



# The Barcelona Startup Ecosystem

■ Digital, Tech, and Open Innovation



FOREWORD

# 2013 vs 2023: How Barcelona Changed in the last 10 years

Miquel Martí, CEO, Tech Barcelona  
Miguel Vicente, President, Tech Barcelona

Barcelona's tech ecosystem has undergone a remarkable metamorphosis over the past decade, emerging as a beacon of innovation and entrepreneurship in Europe. From mimicking global models to creating original local and international ventures. From being a predominantly e-commerce cluster to developing an interconnected ecosystem of technological and science-based startups, corporates, research centres and institutions. Ultimately, shifting from being solely known for tourism, beaches and food to consolidating itself as part of the city's value proposition, becoming a tech powerhouse that fosters innovation and brings global attention and investment.

Tech Barcelona was established in 2013 by a group of entrepreneurs to support other entrepreneurs. At that time, Barcelona was still a primordial soup – it already had the essential elements and potential to become a thriving ecosystem but needed a spark: an association that could foster collective awareness and vertebrate collaboration to transform this potential into a tangible reality. Over time, this private and non-profit initiative, born out of the ambitions of the city's entrepreneurs, has become one of the largest technology organisations in Europe with more than 1,300 members, 90 corporate partners and three 'Piers', office buildings that, like innovation showrooms, integrate innovation and technology into the city. This growth has gone hand in hand with the expansion of the ecosystem. Collaborations between public and private agents have created the necessary infrastructure, culture and legal framework to naturalise serial entrepreneurship, facilitate access to mentoring and encourage the emergence of specialised investors. The consolidation of international events such as the MWC-4YFN, Smart City Expo, ISE and even top-level sectoral fairs, has allowed the local network to stand out and connect with global innovation. Additionally, the high quality of education, particularly in business and engineering, has provided a wide talent pool, which fuels research centres such as the Barcelona Supercomputing Center, startups and digital hubs of large multinational corporations. We could say that talent is the main driver in this evolution. Barcelona forges good professionals and has the capabilities to attract projects and professionals from all over the world.

In the last ten years, while connected to the global reality, the ecosystem has also encountered challenges. And opportunities. The Covid-19 pandemic accelerated digitalization and the widespread adoption of technology, promoting cross-fertilisation between industries. This technological autonomy has broadened our horizons, paving the way for new and innovative solutions that transcend from Barcelona into the global market. The maturity of the ecosystem turns the spotlight to deep tech: from science to the market, from Barcelona to the world, is now the challenge and the opportunity. And we must continue together on this path. Together means everything in this journey. It's a long-term run, and public-private alignment and cooperation are essential to achieve the healthy growth of the ecosystem. Technology is our driver to transform industries: Healthcare, Mobility, Retail, Energy, etc. But our goal is to move towards a social and economic model -let's term it a Mediterranean approach- placing individuals at the core while prioritizing sustainability and impact.



FOREWORD

# Barcelona: the Access Point to Southern Startup Europe?

Marco Marinucci, Founder & CEO, Mind the Bridge  
Alberto Onetti, Chairman, Mind the Bridge

Today, there is a worldwide competition in innovation between local ecosystems involving every country, region, and city. Unfortunately, the attention of global "innovation hunters" (VC funds, large corporates, etc.) tends to gravitate toward a selected few global hotspots distinguished by a high density of scaleups, capital, and talent: Silicon Valley, Israel, and probably a few others hubs across the globe. For all the other regions, scaling and building global connections fast is the only way to enter the world's innovation map and consequently boost capital and talent attraction (and - ultimately - future economic growth).

Barcelona has been actively engaged in this "emergence process" for some time.

Today, the city is uniquely positioned as a gateway to the Tech and Digital Ecosystem of Southern Europe. This status is bolstered by Barcelona's international appeal, which has transformed Catalonia's capital into a hub for foreign founders and startup employees (accounting for 19% and 23% of the total, respectively), as well as a chosen location for international companies, with 96 establishing their digital and innovation hubs here.

We at Mind the Bridge know that as a fact. As a company headquartered in Silicon Valley and boasting a global reach, we selected Barcelona as our primary hub in the European Union. Notably, 90% of our workforce in Barcelona comprises talented individuals who have converged here from every corner of the globe.

Examining the global Innovation Ecosystem Life Cycle curve, Barcelona currently finds itself in the "Early Scaleup" stage of maturity. The city is anticipated to advance to the "Late Scaleup" phase within the next 2-3 years. This progression can be significantly expedited by leveraging its international presence. This involves continuing support for leading local startups to access funding, business, and strategic opportunities beyond their immediate ecosystems. It also includes assisting local companies in developing open innovation strategies and addressing their innovation challenges by connecting them with international startups and research hubs.

In this context, initiatives like Tech Barcelona, which celebrates its 10th anniversary this year, play a pivotal role.

For a decade, Tech Barcelona has been instrumental in nurturing the growth of the ecosystem. We look forward to another decade of collaboration and shared success with Tech Barcelona in this dynamic and evolving landscape.

Barcelona

# The Largest Tech Hotspot of the South of Europe

In today's global race for innovation and startups, regions and cities worldwide are working hard to push their own **startup ecosystems** and position them on the global stage<sup>1</sup>.

High-density ecosystems, like **Silicon Valley**<sup>2</sup> – the world's innovation epicenter – and **Israel**<sup>3</sup>, remain the most attractive hubs for primary **'innovation hunters'** (VC funds and large corporations). Consequently, until a certain threshold in terms of startup volume is reached, these ecosystems tend to remain local, thereby limiting their growth potential.

That being said, several emerging ecosystems, such as **South Korea**<sup>4</sup> and **Australia**<sup>5</sup>, are gaining global significance, while other national leaders hold the potential to become **prominent players in the global innovation arena** in the future.

**Barcelona** is among them, for numerous compelling reasons.

“Barcelona is among the world's emerging ecosystems that are rapidly gaining global significance and rising to become prominent players in the global Innovation arena.”



1 - Onetti, A., *Australia: a New Entry in the Global Innovation Map*, Crunchbase News, November 2023  
 2 - Mind the Bridge, *The Rise of Generative AI - Tech Scaleup Silicon Valley - 2023 Report*, San Francisco (CA), October 2023  
 3 - Mind the Bridge, *Corporate Innovation Outposts in Israel - 2023 Report*, Tel Aviv, April 2023  
 4 - Mind the Bridge, *Tech Scaleup South Korea - Report 2023*, Seoul, July 2023  
 5 - Mind the Bridge, *Tech Scaleup Australia - Report 2023*, Sydney, October 2023

FIGURE 1

## The Barcelona Tech Ecosystem: Key Figures

Source: Mind the Bridge with the support of Crunchbase, Mind the Bridge elaboration on Acció Data



**1,753**  
STARTUPS



**409**  
SCALEUPS



**\$8.7B**  
CAPITAL RAISED  
BY SCALEUPS

### Over the past decade, Barcelona has achieved significant milestones:

- It has firmly established itself as **Spain's premier tech hotspot**, with a robust presence of 409 mature scaleups (startups that have raised more than \$1 million in funding since their inception), collectively attracting \$8.7B in funding.
- The city has nurtured a **vibrant early-stage startup ecosystem**, boasting over 1,700 companies (over 2,000 if we extend the scope to the entire Catalonia region)<sup>6</sup>. Notably, approximately 15% of these operate within **deep tech**-related fields<sup>7</sup>.

Furthermore, **Barcelona's potential** has garnered recognition from several global institutions, as indicated by the following achievements:

- Barcelona has been acknowledged as the **5th best ecosystem within the EU for launching a startup**, ranking just behind Paris, Berlin, Stockholm, and Amsterdam, and surpassing Munich, Dublin, Helsinki, Madrid, and Copenhagen<sup>8</sup>.
- It stands as the **2nd preferred EU hub for founders** looking to establish a startup<sup>9</sup>.
- Barcelona has also secured the position of the **2nd most attractive EU hub for international founders**<sup>10</sup>.
- The city hosts **7 unicorn companies** and holds the **7th position within the EU in terms of the number of "soon-unicorns"** with the potential to evolve into future unicorns<sup>11</sup>.

Time will tell whether Barcelona will be able to fully leverage its unique potential, but these statistics suggest that the city is well-positioned to emerge as a strong contender in the global innovation arena, beyond national and European boundaries.

6 - Source: ACCIO - Catalonia Trade & Investment - Barcelona & Catalonia Startup Hub, 2022  
 7 - Source: ACCIO - Catalonia Trade & Investment - Barcelona & Catalonia Startup Hub, 2022  
 8 - Source: StartupBlink, Global Startup Ecosystem Index 2022  
 9 - Source: Startup Heatmap Europe Report, 2022  
 10 - Source: StartupHeatmap Europe, SHM2021: The power of the Ecosystem 2021  
 11 - Source: Dealroom, 2023

Barcelona not only holds a position of national tech leadership but also ranks among the most flourishing European innovation hubs.

As depicted in Figure 2, according to the 2023 Tech Scaleup City Hub Index, Barcelona stands as the **5th largest innovation hub in Europe**<sup>12</sup> in terms of number of scaleups. It trails just behind Stockholm (with 680 scaleups) and Berlin (with 870).

While it is far outperformed by global hubs like London (with 3,164 scaleups, approximately 8 times more than Barcelona) and Paris (with 1,642, roughly 4 times more), **Barcelona has the potential to further advance** and aspire to become a top-tier continental hub.

Here are a couple of supporting indicators:

While Barcelona currently lags behind other European hubs in terms of scaleup financing (having raised \$8.7B compared to \$12.6B in Amsterdam and \$13.4B in Munich), it's worth noting that **15 Barcelona-based scaleups**, including Wallpop, Paack, and UserZoom, **have secured more than \$100M in funding**, thus having the potential to become the next Glovo.

Additionally, the **expanding pool of over 2,000 early-stage startups** headquartered in the Catalonia region represents a unique strength for Barcelona. This burgeoning ecosystem has the potential to attract more financing and further enhance the already robust growth of the local tech scene.

“Barcelona not only holds a position of national tech leadership but also ranks among the most flourishing European innovation hubs”



12 - Mind the Bridge, Tech Scaleup Spain - Report 2023, December 2023

FIGURE 2

## Barcelona vs. Top European Scaleup Ecosystems

Source: Mind the Bridge with the support of Crunchbase



● SCALEUPS  
● CAPITAL RAISED



Results such as these do not come by chance.

Over the past decade, the scaleup ecosystem in Barcelona has seen **substantial growth**, marked by three key phases:

- **2013-2017:** During this period, an average of 10-30 new scaleups emerged each year, with an average annual funding of \$0.3B.
- **2018-2020:** The subsequent phase witnessed an average of approximately 40 new scaleups yearly, accompanied by funding ranging from \$0.5B to \$0.9B annually.
- **2021-2022:** The most recent period marked accelerated growth, with an average of 70 and 59 new scaleups emerging each year, and surpassing the **billion-dollar** funding threshold twice (\$2.2B in 2021 and \$1.5B in 2022).

Furthermore, in just seven years (between 2016 and 2022), the aggregate number of early-stage startups based in Barcelona nearly doubled<sup>13</sup>.

The years 2021 and 2022 have stood out as exceptional periods for innovation ecosystems worldwide, and it is likely that those performance levels will not be replicated in the future<sup>14</sup>.

Barcelona has also felt the impact of the global 'VC pullback,' albeit somewhat later than other ecosystems worldwide.

In 2023, Scaleup Barcelona is expected to revert back to 2020 figures, following a more focused investment strategy but unlikely to experience a dramatic downturn.



13 - Source: Barcelona & Catalonia Startup Hub 2022

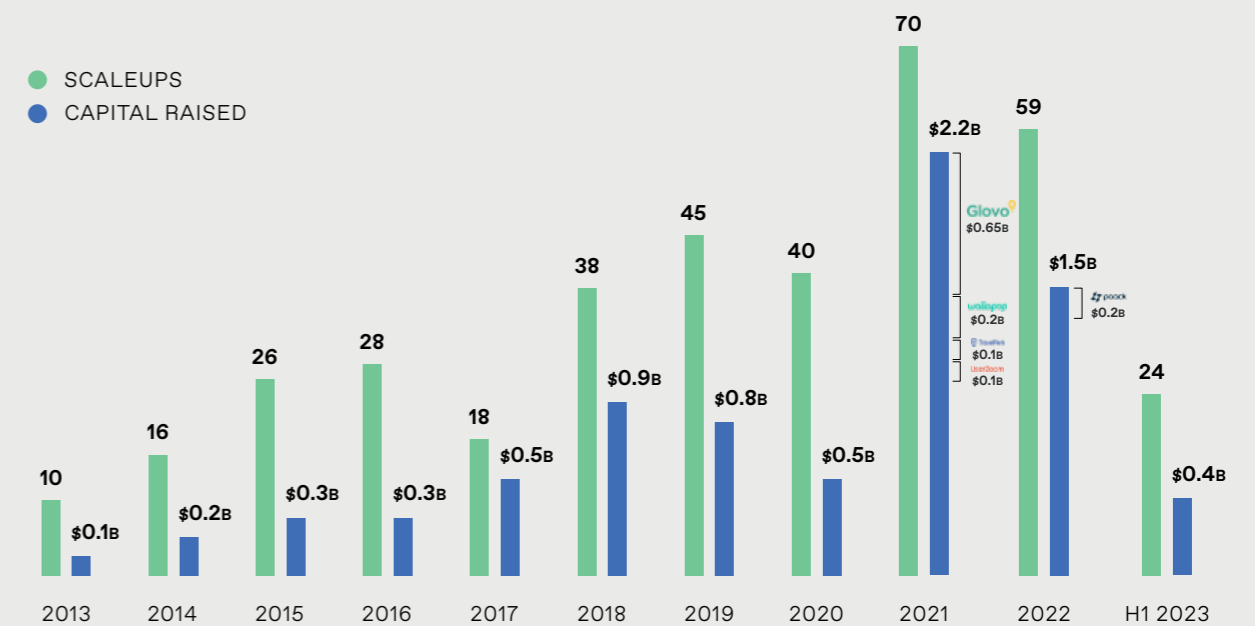
14 - Onetti, A., Startup, *Negli Stati Uniti l'inverno del venture capital è in arrivo ma tiene l'open innovation*, EconomyUp, October 18, 2022.

“In 2021 and 2022 Barcelona surpassed the billion-dollar funding threshold twice.”

FIGURE 3

## The Last Ten Years of Tech Scaleup Barcelona

Source: Mind the Bridge with the support of Crunchbase



# Where is Barcelona on the World's Innovation Life Cycle Curve?

Barcelona holds a reputable position in the global landscape of innovation ecosystems.

By plotting the Barcelona/Catalonia innovation ecosystem on the **Innovation Life Cycle Curve**<sup>15</sup>, it is possible to evaluate the maturity stage of the ecosystem and estimate the future growth trajectory of the ecosystem.

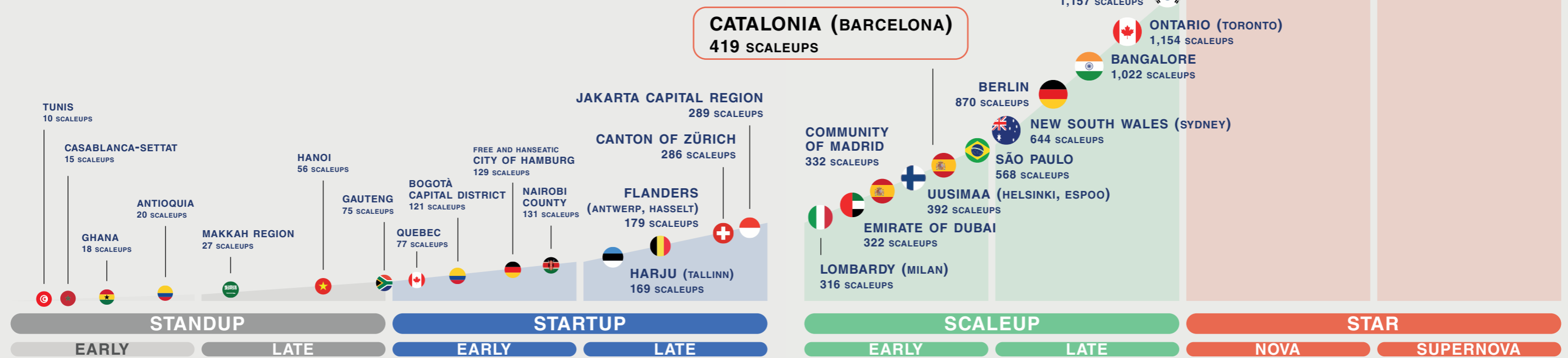
According to Figure 4, Barcelona/Catalonia, with 419 scaleups, ranks 30th globally and is currently in its **"Early Scaleup"** maturity stage. It is approaching the Late Scaleup phase, narrowing the gap with other global hubs like Sao Paulo (568 scaleups) and New South Wales (644 scaleups).

The Early Scaleup group is a fairly **exclusive club** consisting of 21 innovation ecosystems worldwide, succeeding an even more exclusive group of 13 "Late Scaleup" ecosystems. With its current growth trajectory, Barcelona is expected to transition to this next phase in about 2 years.

15 - Mind the Bridge, *Building Startup Ecosystem Starts - The World's Life Cycle of Innovation*, Paris, December 2023



FIGURE 4  
Barcelona on the World's Innovation Ecosystems Life Cycle Curve  
Source: Mind the Bridge with the support of Crunchbase



Recent reports<sup>16</sup> suggest that specializing in specific strategic industry verticals is often associated with accelerated ecosystem growth. Currently, Scaleup Barcelona features three primary 'house specialties':

- **Business & Productivity Software:** With 51 scaleups and a total funding of \$0.7B.
- **Healthtech and Fintech:** Both sectors account for 39 scaleups each, with \$0.5B and \$0.4B raised, respectively.

Among these, the **Healthtech** sector holds the most promising **potential** for future growth. Recent data<sup>17</sup> indicates that the early-stage healthtech startup community is the most dynamic in Barcelona, comprising 326 startups, which represents 16.3% of the total.

Several other industry verticals exhibit substantial growth potential, depending on the size of their associated early-stage startup and scaleup communities:

- **Business & Productivity:** Beyond the existing 51 scaleups and \$0.7B in funding, this sector may harness the potential offered by 251 early-stage startups, representing 12.4% of the total.
- **FoodTech:** Despite the modest 6 scaleups (\$0.1B raised), this sector has the capacity to expand significantly with 109 early-stage startups in the field, constituting 5.4% of the total.
- **TravelTech:** Comprising 24 scaleups with \$1.1B raised and supported by 100 early-stage startups.
- **Energy & Cleantech:** With 14 scaleups, \$0.1B raised, and 90 early-stage startups.



16 - Particularly notable is the case of South Korea, an ecosystem that - over the years - has become a haven for digital media technologies and a fertile ground for experimentation in advanced applications of the metaverse.

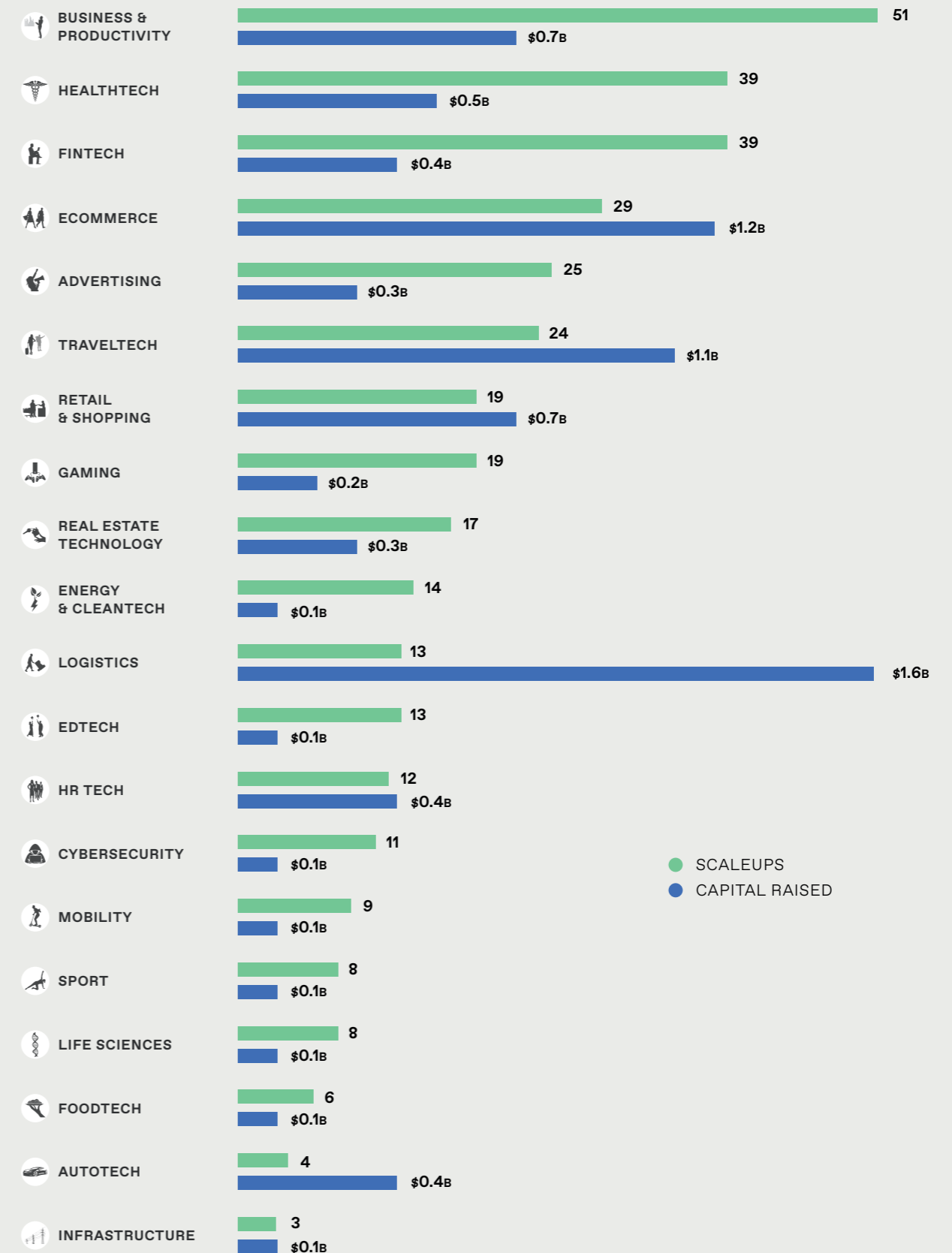
Most recently, the country is at the forefront of innovations in AI applied to a plethora of industries.

17 - Source: Barcelona & Catalonia StartupHub, 2022, ACCIÓ

FIGURE 5

## Barcelona Tech Specialties

Source: Mind the Bridge with the support of Crunchbase



Barcelona

# An Attractive Global Innovation Hub

In the fast-paced world of innovation, a common adage rings true:  
"No global connections, no party."

As mentioned earlier, the majority of global innovation leaders tend to concentrate their scouting efforts on the most densely populated global innovation ecosystems. That being said, how can relatively smaller innovation ecosystems rise to the challenge, enhance their relevance, and stimulate their growth? The answer, while easier said than done, is quite straightforward: by nurturing international connections. In this regard, **Barcelona is already ahead of the curve** and rightfully holds the title of the most international city in Spain.

From the **startup** perspective<sup>18</sup>:

- The city holds **strong appeal for foreign founders and startup employees**, constituting 19% and 23% of the total, amounting to approximately **4-5,000 innovation talents** who have flocked to Barcelona from around the world.
- **Two-thirds of all local scaleups have international customers**, which contribute to 44% of their average turnover.

In terms of **corporate** presence:

- Barcelona has attracted more than **96 international companies** that have established strategic tech hubs in the city<sup>19</sup>. Notably, **29 of these are Fortune 500 / Forbes 2000 corporate leaders**, each having established an innovation presence in Barcelona through various means, including R&D facilities and corporate-startup collaboration initiatives such as innovation challenges, investments, and participation in third-party accelerator programs.



18 - Source: Barcelona & Catalonia Startup Hub 2022, ACCIÓ

19 - Mobile World Capital Barcelona, *Tech hubs Overview: Barcelona, European capital of tech hubs*, February 2023.

FIGURE 6

## Barcelona: an Attractive International Innovation Hub

Source: Mind the Bridge elaboration on Mobile World Capital Foundation and Acció





Barcelona

# A Dynamic Ecosystem of Corporates Working with Startups

## Size Is Not an Alibi: Open Innovation Is a Must for All

**Open Innovation** - a democratized approach to innovation where collaboration among internal and external resources replaces conventional closed R&D silos - has become a **vital driver of success for organizations**<sup>20</sup>.

The **Open Innovation paradigm has evolved in time to become a multi-faceted play**, with several tools and initiatives that corporates put in action to engage with startups and scaleups - along with internal enabling conditions that are equally relevant to produce sustainable results.

More recently, **companies have garnered experience in the Open Innovation arena**, and are now increasingly focusing on producing **tangible results**.

Although the **modes of collaboration are in constant evolution** (we're observing a general **trend of hybridization** of models and initiatives), there are **best practices** for many tools (e.g. Venture Client, Intrapreneurship, CVC, ...) as well as **KPIs for measuring impact and returns**.

## Going Global: Unlocking Success for Local Startup Ecosystems

For local and regional startup ecosystems, "**glocal**" open innovation approaches have been recognized as an **effective tool** to unlock their success.

On the one hand, **local startups benefit from accessing innovation challenges by corporates worldwide**, thus gaining access to business, investment, and strategic opportunities.

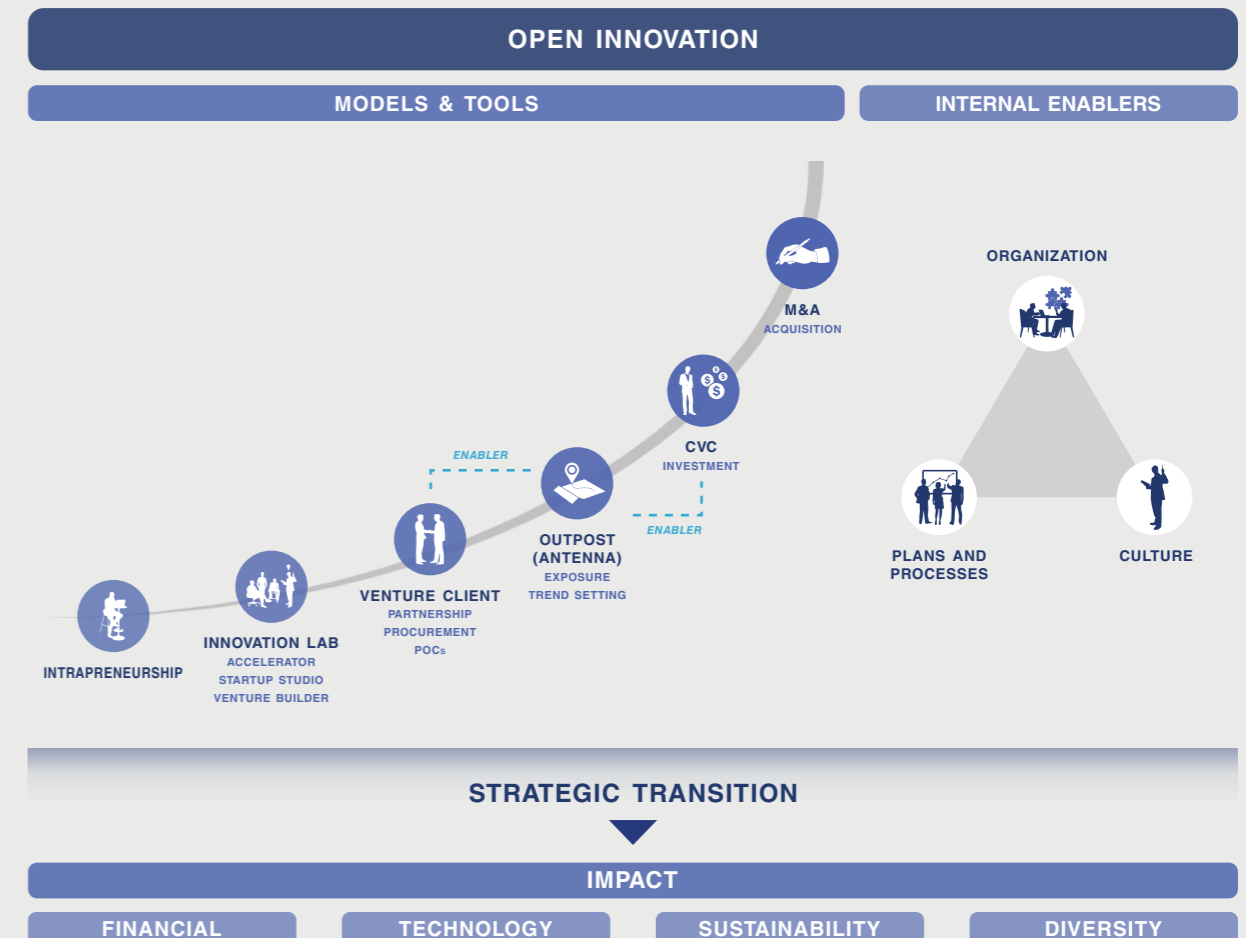
On the other hand, **corporates - by implementing a territorial venture client model - gain access to the best of breed innovative solutions** that are ready to be deployed.

<sup>20</sup> - 95% of organizations now report leveraging Open Innovation practices, with 54% doing so on "most" or "all" projects, according to a recent research report from The Economist that was sponsored by SUSE (Economist Impact, 2022).

FIGURE 7

## Open Innovation Models and Initiatives

Source: Mind the Bridge



Business Cases of Successful

# Corporate-Startup Collaborations

The Barcelona Tech Ecosystem is experiencing significant growth, particularly in the field of open innovation. The city is attracting both local and international corporates, fostering an environment where these entities collaborate with startups. This trend is not only enhancing Barcelona's innovation ecosystem but also driving business growth and global competitiveness.

The best way to learn about Open Innovation is by observing what top-performing companies are doing. This is why the next section of the report highlights various examples of **successful corporate-startup collaborations**, showcasing evolving models and best practices in open innovation. These collaborations demonstrate the ecosystem's commitment to fostering an environment conducive to innovation and offer insights into how businesses are leveraging these opportunities for expansion and competitive advantage in the international market. Each case offers insights into various initiatives and perspectives:

**Sector Diversity:** The collaborations span a wide range of sectors including utilities (Labaqua & Ulbios), IoT (i2Cat & Sateliot), healthtech (Ferrer & Wellthy), fintech (CaixaBank & Menhir), aerospace, biotech, construction (Sorigué & Conkau), energy (Naturgy & Clevergy), and fashion (Mango & Recovo). This diversity indicates a broad interest across industries in engaging with startups for innovation.

**Enhancement of Operational Efficiency and Sustainability:** A recurrent theme is the use of startup technologies, as seen in the collaboration between Fluidra & Efficpool, to improve operational efficiency and sustainability. This includes reducing energy consumption, optimizing resource use, and streamlining processes.

**Collaboration Models:** The collaborations vary in nature but generally include partnerships, joint ventures, and investments. These models often involve integrating the startup's technology into the corporate's operations or co-developing new solutions, as seen in Wayra & Genomcore's project in healthtech.

**Global and Local Impact:** While some collaborations like i2Cat & Sateliot focus on global scale and expansion, others concentrate on local or regional impact, indicating a balanced approach to innovation.

**Future Potential and Growth:** Many of these collaborations are not just about immediate gains but are also seen as strategic moves for future growth and potential expansion into new markets or sectors. The partnership between Mango & Recovo, for example, reflects a strategic move towards sustainability in fashion.

**Barcelona's tech scene is not just buzzing; it's booming with a purpose.**

The city's tech ecosystem is a **melting pot of innovation**, where startups and corporates dance in a tango of technology and creativity. With **sustainability** at its heart, and **technology** as its language, **Barcelona is not just building businesses, it's crafting the future.** It's a vibrant testament to how open innovation can be a game-changer, turning challenges into opportunities and ideas into realities.

**This is not just growth; it's growth with a conscience.**



BUSINESS CASE

# Labagua & Ulbios

Connecting Environmental Security to Sustainability

## Labagua (Grupo Agbar/Veolia)

SECTOR  
■ Utilities

### Description

Labagua, part of the Agbar/Veolia group, specializes in environmental consulting and analytical laboratory solutions.

Labagua collaborates with facilities and hospitals and conducts monitoring programs for water quality, air emissions, Legionella prevention, and indoor air quality in various sectors, including water cycle companies, municipalities, hospitals, and industrial facilities.

## Ulbios

SECTOR  
■ IoT/Sensors

### Description

Founded in 2021 and based in Barcelona, ULBIOS specializes in integrating biosensing for monitoring water, air, and energy consumption in buildings to ensure safe, healthy, and efficient spaces. Their IoT system employs real-time data from bio and high-tech sensors. Mathematical correlations determine responses for end-users, with monthly reports featuring Big Data visualization and analysis, offering corrective and preventive recommendations.



### ■ KPIs

- **Customer Response Efficiency:** Measure of Labagua's improved ability to respond to customer needs with ULBIOS technology.
- **Health Safety Achievement:** Evaluation of the effectiveness in securing public health through technology.

### ■ Challenge

Labagua's main objective was to assess environmental safety, particularly focusing on water and air quality, while ensuring sustainability and minimal energy usage.

The optimal solution had to deliver cost savings (operating and maintenance costs), ensure safety, and provide critical data for efficient decision-making.

### ■ Solution

ULBIOS's technological solutions were integrated into their operations, supported by a business model designed for product scalability and the employment of advanced technologies. This approach exceeded the requirements for creating relationship-engines to interpret results. It involved fine-tuning predictive mathematical models, developed with insights from Big Data, to align with market demands.

### ■ Result

Thanks to this initial collaboration, Labagua and ULBIOS now have a cooperation agreement aimed at providing services to existing LABAQUA clients, but also new services to potential customers. These new services are designed to address legionella risk assessments in accordance with EU Directives and Royal Decrees concerning Legionella prevention and water quality standards for human consumption.



BUSINESS CASE

# i2Cat & Sateliot

A Long-term Strategic Partnership towards Full Operations

## i2Cat

SECTOR  
■ R&D

### Description

The i2CAT Foundation is a CERCA R&I center that promotes mission-driven knowledge to solve business and societal challenges, co-create solutions with a transformative impact and empower citizens, leveraging the knowledge gained from cutting-edge European and local R&D projects in the fields of 5G/6G, IoT, immersive and interactive technologies, cybersecurity, AI, blockchain, space communications and digital society technologies.

## Sateliot

SECTOR  
■ Aerospace

### Description

Founded in 2018 and based in Barcelona, Sateliot is the first satellite communication service provider to offer global IoT connectivity over standard 5G NB-IoT standard. Each satellite of the LEO constellation operates the same way as a phone tower that is located in space. This expands the coverage of terrestrial networks, providing global connectivity. The use of the 5G standard means that any commercial 5G device can be used with Sateliot's system.



### ■ KPIs

- **Investment Growth:** Increase in investments secured by Sateliot as a direct result of the partnership.
- **Number of Strategic Partnerships:** New strategic partnerships formed by Sateliot in the industry, facilitated by the collaboration.
- **Research Utilization:** i2CAT's research has been applied in practical, real-world scenarios through Sateliot's system.

### ■ Challenge

On the market, there were no existing communication network cores available that could meet the needs of both ground-based and space environments.

i2CAT's research teams investigated several methods to overcome the challenges of combining both environments, such as communication delays, authentication, etc.

### ■ Solution

This situation required the creation of a tailor-made Narrowband Internet of Things (NB-IoT) core network.

This network, featuring standard 3GPP interfaces accessible to both users and Mobile Network Operators (MNOs), was essential to cater specifically to the demands of Sateliot's system.

### ■ Result

The teams from i2CAT and Sateliot collaboratively designed, developed, and fine-tuned a communication core network, which they successfully tested in a laboratory setting.

They continue to work together, progressively enhancing Sateliot's system towards achieving its full operational potential.



BUSINESS CASE

# HP Large Format & Zakeke

Optimizing Print Service Providers and Gaining New Market Knowledge

## HP Large Format

SECTOR  
■ Utilities

### Description

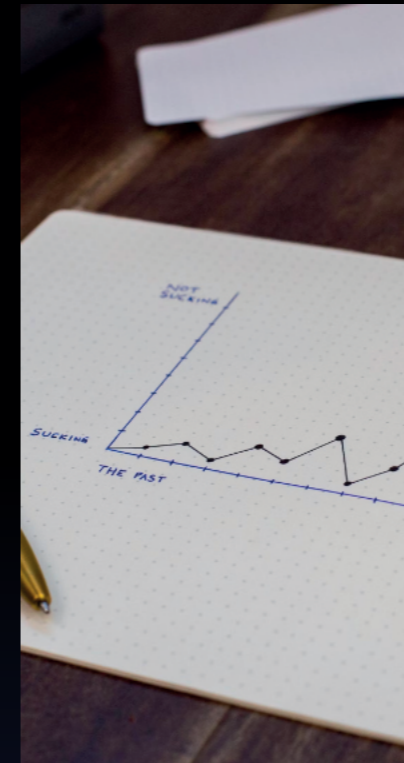
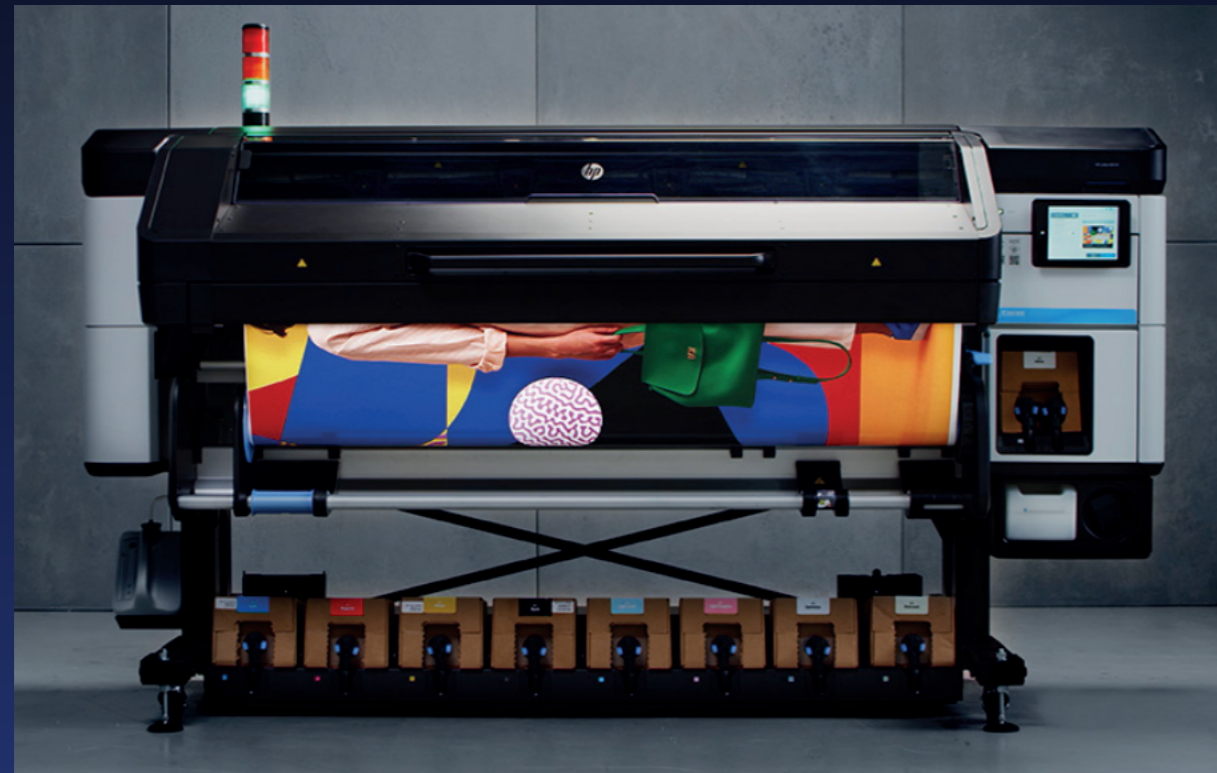
HP Large Format focuses on hardware sales and supplies, catering to Print Service Providers (PSPs) such as digital printers, sign makers, and commercial printers. Emphasizing growth, technology advice, and investment direction, the company addresses the post-pandemic reinvention needs of smaller PSPs. To support business growth, HP monetizes services like HP Print OS Design & eCommerce, an intuitive web-to-print solution.

## Zakeke

SECTOR  
■ IoT/Sensors

### Description

Founded in 2017 and based in Italy with offices in Apulia and Milan, Zakeke enables brands to offer live product personalization leveraging 3D/AR View, integrating Visual Commerce Solutions for engaging "design-your-own" experiences online and offline. Recognizing diverse customer tastes, Zakeke facilitates mass customization, allowing users to play a primary role in designing unique products. The cloud-based, cross-platform, and multi-lingual platform meets the increasing demand for customized products.



### ■ KPIs

- **Market Expansion Speed:** HP entered new markets due to the rapid software development facilitated by the collaboration.
- **Development Cost Reduction:** Decrease in costs associated with developing new software solutions, as a result of leveraging the partnership.
- **Resource Optimization Efficiency:** Improvement in the use of resources allocated and utilized in the process of expanding into new markets.
- **E-Commerce and Online Customization Knowledge Gain:** New knowledge and expertise gained by HP in the realms of e-commerce and online customization.
- **Innovation and Growth Effectiveness:** Validation of the effectiveness of the corporate-startup working model in driving innovation and overall business growth.

### ■ Challenge

The main challenge for HP is to understand the evolution in the Large Format industry driven by global trends. Specifically, HP is focused on enhancing business operations for Print Service Providers (PSPs) who are looking for increased efficiency and a broader customer base. While HP has traditionally been oriented towards selling hardware on a transactional basis, they are now promoting a strategy of partnering with digital-native companies. This approach is aimed at maximizing the value of their products and generating mutual benefits, in line with the ongoing changes in the industry.

### ■ Solution

Zakeke's product offers a comprehensive suite of features while maintaining an easy-to-use interface, effectively removing technical hurdles.

Its integration with leading eCommerce platforms enables businesses globally to elevate the personalization experience for their customers. This enhancement not only boosts customer satisfaction but also leads to increased conversion rates.

### ■ Result

In partnership with the startup Zakeke, HP started offering Print Service Providers (PSPs), a software solution that extends well beyond a basic customization and design platform. This advanced software allows end-users to modify dimensions, upload files, personalize pre-designed templates, and preview the outcomes. This integration forms part of a fluid workflow for product selection, customization, and purchasing, making it particularly effective for Large Format items like canvases and wallpapers.

BUSINESS CASE

# Ferrer & Wellthy

Improving the Quality of Life of Patients through Digitalization

## Ferrer

SECTOR

■ Biotech, Life Sciences, and Pharma

## Wellthy

SECTOR

■ Healthtech

### Description

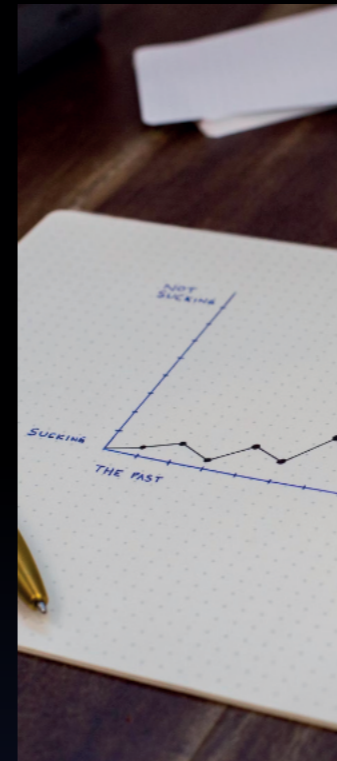
Ferrer is an international family company based in Barcelona and headed by Sergi Ferrer-Salat, manufacturing pharmaceuticals and chemicals.

The company's products include prescription drugs, hospital equipment, personalized medicines, vaccines, consumer healthcare, fine chemicals and other related products.

### Description

Founded in 2015 and based in Mumbai with a global presence, Wellthy aims to promote health equity globally through digital care solutions, addressing challenges like access disparities and socio-economic barriers.

Their platform leverages behavioral science mechanisms for patient-companion and concierge solutions. Partners can create next-generation digital solutions through a single, commercially and clinically validated front-end, supported by a regulatory-compliant back-end.



### ■ KPIs

- **Enhancement of Patient Support Program:** The collaboration improved Ferrer's Patient Support Program for PAH by adding a digital service layer.
- **Quality of Life Improvement for Patients:** Quantitative measure of the improvement in the quality of life for PAH patients as a result of the enhanced support program and Successful incorporation of a digital layer into the existing treatment program for PAH patients.
- **Innovative Solution Development:** Development of transformative solutions through the open innovation program, benefiting both organizations and patients. The collaboration serves as a leading example of how open innovation programs can create significant benefits in healthcare.

### ■ Challenge

Ferrer's open innovation program, Ferrer4Future, was established to meet the urgent requirement of providing daily support and empowerment to PAH patients. These patients, facing a severe illness with complicated treatments, often need infusion pumps. One of the key challenges in partnering with external companies or startups was to ensure effective knowledge transfer between the entities. Additionally, maintaining strict quality control during the development phase and resolving technical problems during implementation were crucial aspects of this collaboration.

### ■ Solution

The Wellthy's innovative approach included customizing their existing platform to specifically serve PAH patients. The innovative company contributed with their platform and engineering skills, whereas Ferrer offered their extensive understanding of the disease, connections with key opinion leaders (KOLs), and ties with the PAH community. This collaboration combined technological expertise with in-depth medical knowledge to create a targeted solution for PAH patients.

### ■ Result

The partnership resulted in the development of a Class I CE marked Software Medical Device in 2021. This was followed by a Post-Market Clinical Follow-up study conducted in 2022. The software offers structured, personalized educational materials, aids in self-monitoring of the disease, and allows access to health coaches for emotional and motivational support. User feedback was extremely positive, as evidenced by a post-study questionnaire, where 94.7% of participants recommended the program to their friends and family.



BUSINESS CASE

# Fluidra & Efficpool

Improving Sustainability with Intelligent Water Treatment Systems

## Fluidra

SECTOR

Water, Manufacturing

## Efficpool

SECTOR

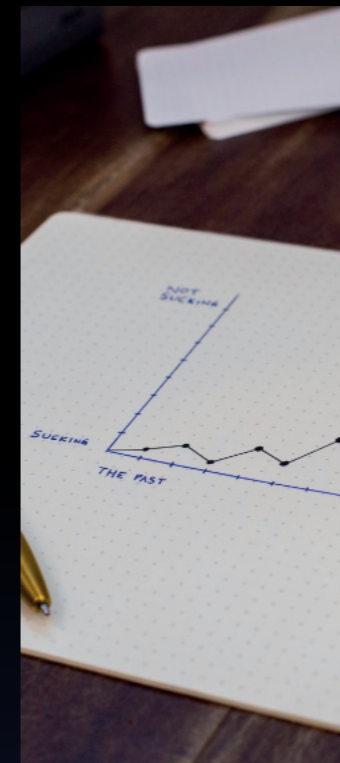
Water Treatment

### Description

Fluidra is a leading global company in the pool and wellness industry, listed on the Spanish Stock Exchange. With a history dating back to 1969, Fluidra excels in innovative products and services for the residential and commercial pool market. Their mission is to responsibly create the perfect pool and wellness experience.

### Description

Founded in 2018 and based in Tarragona, Efficpool provides a system that fits perfectly in the current context of industry 4.0, the industrial revolution, as well as the internet of things. It is an intelligent system, which monitors all the measurable parameters of water treatment and purification for pools, in order to achieve higher efficiency.



### KPIs

- **Energy Consumption Reduction:** Decrease in energy usage compared to traditional sand filter systems.
- **Chemical Usage Reduction:** Reduction in the amount of chemicals needed for pool maintenance compared to existing sand filters.
- **Sustainability Improvement:** Overall enhancement in sustainability of the filtration system compared to traditional methods.
- **Greenhouse Gas Emissions Reduction:** Decrease in total greenhouse gases (GHGs) emitted indirectly, demonstrating the environmental impact of the technology.

### Challenge

Fluidra, a prominent player in the global pool and wellness industry, is prioritizing sustainability as its primary focus. This emphasis encompasses the company's entire organization, operations, and the solutions provided to customers. Fluidra is dedicated to ensuring that pools are safe and comfortable spaces for aquatic activities, while also emphasizing the efficient and sustainable use of essential resources. Among their main challenges:

- Reduce consumption of water
- Reduce energy consumption
- Resource use measurement
- Reduce environmental impact of operations
- Promote and encourage sustainable attitudes

### Solution

Efficpool's "Special Perlita" filtering system features self-regenerating capabilities and adjusts pump speed to optimize energy and resource usage. It can retain particles as small as one micron, effectively capturing protozoa. The system is designed to monitor and alert when its elements are saturated. This allows for an easy, 10-minute replacement process that can be conducted by a single operator. The replacement is performed in a dry, semi-automatic mode using vacuum, simplifying maintenance and enhancing operational efficiency.

### Result

Following a successful pilot in a real-world setting to confirm the advantages of the technology, Fluidra and Efficpool entered into a commercial agreement in 2022. This agreement aimed to incorporate Efficpool's technology into Fluidra's commercial pools portfolio.

BUSINESS CASE

# Mango & Recovo

Making Strides in Sustainability and Efficiency in the Fashion Industry

## Mango

SECTOR  
Fashion

### Description

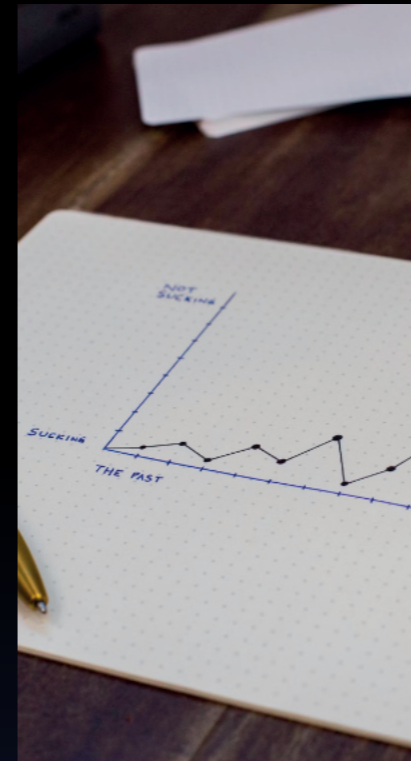
Mango, a leading European fashion group, prioritizes design, creativity, and technology, with a strategy focused on constant innovation and sustainability. Founded in Barcelona in 1984, it translates key fashion trends into its unique language. Mango is present in more than 115 markets and with a network of close to 2,600 stores.

## Recovo

SECTOR  
Fashiontech

### Description

Founded in 2021 based in Barcelona, Recovo, a textile SaaS platform, drives circularity in fashion by transforming waste into a resource through material reuse, recycling, and recyclable materials. The platform enables fashion companies to close the loop on waste, access eco-friendly materials, and ensures traceability through data.



## KPIs

- **Corporate Fabric Operations Understanding:** Recovo gained precious insights into the fabric operations of large corporations and received expert mentorship to improve Recovo's technical infrastructure.
- **Financial Support:** Recovo received financial support to fuel the company's growth.
- **Sustainability Advancements and Industry Impact:** Progress has been made in sustainability initiatives as a result of the collaboration, supporting Recovo's mission to transform the fashion industry, particularly in terms of sustainable practices.

## Challenge

Mango StartUp Studio primarily focus on discovering and nurturing solutions that make the fashion industry more sustainable. As a corporate accelerator, its focus is on investing in and developing companies at the early stages, especially those innovating in technology and sustainability. The goal is to transform the entire value chain of the fashion industry, from product creation to distribution, to become more environmentally friendly and sustainable.

## Solution

Recovo operates as a re-commerce platform specializing in textiles, yarn, and production material waste. This platform enables companies to repurpose textile surplus, thereby granting these materials a second life and reducing their environmental footprint. Recovo's business model is centered around fostering a circular economy, achieved through innovative technology, traceability, and community involvement.

## Result

Mango has invested in Recovo as part of its Mango StartUp Studio initiative. This collaboration involved a convertible equity loan and included Recovo's participation in an acceleration program in 2022. The program was marked by success, featuring mentoring sessions, dedicated training, and various collaboration opportunities. As a result of this partnership, Mango is now actively testing Recovo's platform to enhance the sustainability of its production processes.





BUSINESS CASE

# CaixaBank & Menhir

## Optimizing Debt Collection and Risk Management

### CaixaBank

SECTOR  
■ Finance & Banking

### Description

CaixaBank is a major Spanish multinational financial services company, ranked as the third-largest lender in Spain. With 5,397 branches and 15.8 million customers, it has the most extensive branch network in the Spanish market. Listed in the Bolsa de Madrid and part of IBEX 35, CaixaBank operates as a leading financial group with a universal banking model, emphasizing social responsibility, long-term commitment, and innovation.

### Menhir

SECTOR  
■ Fintech

### Description

Menhir assists banks, funds, and asset managers in comprehending the intangible value within the complexity of Non Performing Assets (NPAs), enhancing yields. Collaborating with servicers, Menhir employs AI models to identify recoverable Non-performing loans (NPLs), allowing prioritized efforts for investment funds, banks, and servicers. The ultimate vision is to start with defaults, improving loan origination and aiding SMEs and individuals throughout the financial cycle.



### ■ KPIs

- **Cost Reduction Rate:** Cost reduction achieved by CPC since implementing Menhir's solution.
- **Efficiency Improvement:** Improvement in operational efficiency within CPC due to Menhir's technology.
- **Collaboration Impact:** Third-party collaborations such as these played a crucial role helping with Caixabank's developments, quickly meeting the market demands and adapting to the changes in the financial sector.

### ■ Challenge

CaixaBank, via its subsidiary CaixaBank Payments & Consumer (CPC), collaborates with innovative companies to enhance services for business customers, addressing industry challenges.

The aim is to boost agility, efficiency, and innovation access, accelerating the development of cutting-edge projects and identifying international talent. The goal is to collaborate in improving service efficiency.

### ■ Solution

Since 2021, Caixabank Payments and Consumer (CPC) has been in collaboration with Menhir.

Menhir has created a product that assists with key financial operations, focusing on areas such as risk management and collections.

### ■ Result

Menhir's solution, which is built on an algorithm providing a scoring framework, has enabled Caixabank Payments and Consumer (CPC) to prioritize their workload effectively for an optimized debt collection process.



BUSINESS CASE

# Naturgy & Clevergy

A Machine Learning Pilot Project for Energy Consumption Information

## Naturgy

SECTOR  
■ Energy & Power

### Description

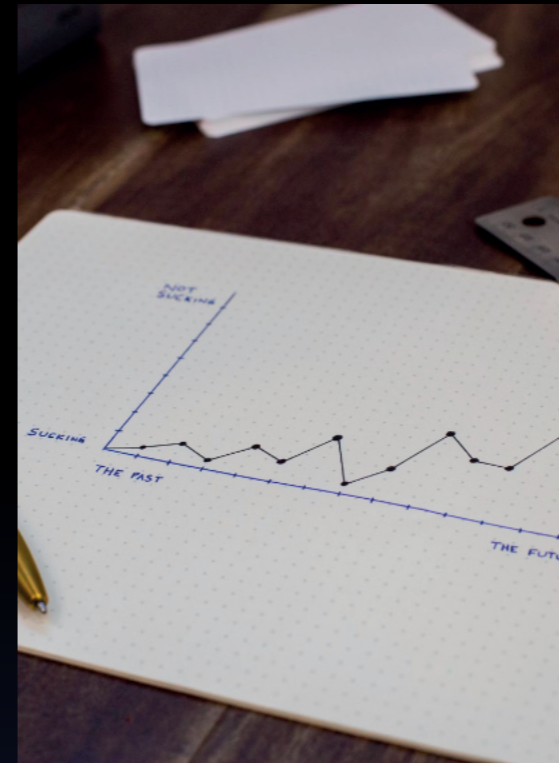
Naturgy is a multinational energy group that operates in the electricity and gas sectors with a focus on innovation and sustainability. The company has a diversified business model, operating in Spain, Latin America, Australia, the US and Italy. Naturgy is a leader in both the gas and power sectors, ensuring a reliable power supply while meeting social responsibilities and promoting sustainable innovation through value-added services.

## Clevergy

SECTOR  
■ Energy & Cleantech

### Description

Clevergy's mission is to optimize energy consumption, saving money while promoting sustainability. Through partnerships with energy providers, Clevergy provides various tools, including AI-driven algorithms for visibility (understanding and comparing consumption), advisory services (personalized tips and integration of smart devices), and control (programming devices for optimum efficiency) all through a single app.



### ■ KPIs

- **Innovation Program and Mentorship Access:** Clevergy won the Connecting Energy innovation program by Naturgy, and gained access to the unconditional support of mentors such as Alejandro Lozano, as well as secured the opportunity to advance their project with Naturgy.
- **Value Proposition Validation:** Through the pilot, Clevergy was able to assess the strength and relevance of the value proposition for contemporary energy companies, as evidenced by their program win.

### ■ Challenge

Naturgy's "Connecting Energy" business program is designed to enhance its production model by nurturing ideas, projects, and new business ventures. The program's goal is to drive a significant transformation in the energy system. It concentrates on several key areas: promoting responsible energy consumption, developing biomethane, hydrogen, and other renewable gases, advancing sustainable mobility, and focusing on the circular economy and effective waste management.

### ■ Solution

Naturgy is working to better the way it delivers information about energy consumption. Typically, traditional suppliers encounter long delays when implementing complex projects. However, Clevergy, in a pilot project spanning four months, employed machine learning to speed up this process. This approach significantly improved the delivery of energy consumption information, benefiting both customers and the company itself.

### ■ Result

The team at Naturgy has played a vital role in assisting Clevergy to develop a genuinely beneficial product, not only for Naturgy as an energy provider but also for its customers.

The overarching aim is for this solution to be advantageous to all of Naturgy's customers, by providing energy insights to everyone.



BUSINESS CASE

# Wayra & Genomcore

Accelerating Data-Driven Personalized Medicine in the National Health System

## Wayra by Telefónica

SECTOR  
■ Telecommunications

## Genomcore

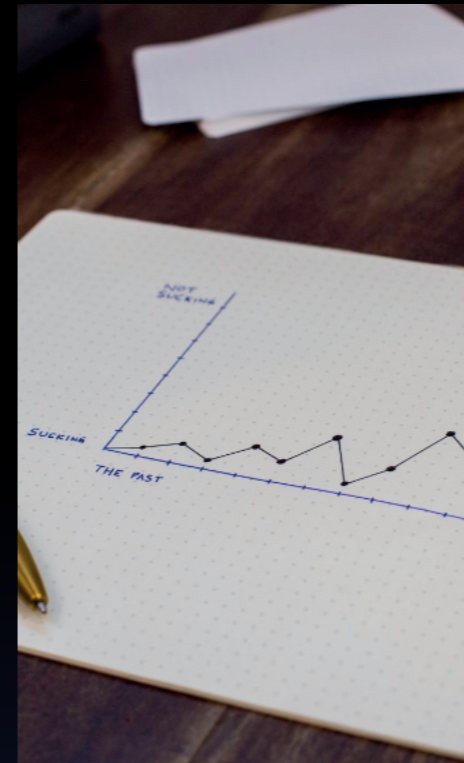
SECTOR  
■ Healthtech

### Description

Wayra serves as the connection between Telefónica and global technological disruptors. As a preferred strategic partner, Wayra accelerates both the startups and Telefónica's business. Wayra facilitates investment and acts as a seamless interface, connecting entrepreneurs with a network of corporates, governments, and partners, adding value to ecosystems where it operates.

### Description

Genomcore provides a technological framework for precision healthcare, offering customizable app services for end-users. Their platform enables the implementation of new protocols and services, integrating genomics, biomedical data, wearables, and medical imaging. Genomcore's solution facilitates data-driven precision healthcare, managing large datasets across the health industry from biomedical research to primary care.



### ■ KPIs

- **Pioneering Public Tender Achievement:**  
The Telefónica-Genomcore collaboration mark the first major public tender in Spain aimed at equipping the National Health System with genomic and biomedical data management capabilities.
- **Clinical Application Focus:**  
The collaboration resulted in a shift in emphasis from research and development to clinical applications within the project, with progress made towards personalized healthcare in Spain, considering the clinical focus of the project.

### ■ Challenge

Numerous genome analysis services employ affordable DNA microchip-based partial genotyping methods, which restricts the complete understanding of a patient's genome. Handling the extensive amount of genomic data presents a significant challenge for the future. Wayra acknowledged the profound societal implications of this, envisioning a change that goes beyond just the biomedical field. They foresee "The democratization of the genome," which is not only a scientific advancement but also a movement towards social transformation.

### ■ Solution

Telefónica and Genomcore collaborated on integrating Clinical Genomics into the National Health System, marking a significant stride toward personalized healthcare. Genomcore offers a tailored data storage solution for the health sector, while Telefónica contributes tools and expertise in working with the Public Administration. This partnership represents a pioneering initiative for advancing healthcare integration and accessibility.

### ■ Result

Wayra invested in Genomcore in 2015 and continued its support in the latest funding round in 2022. The collaboration over the years has resulted in Genomcore developing new capabilities, fostering a mutually beneficial relationship with various sectors at Telefónica.

This partnership has opened up new business opportunities for both entities.



BUSINESS CASE

# Sorigué & Conkau

Streamlining the Sourcing Process in the Construction Sector

## Sorigué

SECTOR

■ Infrastructure, Construction

## Conkau

SECTOR

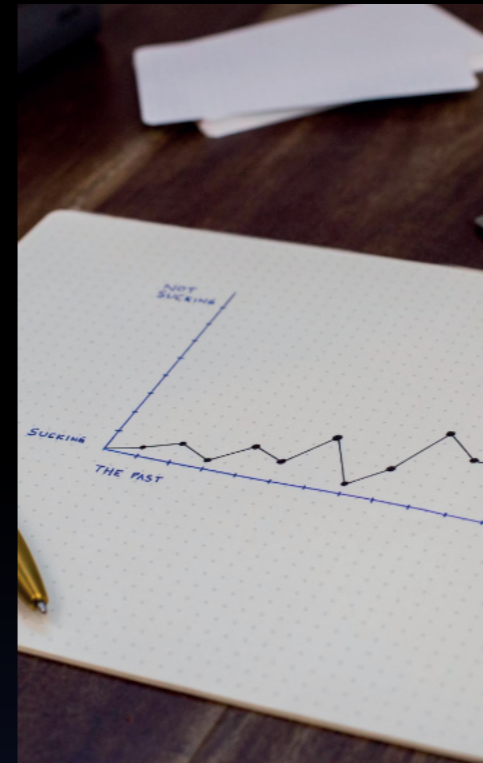
■ Construction, Enterprise Software

### Description

Sorigué is a leading group in construction, services, materials, technology, and water engineering, committed to innovation. Originating in production of aggregates and asphalt treatment in 1954, it has diversified while maintaining strong client and supplier relationships. Operating nationally with branches in major Spanish cities, Sorigué continuously develops new products and production methods, remaining at the forefront of the industry.

### Description

Founded in 2021 and based in Barcelona, Conkau is a B2B SaaS for comprehensive procurement management in the construction sector. Aspiring to be a one-stop-shop, the platform addresses tendering challenges digitally, offering efficiency, time savings, and data-driven decision-making. Conkau ensures secure, organized, and confidential storage of users' historical data, providing a convenient and efficient solution for the construction industry.



### ■ KPIs

- **Gross Merchandise Value (GMV):** Measures the total value of goods managed through Conkau's platform, indicating the scale of transactions facilitated.
- **Time to Close a Deal with Suppliers:** Tracks the duration from tender initiation to deal finalization with suppliers, assessing the efficiency of the procurement process.
- **Number of Suppliers per Tender:** Quantifies the average number of suppliers engaged in each tender, reflecting the extent of supplier participation and competition.

### ■ Challenge

The construction sector faces challenges with its inefficient, error-prone, and unstructured sourcing process.

The need is evident for digitalization to enhance efficiency and gather valuable data. The challenge is to implement digital tools to structure data and provide user-friendly solutions, addressing the sector's current limitations.

### ■ Solution

Conkau's Software as a Service (SaaS) solution is designed to supplant the ineffective use of Excel sheets, WhatsApp, and email currently prevalent in the construction sector's sourcing process.

By offering a well-organized database, it delivers crucial information that aids in making better decisions, thereby boosting efficiency and streamlining operational processes.

### ■ Result

The implementation of Conkau's solution company-wide significantly improved Sorigué's sourcing process, enhancing efficiency and decision-making while reducing time consumption.

The structured database streamlined operations, demonstrating notable positive results in the overall sourcing workflow.



BUSINESS CASE

# Damm & We Smart Park

A Pilot for a Customized Corporate Parking Rotation Service

## Damm

SECTOR

Food & Drink

## We Smart Park

SECTOR

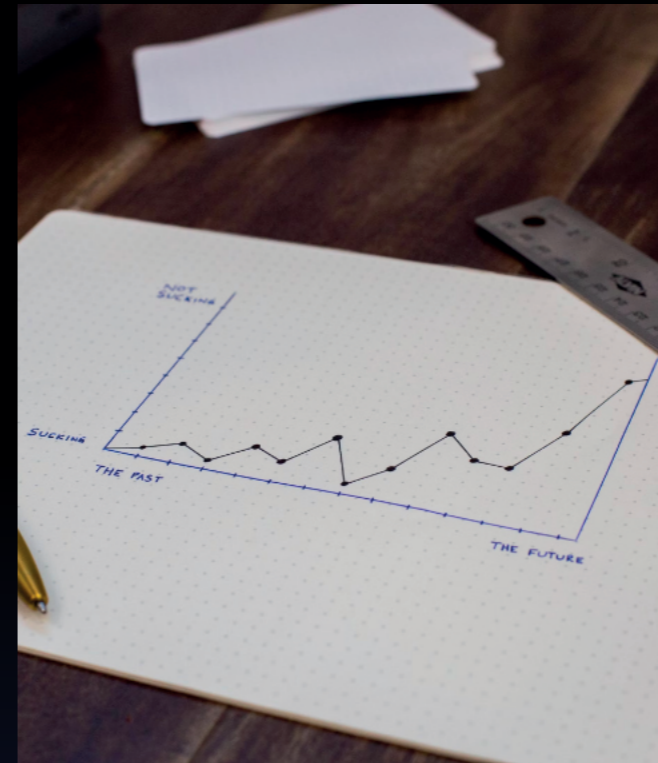
Smart City

### Description

Founded in 1876 and rooted in Barcelona, Damm crafts Mediterranean-adapted beer. Damm operates in 120+ countries globally in the food, beverages, logistics, distribution, and restoration. At present, Damm has a wide network of plants and factories dedicated to the production, packaging and distribution of beverages throughout the Iberian Peninsula. Damm also embraces sports, gastronomy, culture, and social commitment through the Damm Foundation.

### Description

Founded in 2013 and based in Barcelona, We Smart Park's disruptive technology revolutionizes how Real Estate rents parking spaces, enhancing efficiency and profitability. Their innovative solution enables easy management of closed parking spaces through mobile or computer, boosting revenue per slot. The ultimate goal is to achieve 100% parking occupancy without owners worrying about it.



### KPIs

- Employee Satisfaction Rate:**  
Higher level of satisfaction among employees since the implementation of the new parking rotation service with WeSmartPark.
- Parking Slot Utilization:**  
Improved effectiveness of the parking rotation system in terms of the percentage of employees making use of it, given that only 20% had permanently assigned slots.

### Challenge

Damm was seeking a solution to optimize the parking slots at its HQ in central Barcelona. Due to the implementation of remote working, along with other circumstances such as holidays and work trips, there was a pool of free parking slots that remained vacant, assigned to employees who have a permanent slot in these facilities. Damm sought to develop a system facilitating the rotation of vacant slots for temporary use by other employees.

### Solution

The core service at WeSmartPark was the smart management and optimization of private and particular parking slots, primarily focusing on individual users rather than corporate facilities. Essentially, WeSmartPark developed an entirely new service, better tailored for corporations, incorporating new ad-hoc functionalities and services for the employees, catering not only to the people who demand a parking slot but also to ones who offer theirs.

### Result

The main challenge of the project was to meet the corporation's requirements, as WeSmartPark had to rebuild part of the app and the back office while also complying with Damm's policies.

The challenge was successfully overcome, and WeSmartPark now has a new service in their portfolio that can be offered to other corporates.





## ABOUT TECH BARCELONA

Tech Barcelona is an independent and non-profit association that works to consolidate Barcelona as a technological and digital hub of international reference.

Created in 2013, it represents more than 1,300 companies and has more than 90 partner organizations, leaders in their sector, committed to the project. The objectives of the association is to promote talent, support entrepreneurship, attract investment and improve the competitiveness of companies.

Tech Barcelona has established itself as the backbone of the ecosystem, with a program of content, activities and connections aimed at promoting the growth of the digital and tech sector, as well as the transformation of the economic model of the city and the country; in a context of international projection and taking care of the impact of technology on society.

The Tech Barcelona ecosystem model is deployed with the Urban Tech Campus project: a network of singular buildings connected so that innovation and technology are integrated into the city, involving and coexisting with its citizens.

For more info:

[www.techbarcelona.com](http://www.techbarcelona.com)



## Mind the Bridge

## ABOUT MIND THE BRIDGE

Mind the Bridge is a global open innovation platform, providing services and products to corporates and local startup ecosystems. Headquartered in Silicon Valley with offices in Barcelona, Seoul and Tel Aviv, and a presence in Los Angeles, New York and Milan, Mind the Bridge has been working as an international bridge at the intersection between startups and corporates since 2007.

Mind the Bridge scouts, filters, and works with 10,000+ startups a year supporting global corporations with open innovation initiatives that translate into curated deals with startups (POCs, procurement, investments, and/or acquisitions). It also provides corporates with advisory services and benchmarking on innovation strategies and structures.

Mind the Bridge developed MTB Ecosystem, a AI-powered open innovation matching platform.

Mind the Bridge regularly produces research reports with the goal of sharing insights and data about startup ecosystems, open innovation, and corporate presence in global innovation hubs. Mind the Bridge reports have been featured on the Financial Times, USA Today, El Pais, Techcrunch, and more.

Mind the Bridge, in collaboration with the International Chamber of Commerce, the 100 y.o. institution representing more than 45M businesses worldwide, annually runs the “Corporate Startup Stars” awards, which rates and awards the most startup-friendly global corporates.

For more info:

<http://mindthebridge.com> | [@mindthebridge](https://twitter.com/mindthebridge)