in 2022 was the relative diminution of the share of delivery startups. The area is now much less attractive for new entrepreneurs and many companies shut down in 2022. In terms of investments, the amounts put into food science companies are still relatively low, and represent the main area of potential growth for the ecosystem.

CATEGORIES & TRENDS

AGTECH: WELL-DIVERSIFIED BETWEEN ANIMAL FEED, INDOOR FARMING & OTHER AREAS

- Animal feed
- Indoor farming
- AgBiotech
- Farm management
- Ag marketplaces
- Farm robotics

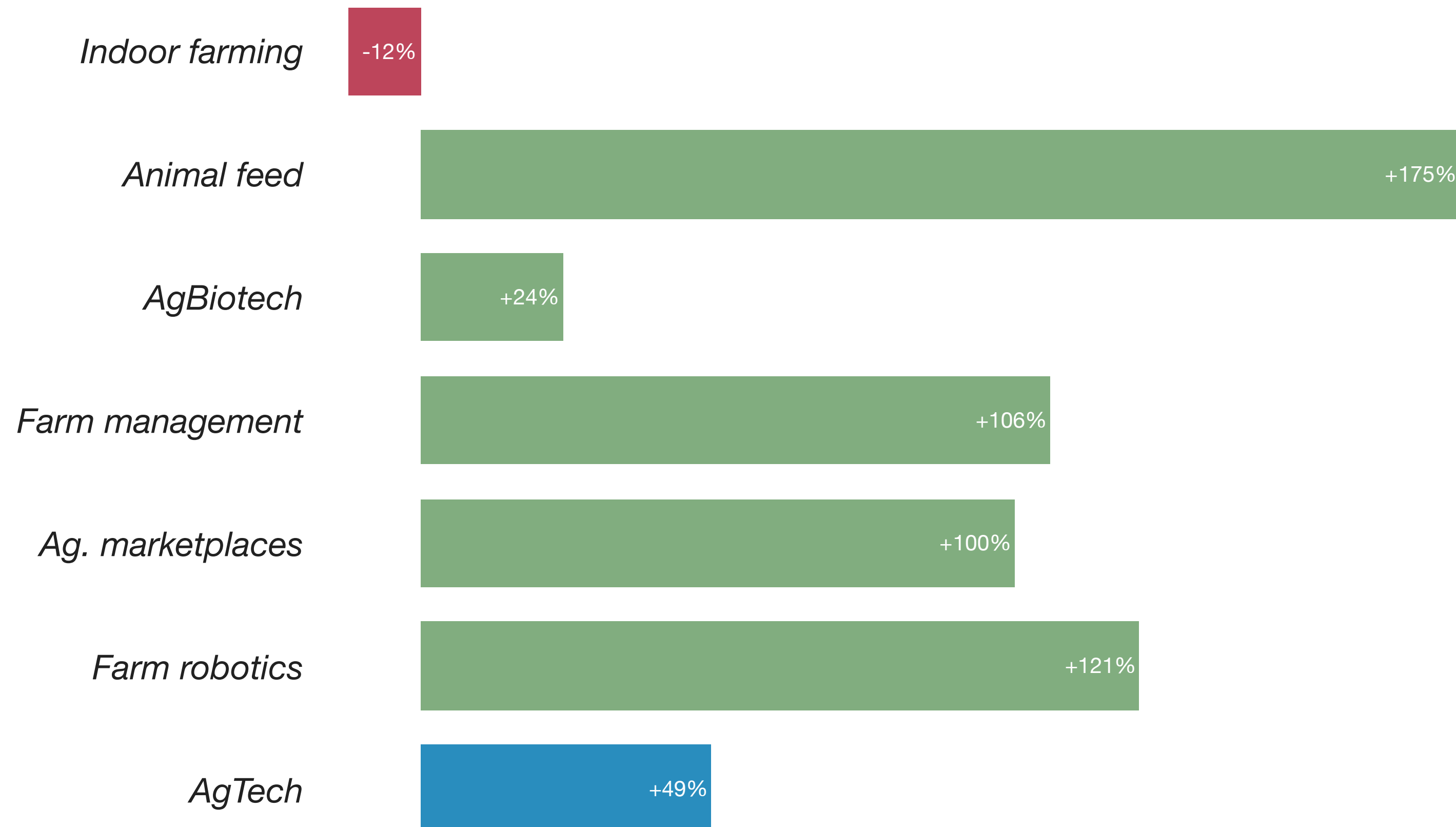


Leaders & rising stars

CATEGORIES & TRENDS

AGTECH: UPS AND DOWNS

Evolution of the investments in the different AgTech components ([definitions can be accessed here](#)) between 2021 and 2022:



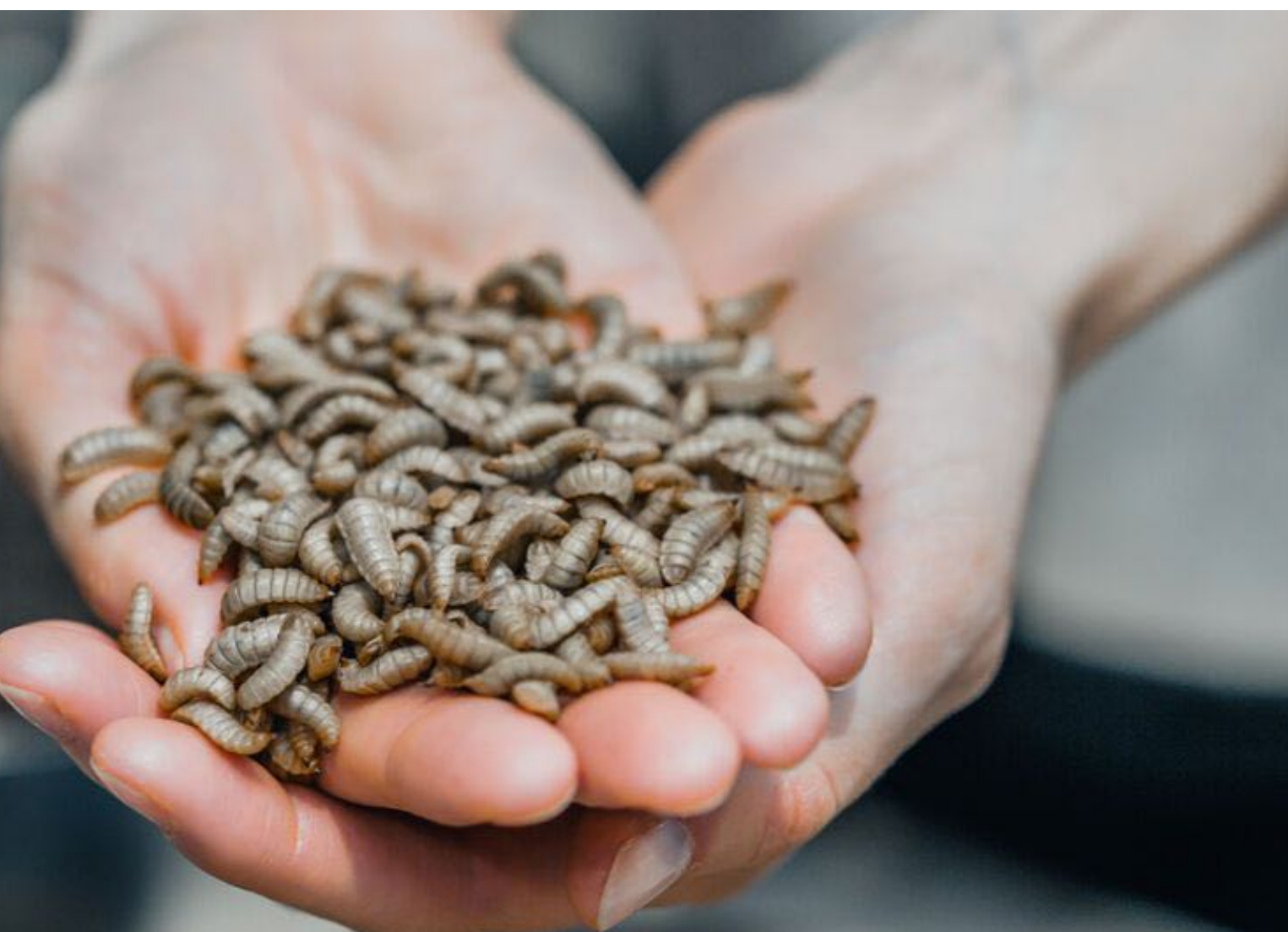
TODAY, AGTECH IS ABOUT

- Increasing the profitability and resilience of existing farms.
- Reducing the impact of farming on the climate (and adapting to the inevitable consequences of climate change) through new crops, new animal feed, and a greater convergence with biotech.
- Creating the farms of tomorrow.

CATEGORIES & TRENDS

AGTECH IN EUROPE: GETTING STRONGER

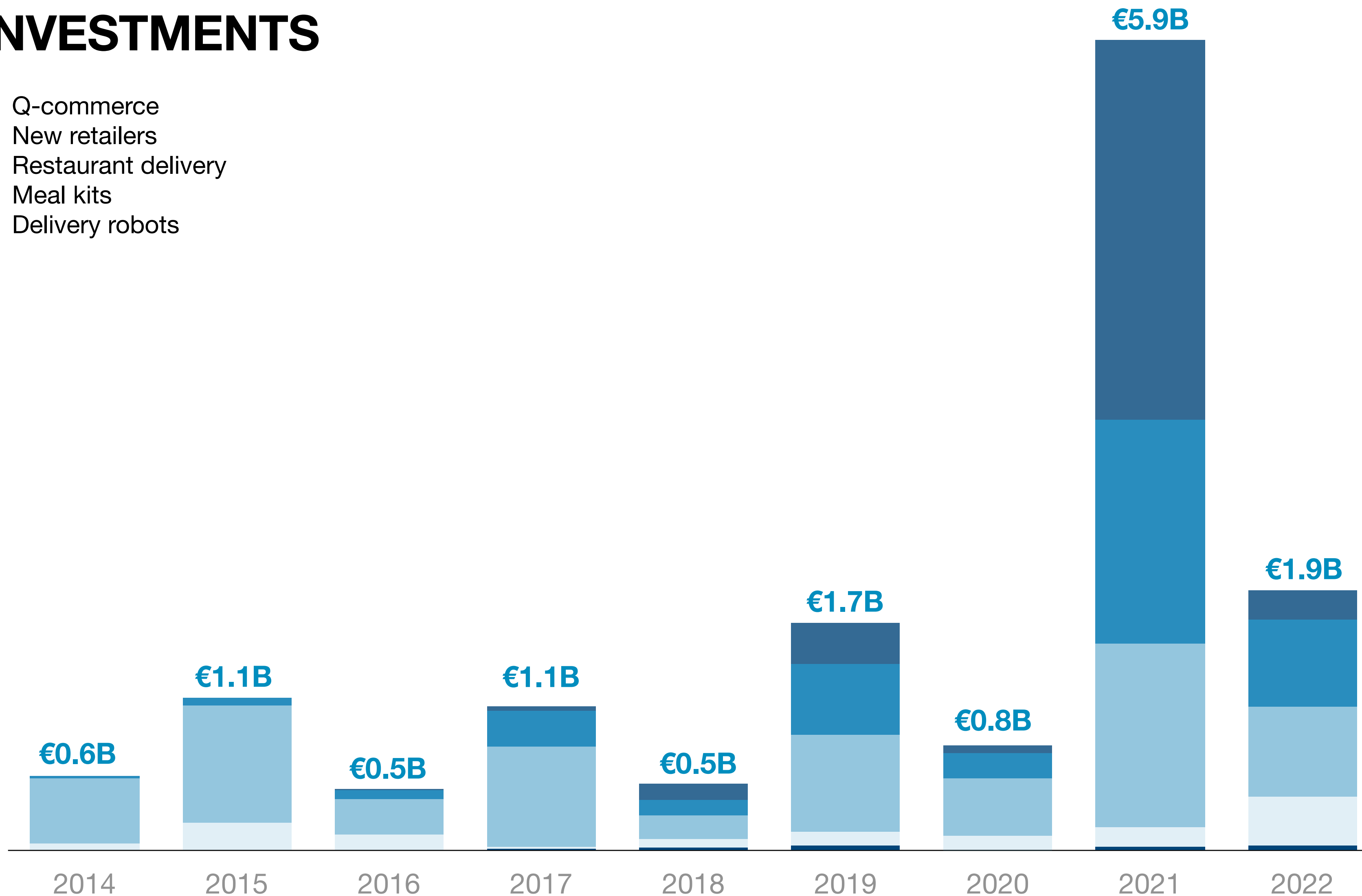
- If **AgTech** is attracting more and more attention and investments (which grew of **49%**), all sub-categories did not evolve in the same way. Indoor farming has received less investment than previously (and a large share of it in the first quarter).
- On the hand, the **energy crisis** has « **stimulated** » investments in new **bio inputs (AgBiotech and animal feed)**. Moreover, the trend toward greater resilience and autonomy of farms (farm robotics & marketplaces, and farm management) is still very active.
- As for food science, we also observe **a trend toward industrialisation**. Some startups, notably around insects, are setting up production facilities which are a testament to the maturity of this ecosystem and the faith of investors in the area.



CATEGORIES & TRENDS

DELIVERY: STILL ATTRACTING MASSIVE INVESTMENTS

- Q-commerce
- New retailers
- Restaurant delivery
- Meal kits
- Delivery robots



Leaders & rising stars

New retailers - large players



New retailers - disruptors



Meal Kits



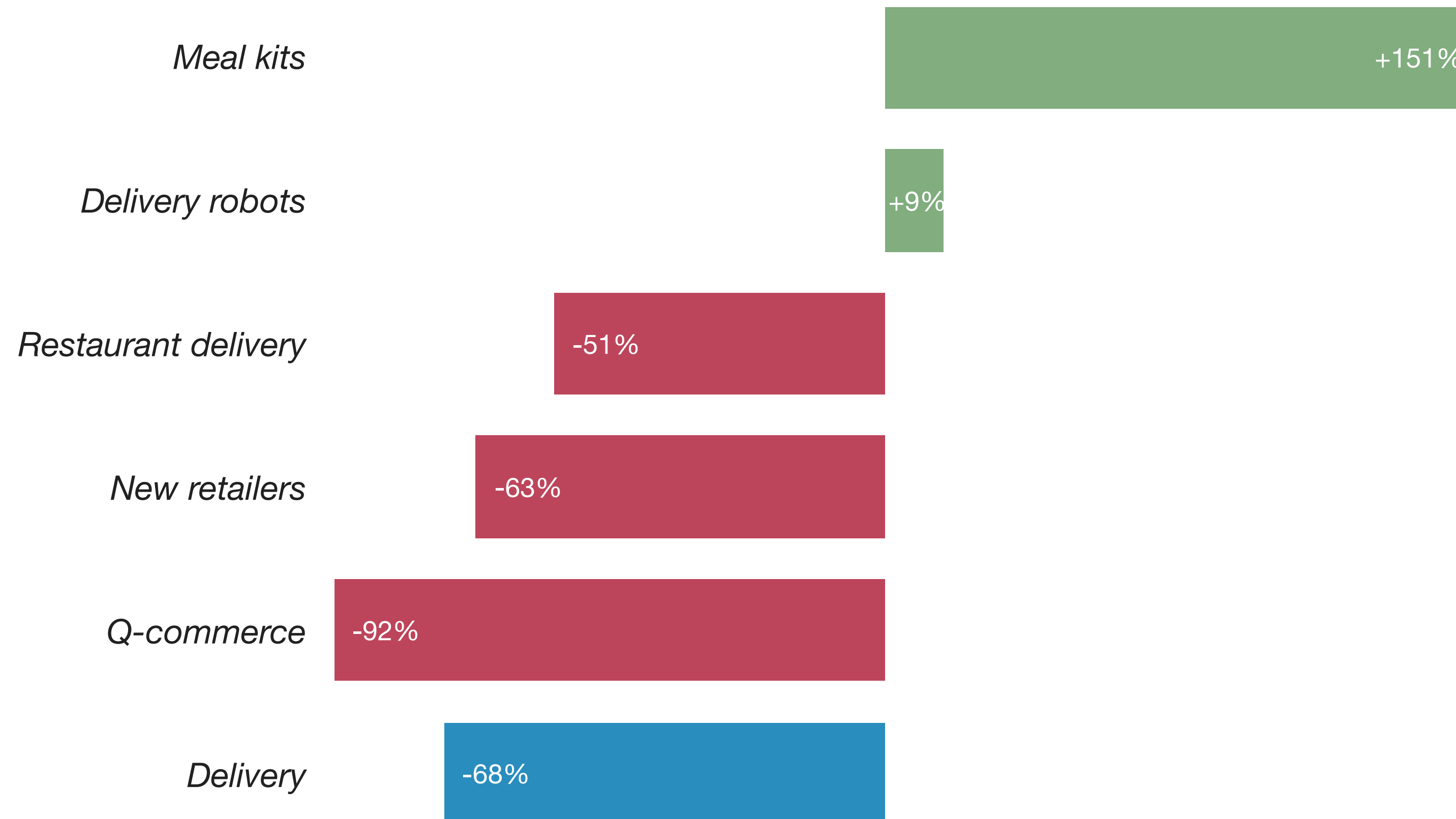
Restaurant delivery & q-commerce



CATEGORIES & TRENDS

DELIVERY: UPS AND DOWNS

Evolution of the investments in the different delivery components (definitions can be accessed here) between 2021 and 2022:



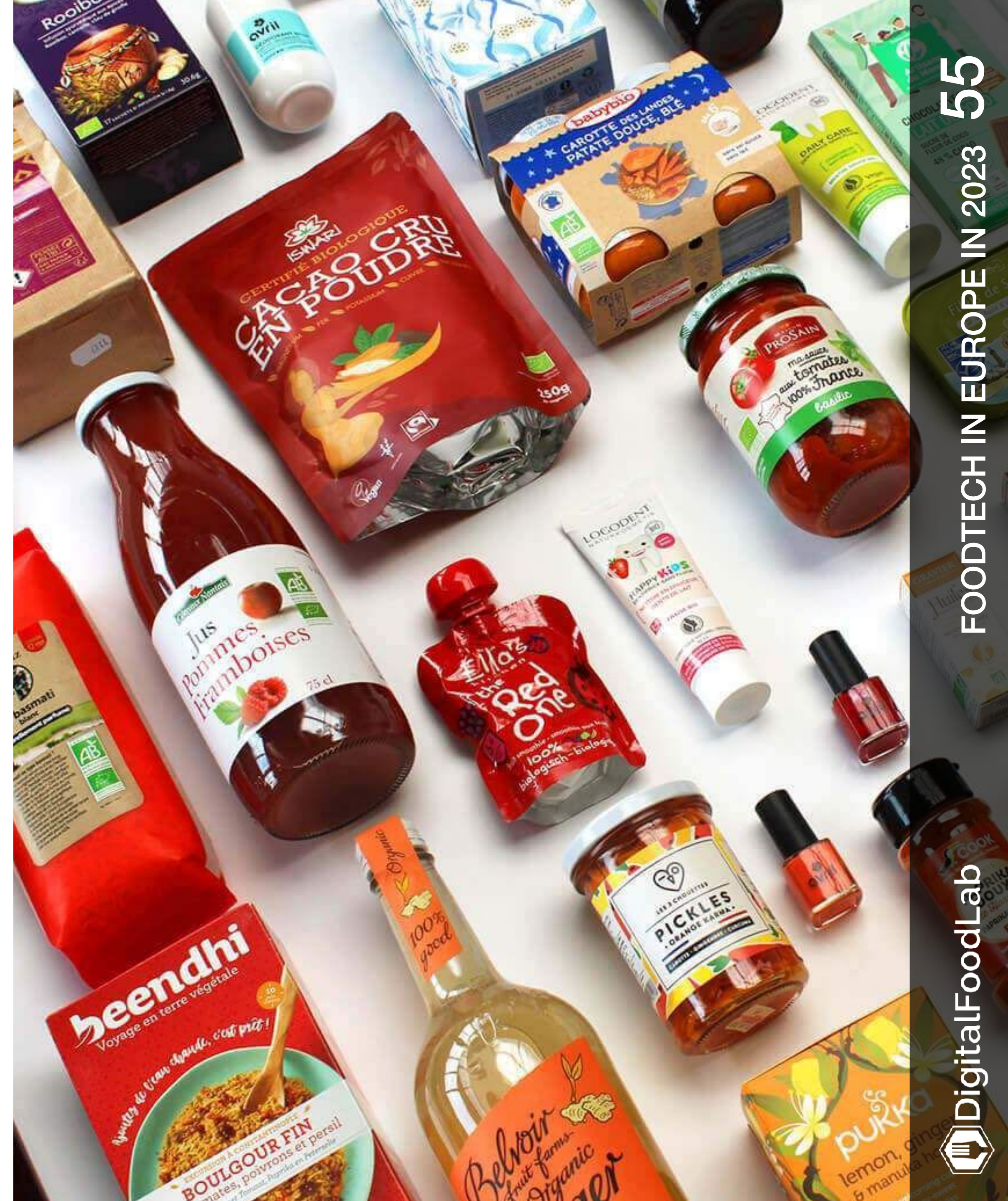
TODAY, DELIVERY IS ABOUT

- Bringing food (groceries and cooked meals) efficiently to the consumer's door or desk.
- Reinventing grocery retail by making it more sustainable and personalized.
- Instant gratification of the consumer's needs and wants.

CATEGORIES & TRENDS

DELIVERY: NOT THE END

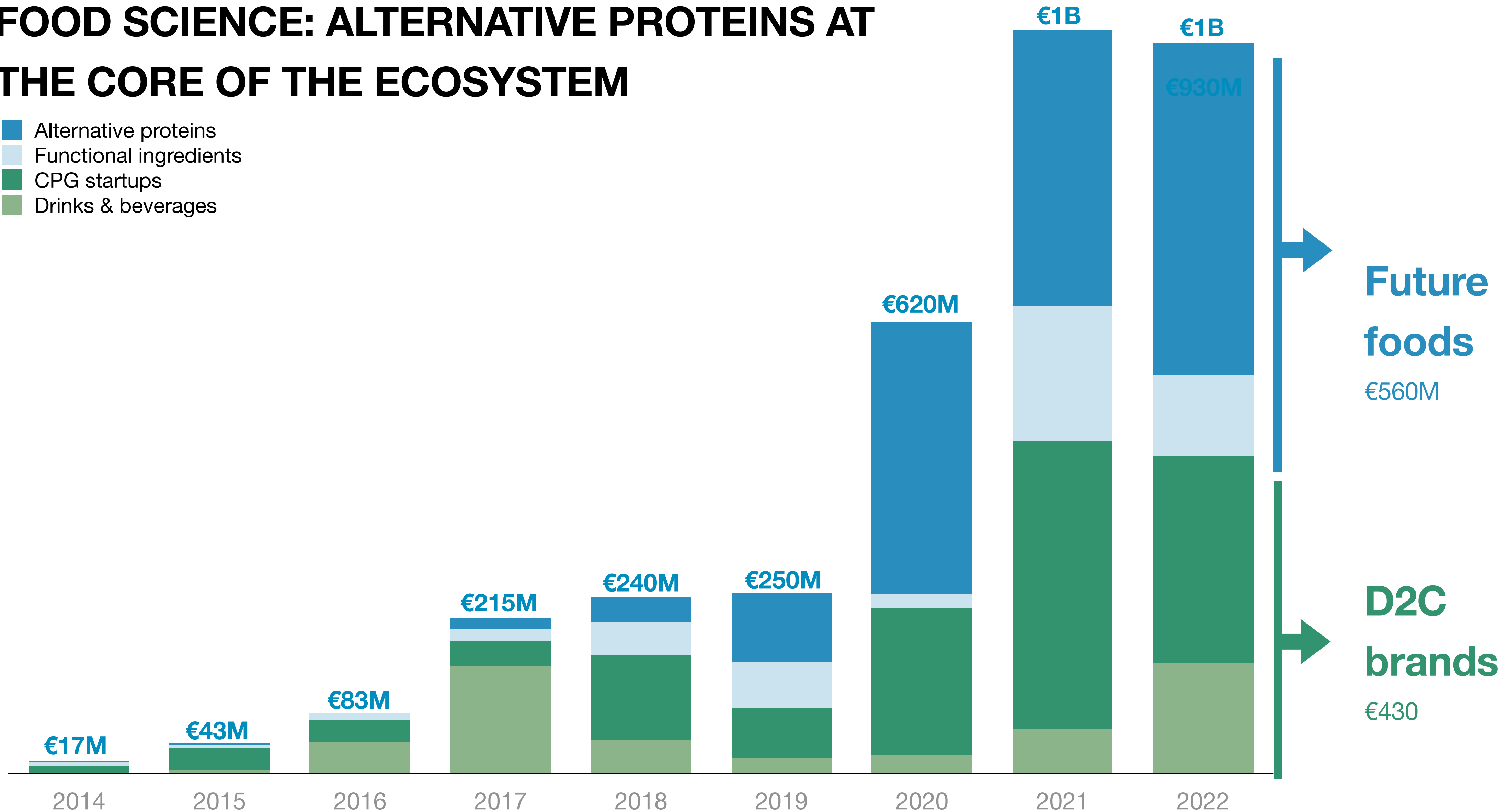
- As we can see in the previous graphs, this ecosystem is still alive, with **almost €2B invested in 2022**. Discounting it would be a grave mistake for established retailers. Innovation and disruption is still coming for them.
- If we take a long view, we can see that **2021 was an anomaly**, and that investments are going back to a more reasonable trajectory of growth. As we can see with the Gousto deal, meal kits are doing well.
- We observe a **surge in new types of online retailers**, some focused on sustainability, some on local products, and some on targeting niche markets. This tells us a story about the future of grocery retail that will be much more diverse than what we know today. We still expect much more investment in Europe's delivery startups in the years to come.



CATEGORIES & TRENDS

FOOD SCIENCE: ALTERNATIVE PROTEINS AT THE CORE OF THE ECOSYSTEM

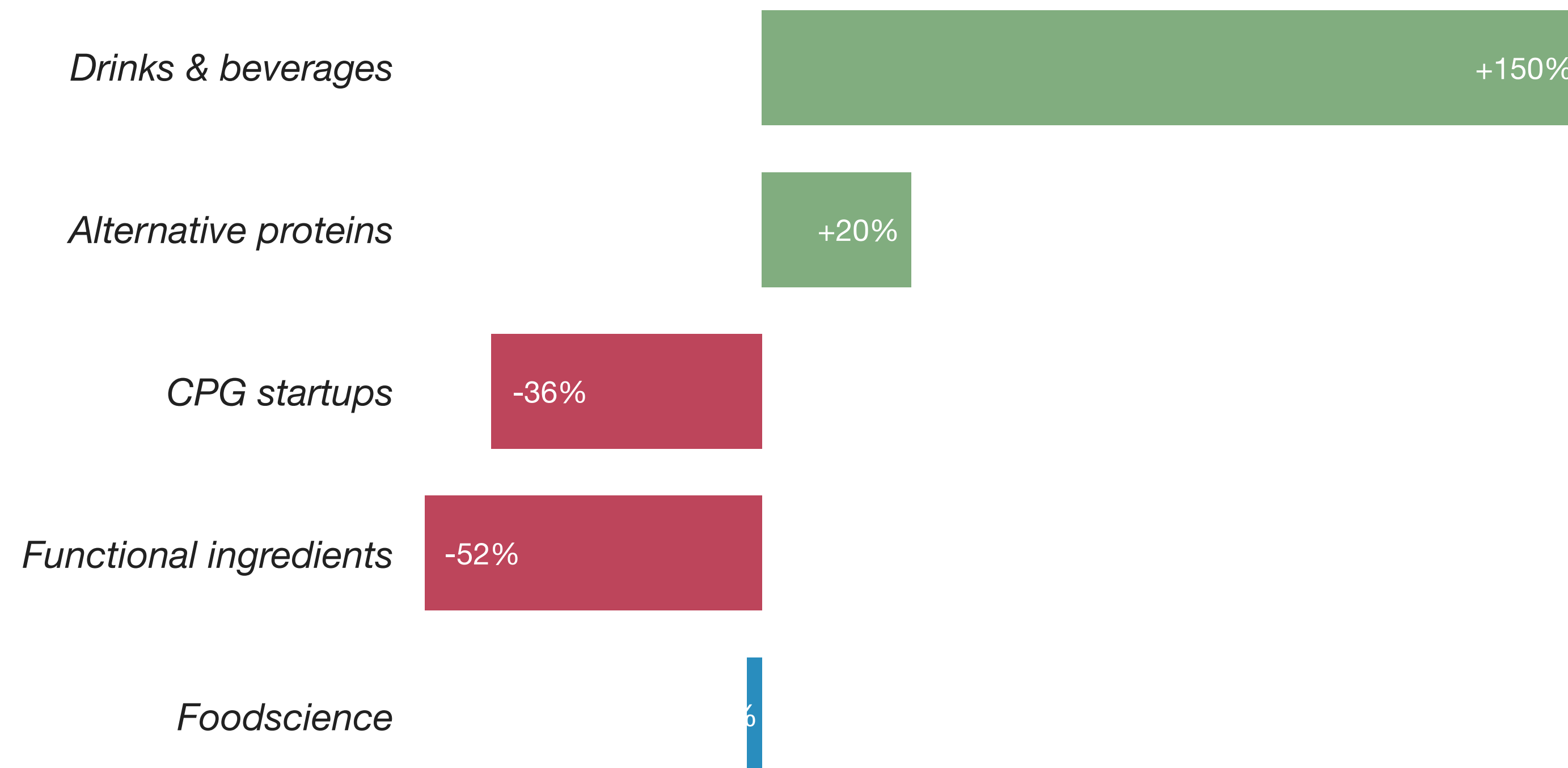
- Alternative proteins
- Functional ingredients
- CPG startups
- Drinks & beverages



CATEGORIES & TRENDS

FOOD SCIENCE: UPS AND DOWNS

Evolution of the investments in the various foodscience components ([definitions can be accessed here](#)) between 2021 and 2022:



TODAY, FOODSCIENCE IS ABOUT

- CPG Brand / D2C startups reinventing day-to-day products, with a growing focus on beverages.
- Alternative proteins, both as ingredients and as final products using technologies from plant-based to cellular agriculture.

CATEGORIES & TRENDS

FOOD SCIENCE: FROM LABS TO FACTORIES

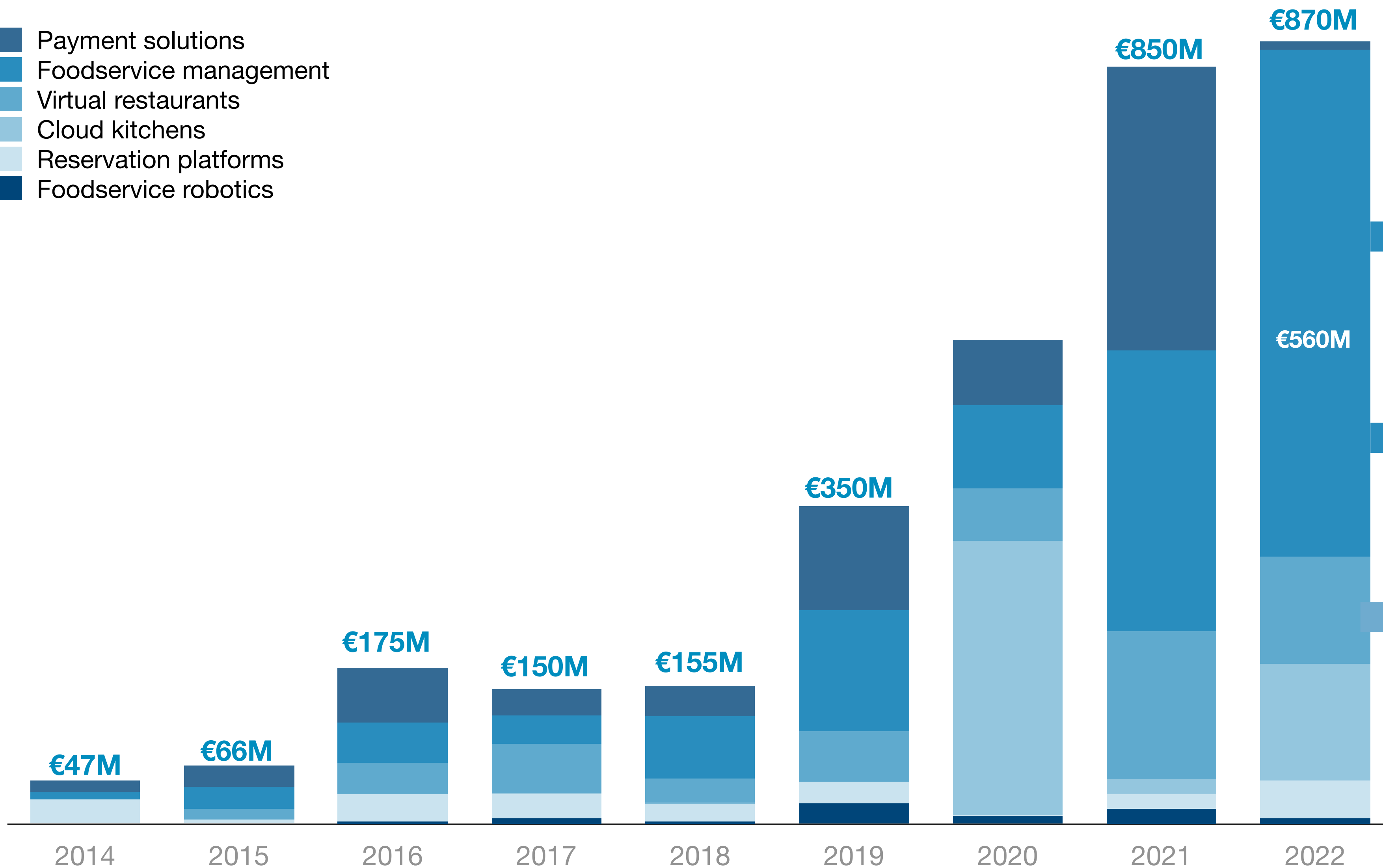
- In a context of doubt created by the decline in sales of plant-based products, it is relatively impressive to see that investments in alternative proteins are still up. Moreover, we have seen a significant shift with companies moving out of their labs to build their own production capabilities. In 2023, we'll see if these ventures succeed in this transition, are able to attract enough capital to complete the development of these facilities, and then if the market is ready for their products.
- Meanwhile, Europe's ability to grow B2B functional ingredients (alternatives to fat, sugar, colorants, flavor...) is still weak compared to that of countries like Israel.
- D2C brands have received fewer investments, except for pet food and for beverages. The latter of which is a fast-growing category notably around new coffee brands or flavored drinks such as Waterdrop's.



CATEGORIES & TRENDS

FOODSERVICE: DIGITIZING THE RESTAURANT

- Payment solutions
- Foodservice management
- Virtual restaurants
- Cloud kitchens
- Reservation platforms
- Foodservice robotics



Unicorns



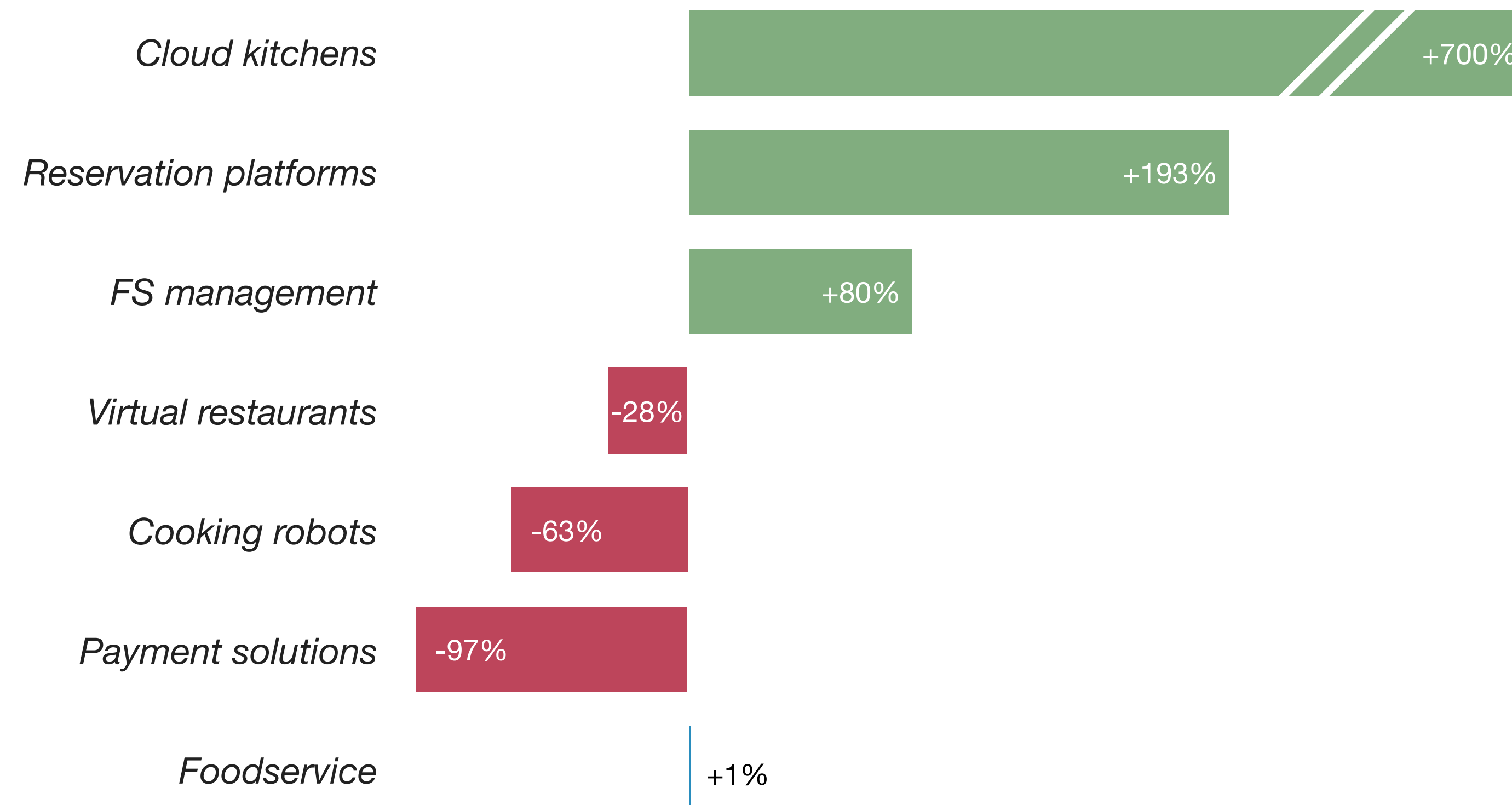
Rising stars



CATEGORIES & TRENDS

FOODSERVICE: UPS AND DOWNS

Evolution of the investments in the various foodservice components (definitions can be accessed here) between 2021 and 2022:



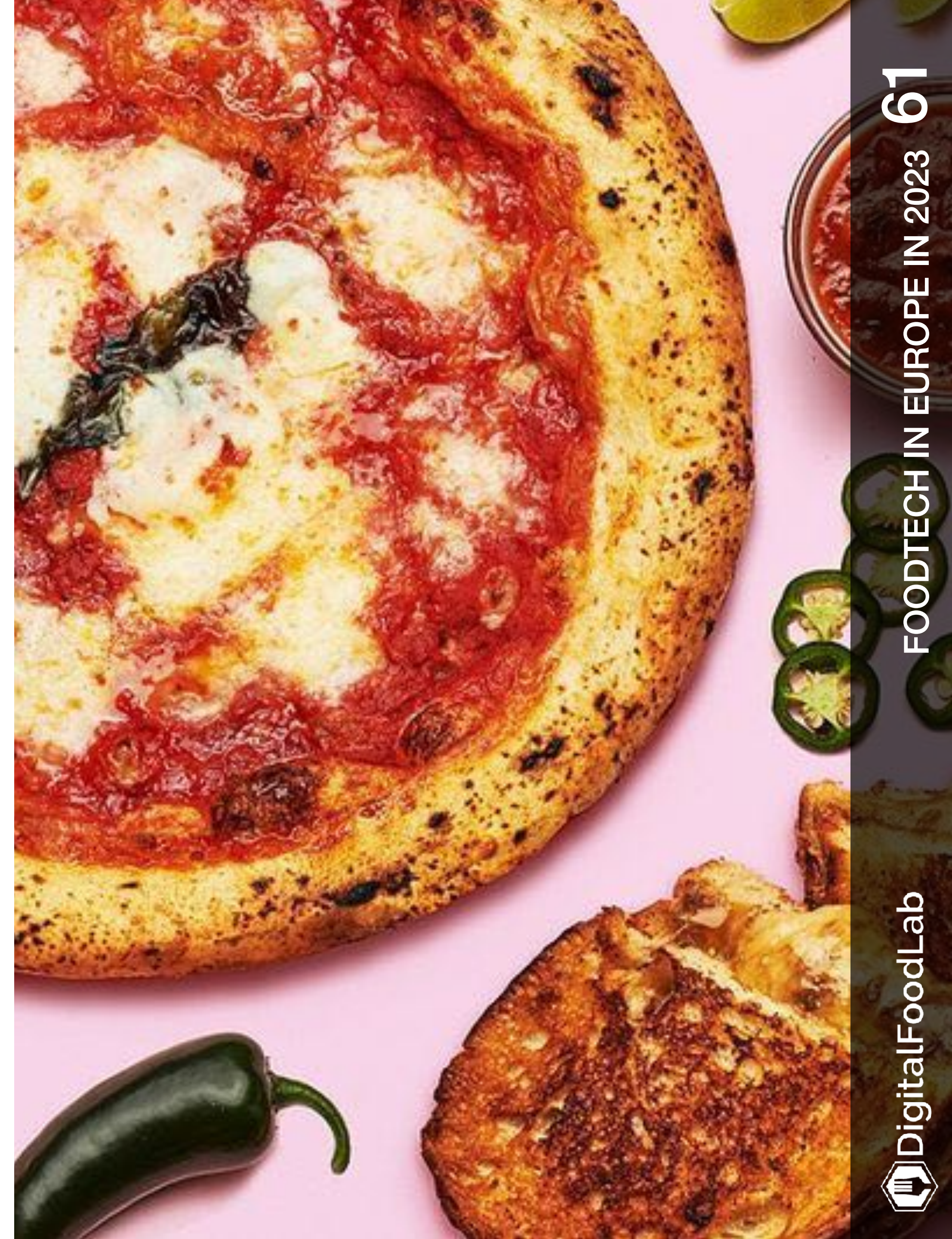
TODAY, FOODSERVICE IS ABOUT

- Making the restaurant more efficient, more profitable, notably through digitization of the whole value chain.
- Creating the autonomous restaurant of tomorrow with robotics.
- Creating virtual brands that are designed to operate only online.

CATEGORIES & TRENDS

FOODSERVICE: DIGITISING THE RESTAURANT

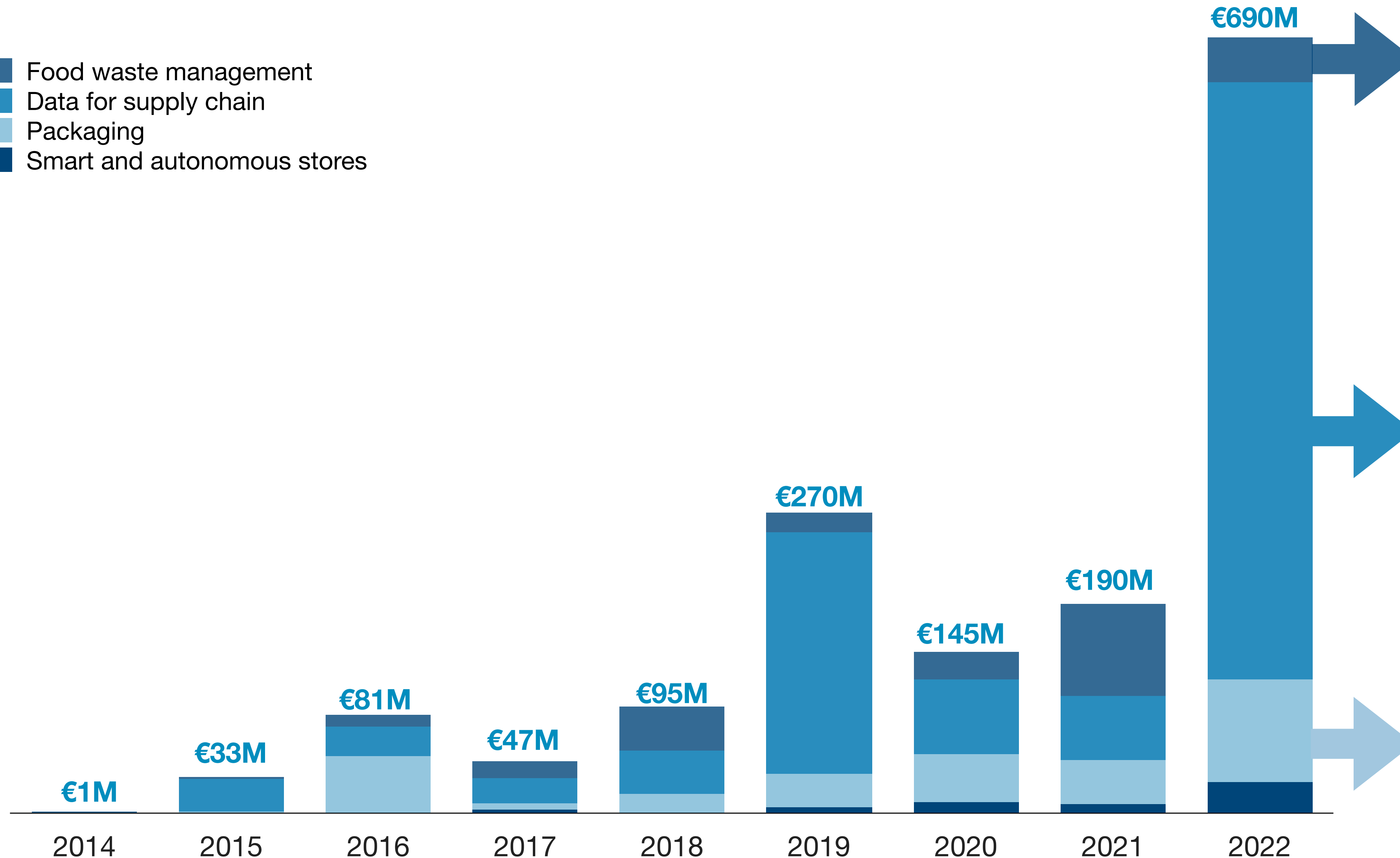
- We can observe a **huge disparity in the evolution of investments**. Some areas have been all but wiped out. This is the case with payment solutions, which had been trending over the past couple of years. Similarly, investments in cloud kitchens, which never took off in Europe, are now equal to those in Karma Kitchen in the UK.
- After covid, **a new wave of digitalisation in the food industry is taking place**. This is been facilitated by many new solutions offered by startups, to help restaurants manage all their operations, from HR to payment. Three of 2022's four new unicorns can be found in this space including:
 - Choco, which aims to digitise restaurants' relationships with their suppliers, a space which is attracting a lot of attention.
 - Flipdish, a solution to take and manage orders from clients.
 - Deliverect, a solution to manage all online orders made by clients on different delivery platforms.



CATEGORIES & TRENDS

SUPPLY CHAIN: HUGE POTENTIAL FOR GROWTH

- Food waste management
- Data for supply chain
- Packaging
- Smart and autonomous stores



Leaders & rising stars

OLIO

Too Good To Go phenix

RELEX

smartway

BIBAK

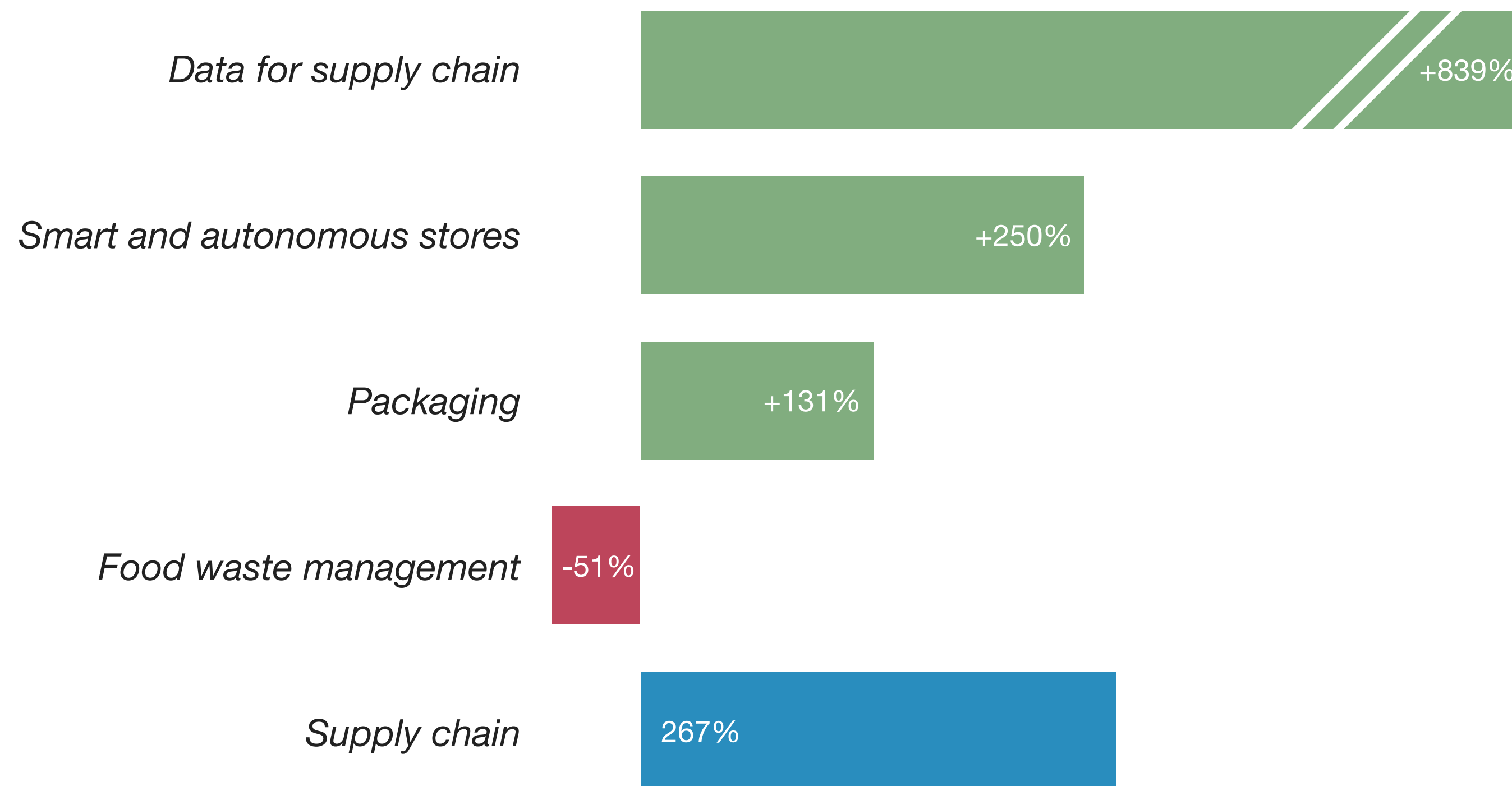
vytal Lactips

PulPac

CATEGORIES & TRENDS

SUPPLY CHAIN: UPS AND DOWNS

Evolution of the investments in the different supply chain components ([definitions can be accessed here](#)) between 2021 and 2022:



TODAY, SUPPLY CHAIN IS ABOUT

- Smarter and more sustainable packaging:
 - reusable, notably following new regulation
 - Biocoatings to increase the lifespan of produce
 - Biodegradable for food application
- Managing the flow of data along the food value chain to increase its efficiency.
- Technologies to make stores more autonomous.



CATEGORIES & TRENDS

SUPPLY CHAIN: FROM LABS TO FACTORIES

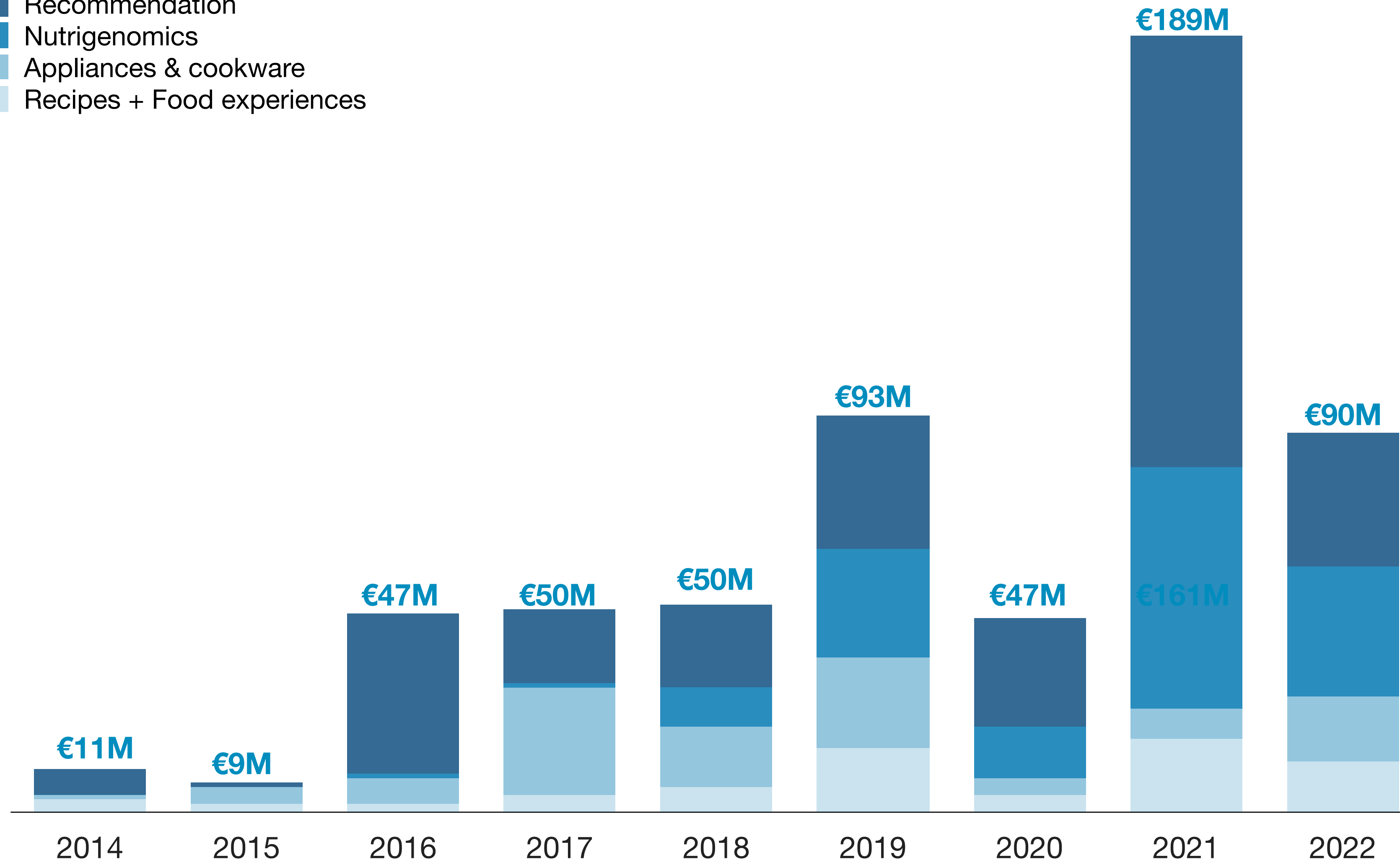
- Even if this specific ecosystem is dominated by a single deal, the **€500M invested in Relex**, other solutions helping retailers and their suppliers to manage data are also faring well.
- The other category that is doing well is packaging.** Investments have grown by 131%, both in innovative packaging (such as Pulpac's) and reusable ones.



CATEGORIES & TRENDS

CONSUMER TECH: THE OVERLOOKED ECOSYSTEM

- Recommendation
- Nutrigenomics
- Appliances & cookware
- Recipes + Food experiences



Leaders & rising stars

Recommendation

OVIVA



Nutrigenomics (personalised nutrition)

zoe

LYKON

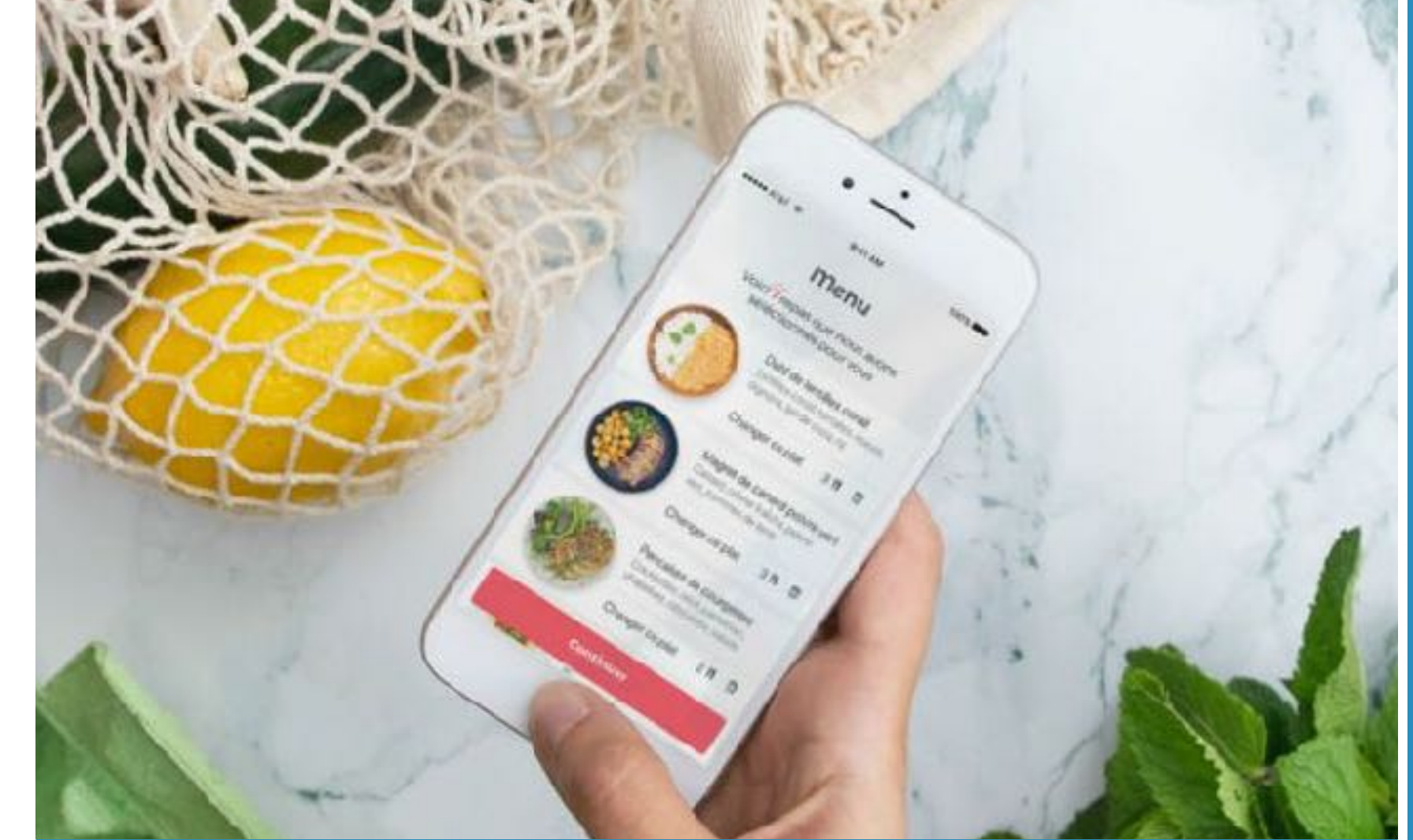
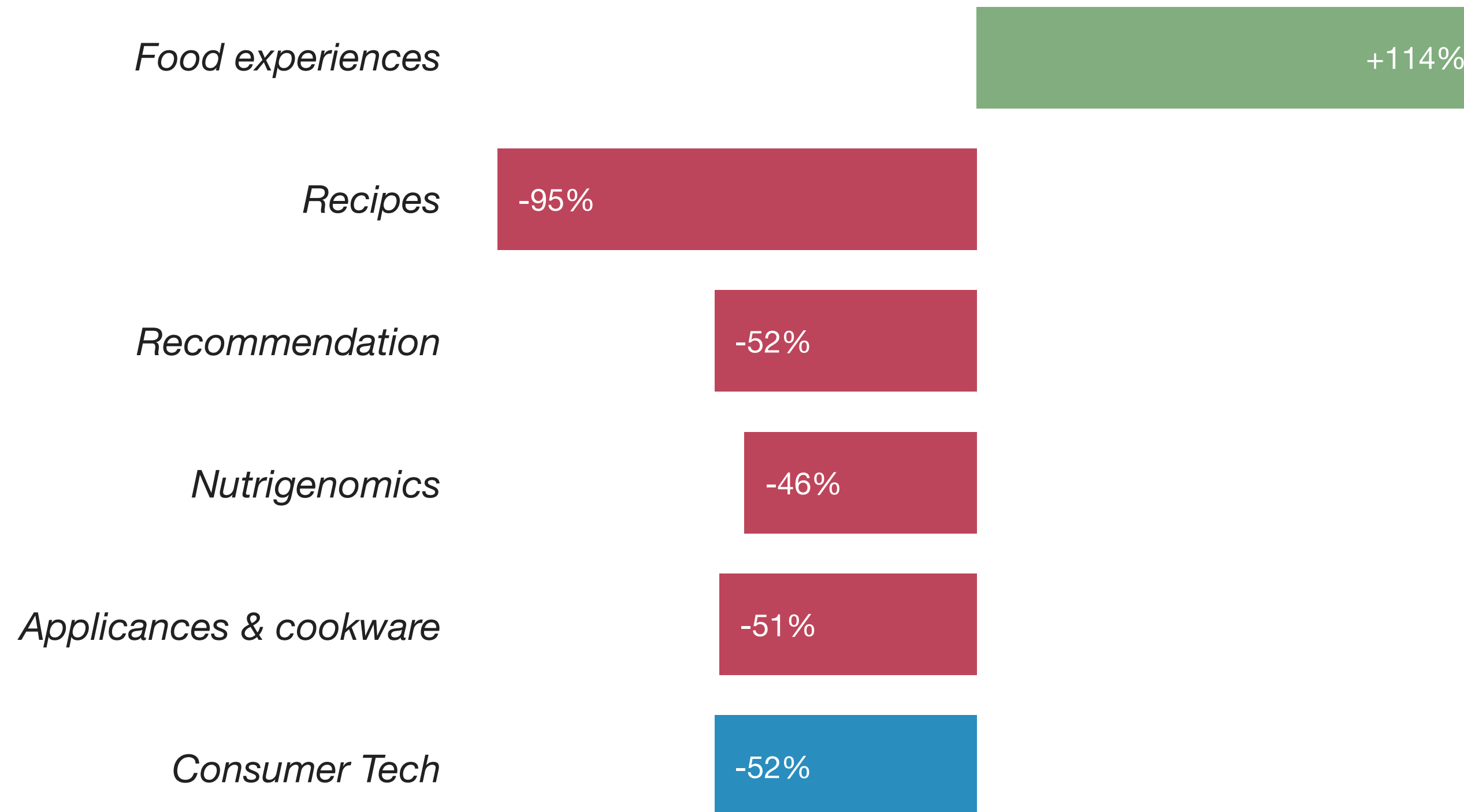
FoodMarble

Nutrix

CATEGORIES & TRENDS

CONSUMER TECH: UPS AND DOWNS

Evolution of the investments in the various consumer tech components ([definitions can be accessed here](#)) between 2021 and 2022:



TODAY, CONSUMER TECH IS ABOUT

- Services that help consumers (general public or people with health issues) to access food recommendations.
- Personalization devices and services that let people know what foods are best for them.
- Services and digital platforms for consumers to share their food experiences and recipes.

CATEGORIES & TRENDS

CONSUMER TECH

- ① This ecosystem remains the **smallest of Europe's FoodTech** with only small amounts invested.
- ① Personalization (through the study of the microbiome or DNA to make food recommendations) has not yet taken off, even though services such as Zoé are attracting a lot of attention.
- ① Compared to the US, where it is vibrant, the European ecosystem of smart cooking appliances is almost non-existent, and could be a land of opportunities for new entrepreneurs.



Your gut
microbiome health

● Excellent

Your blood
fat responses

● Average

Your blood
sugar responses

● Good

DIGITALFOODLAB IN ACTION

USE CASE #3: CREATING A DIGITAL PLATFORM FOR A FOOD COMPANY

Mission for a food company looking to set up a digital and service platform around personalisation as a way to target new clients.

What we did:

- from client's idea for a platform, we benchmarked of the market created by independent players and the initiatives of other FMCG companies.
- we did deep dives on all the components (media, services, products, devices, etc.) potentially available for a platform focused on food personalisation.
- defined a vision, business case and action plan to boost the client's business
- identified partnership and acquisition targets in the different markets addressed
- organized workshops on all the steps of this project to engage with the board and the client's operational teams.

Results:

- creation of a consensus inside the client's teams around the project and its priorities
- client currently following DigitalFoodLab's recommendations and is now starting to build the first blocks of the platform

FOODTECH IN EUROPE IN 2023

IV - INVESTMENT ACTIVITY & ACQUISITIONS

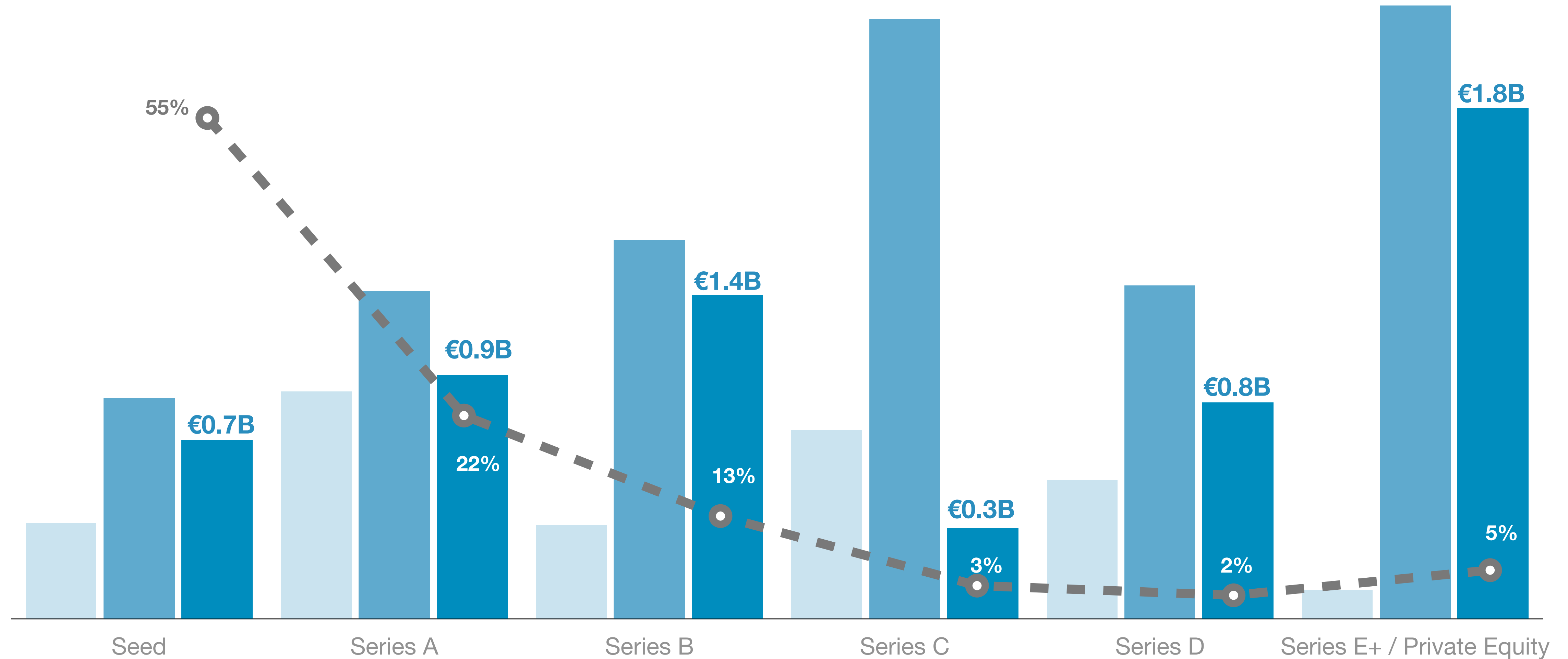


INVESTMENT ACTIVITY & ACQUISITIONS

INVESTMENT FUNNEL

Investments raised per stage in: 2020 2021 2022

○ % of deals per stage in 2022 (number of deals)

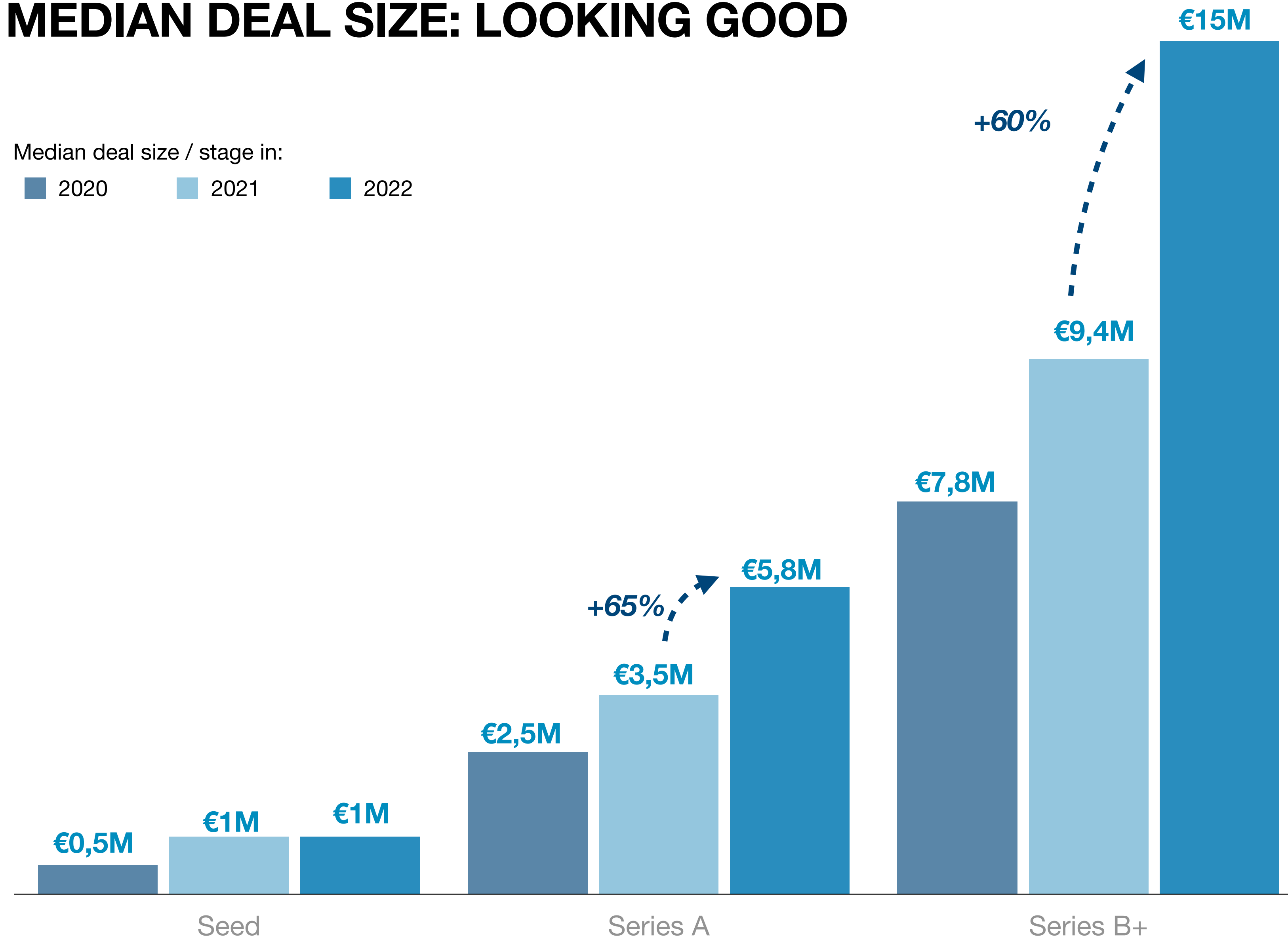


INVESTMENT ACTIVITY & ACQUISITIONS

MEDIAN DEAL SIZE: LOOKING GOOD

Median deal size / stage in:

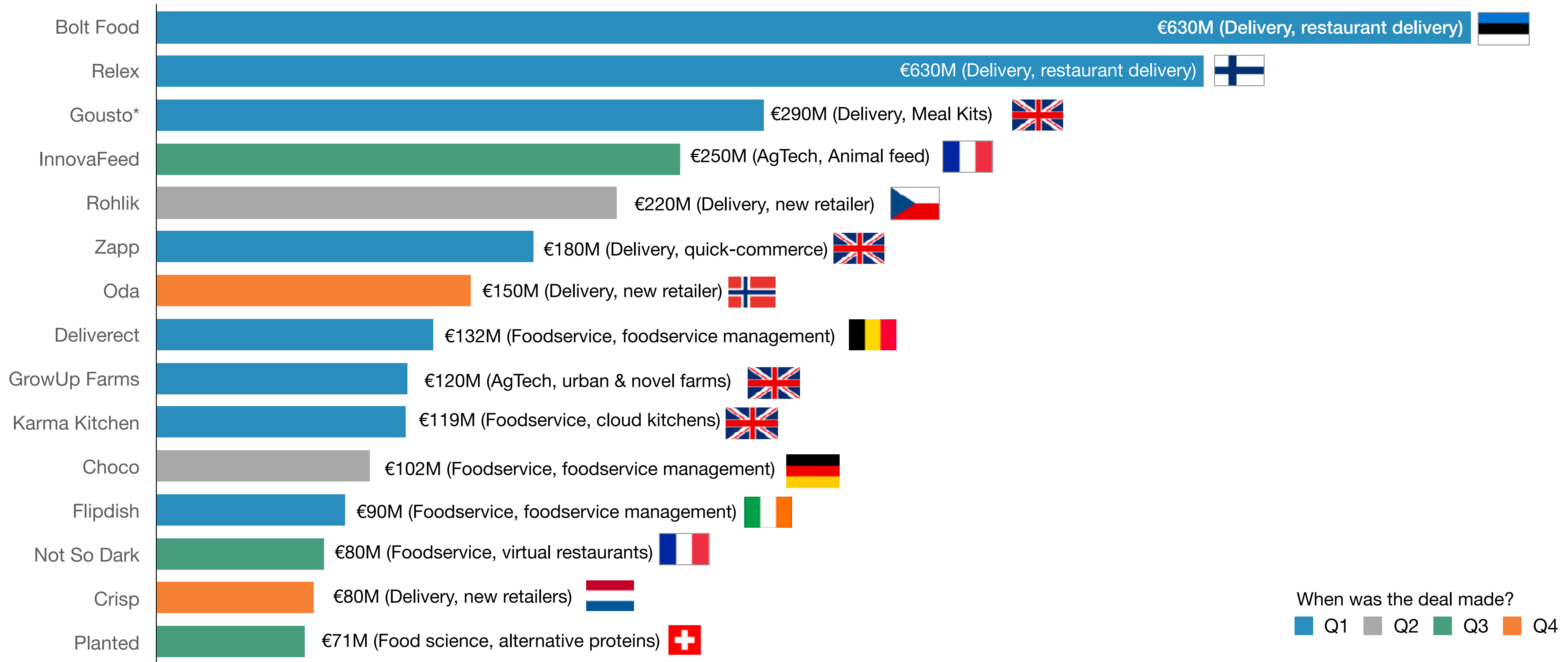
■ 2020 ■ 2021 ■ 2022



- As the number of large deals is smaller, investors are **betting more on the few they have selected.**
- This is also true for Series A. The number is slightly smaller than in 2021, but the median amount is higher. This is notably due to a limited number of outliers.
- Seed deals were almost as numerous as in 2021, and the median deal was still at €1M. Again, this is a very positive sign that **the future is secured and that many future leaders are being built right now.**

INVESTMENT ACTIVITY & ACQUISITIONS

TOP DEALS: SMALLER DEALS, BUT STILL SIGNIFICANT BETS ON THE FUTURE



*Multiple deals, some of which on the secondary market

INVESTMENT ACTIVITY & ACQUISITIONS

TOP DEALS: SMALLER DEALS, BUT STILL SIGNIFICANT BETS ON THE FUTURE

- **Large deals became scarcer during Q3 and Q4**, but can still be found. And even more notable are the very large deals still made in the categories most affected by the downturn, such as delivery or plant-based foods. This is very positive as investors are sorting among startups, between the good and the bad.
- The diversity both in categories and countries observed in the previous graph is an evidence of the growing interest of the European FoodTech ecosystem for investors.



INVESTMENT ACTIVITY & ACQUISITIONS




















NOTABLE INVESTMENTS BY CORPORATIONS

STARTUP	COUNTRY	DEAL SIZE	CATEGORY	CORPPORATE VC
 INNOVAFEED		\$250M	AgTech <i>Animal feed</i>	
		\$200M	Delivery <i>Quick-commerce</i>	Hubert Burda Media
		\$100M	Foodservice <i>FS management</i>	 Tencent 腾讯
		€80M	Foodservice <i>Virtual restaurants</i>	 Pernod Ricard
		€58M	Delivery <i>New retailers</i>	
		\$35M	AgTech <i>AgBiotech</i>	
		\$17M	AgTech <i>Farm management</i>	
		£11M	Foodscience <i>Alternative proteins</i>	

- Corporates (directly or through dedicated CVCs) continued investing into FoodTech startups into 2022. We even observe a small increase in their overall involvement
- The number and the diversity of corporations investing in startups keeps increasing over the years. This shows the growing belief that FoodTech startups are both good financial bets and the best tool to play in part the future of food.

INVESTMENT ACTIVITY & ACQUISITIONS

NOTABLE ACQUISITIONS IN EUROPE

STARTUP	COUNTRY startup/acquirer	ACQUIRER	AMOUNT	CATEGORY
		Delivery Hero	€2.3B	Delivery <i>quick-commerce</i>
		getir	~\$1.2B	Delivery <i>quick-commerce</i>
		Flink'	€90-100M	Delivery <i>quick-commerce</i>
		FMC	\$200M	AgTech <i>AgBiotech</i>
		nexi	\$140-150M	Foodservice <i>Payment solutions</i>
		 <small>Farming Technology. Since 1927.</small>	undisclosed	AgTech <i>Farm robotics</i>
			undisclosed	Foodservice <i>Payment solutions</i>
			undisclosed	Foodservice <i>FS management</i>

- The number of acquisitions remained high in 2022.
- However, beyond a few high-profile deals, many of the deals were small inter-startup acquisitions. Moreover, these often come with no return for investors.
- On a more positive note, Moolec, a molecular farming startup, went public in 2022 (and became the first public company focused on this technology).

MORE CONTENT TO LEARN ABOUT THE FUTURE OF FOOD

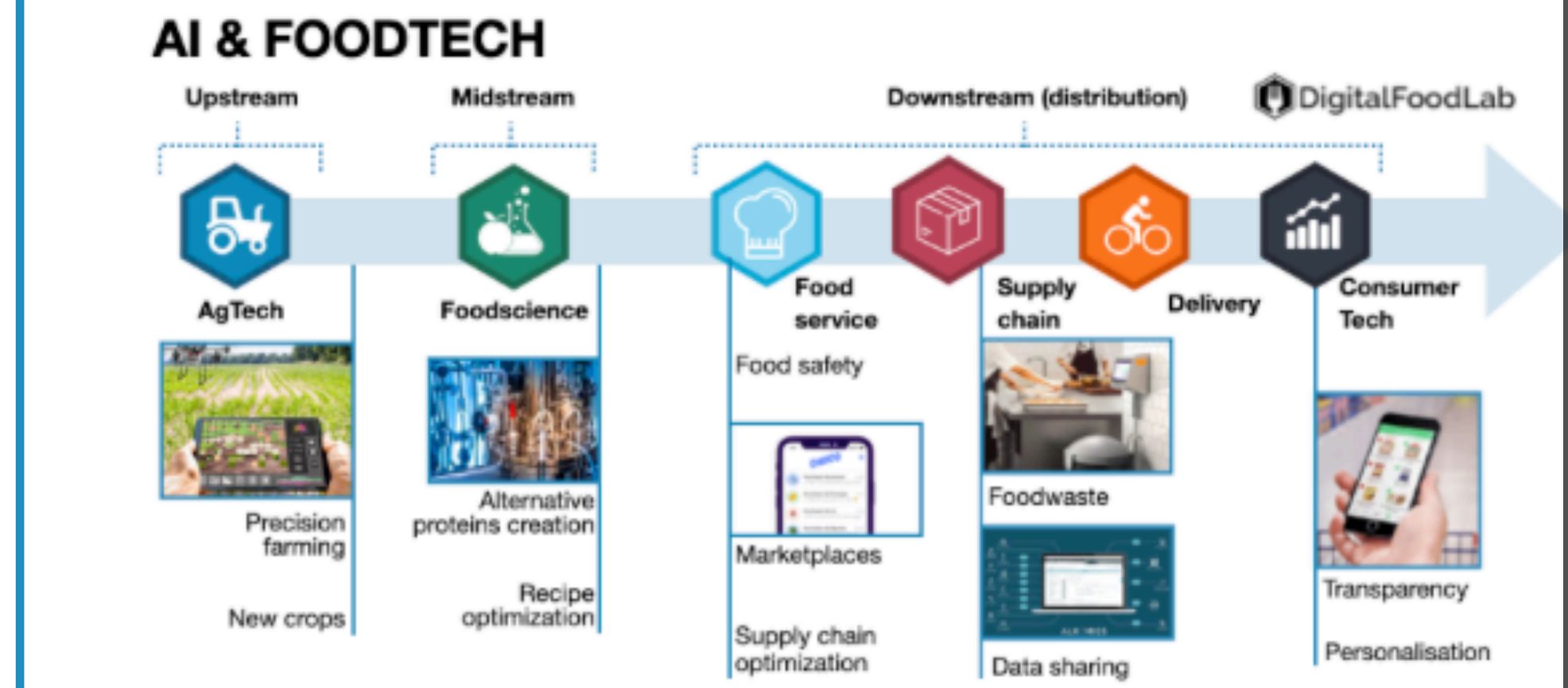


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Access DigitalFoodLab's reports and insights on all FoodTech topics

Access other reports and hundreds of in-depth articles analyzing FoodTech and how it will impact the future of our food system.



FOOD PERSONALISATION DigitalFoodLab

HOW GET MORE INFORMATION ABOUT WHAT YOU SHOULD EAT?

GLUCOSE: Patch that you put on your arm to understand how your level of glucose fluctuate according to various foods. Ex: Levels, Clear

DNA: A measure of your predispositions related to food (vitamins absorption, health risks). Information: 23andMe, Nutritional plans: DNA Fit, GenoPia, Supplements: Orig3n, NGX

BREATH: Breath analyses that you use to measure how well you digest various foods. Ex: Food Marble, Lumen

MICROBIOME: A snapshot of your gut health that can help you rebalance it and improve your overall health. Information: Nahibu, Nutritional plan: Day2, Supplements: Viome

Q&A

FOODTECH UNICORNS 2022 DigitalFoodLab

Grid of logos categorized by sector:

- Groceries: PIC NiC, 酒仙网, instacart, oda, 美菜, 我买网, DealShare.in, 易久批, Misfits Market, DAILY HARVEST, MARKET Kurly, 易果生鲜, GrubMarket, rohlik, Licious, 本来生活
- Q-commerce: JOKR, GORILLAS, getir, Flink, goPuff, blinkit
- Supply Chain: FABRIC, 自由蜂, Foodservice: Swile, flipdish, deliverect, Mealkits, gousto
- Restaurant Delivery: zomato
- Virtual Restaurants / Cloud Kitchen: wonder, REBEL
- Food Science, Packaging



GOT A QUESTION? CONTACT US!

contact@digitalfoodlab.com

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