Basque CyberSecurity Centre: development of a leading cybersecurity ecosystem in Southern Europe

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Abstract

The Basque CyberSecurity Centre (BCSC) was created by the Basque Government in September 2017 within the Basque Business Development Agency (SPRI). Unlike other regional initiatives in the public sector related to cybersecurity within Spain, the BCSC was oriented to economic development while the approach of all other initiatives had been to serve as internal instruments for regional governments with public governance as their purpose. The evolution of the BCSC has achieved remarkable success and it is currently a reference model that other European regions try to replicate.



Origin of the business fabric

The cybersecurity business fabric in the Basque Country was established in the 1990s with the creation of the first company in Spain to do business in cybersecurity: Panda. Shortly afterwards, other leading companies were created, in particular S21sec, and cybersecurity began to be a professional field with a good number of specialists in the region. These beginnings, combined with the entrepreneurial and innovation tradition that characterises the Basque Country, resulted in 153 public or private agents active in the region that were offering services or technology related to digital protection in 2020 (source: White Paper on Cybersecurity in the Basque Country, 2nd edition).

A large proportion of the Basque cybersecurity startups are dedicated to the creation of new technology, compared to a lower ratio of those that offer services Currently, the cybersecurity business ecosystem in the Basque Country presents a profile characterised by several unique traits. On the one hand, unlike what commonly happens in Europe, a large proportion of the new emerging Basque cybersecurity companies (start-ups) are dedicated to the creation of new technology, compared to a lower ratio of those that offer services. Secondly, there is a local market that helps pilot and scale up technological solutions, as the Basque Country is a territory with a significant concentration of highly digitised and widely internationalised industrial companies. Additionally, cybersecurity companies in the Basque Country are proving to be very attractive to investors, there are recent stories of companies created in our region that have been acquired by larger ones (Hdiv by Datadog, BeClever by Devoteam, S21sec by Thales, Panda by WatchGuard, etc.) and other cases of product companies with international success (CounterCraft. SealPath, Wise Security Global, Barbara, Nymiz, Opscura, Smowltech, among others).

Finally, it is important to point out the public-private alignment that exists in the Basque Country and that facilitates the continuous development and evolution of this fabric.

The BCSC as an accelerator of economic activity

Until 2017, the ecosystem evolved naturally, without a defined strategy, which made it difficult to exploit synergies and limited access to business opportunities. The emergence of the Basque Government on the scene, creating the Basque CyberSecurity Centre, worked as a game changer that boosted the visibility and capabilities of the sector.

In 2018, the BCSC published the first edition of the White Paper on Cybersecurity in the Basque Country, in which 109 organisations were registered. Although there were previously other catalogues at the national level, the Basque white paper was the first catalogue of agents in the sector with a regional scope in Spain. In other words, a capacity map was created so that the potential demand market could have a clear and updated list of nearby supply agents. Work is currently underway on the third edition of the white paper.

In that same year, 2018, promoted by the BCSC, the Basque Agency for Business Development (SPRI) announced the first call for the industrial cybersecurity grants programme. This was a pioneering initiative in Spain whose objective was to activate cybersecurity demand among companies in the sectors of economic activity included in the Research & Innovation Smart Specialisation Strategy (RIS3). This aimed to create a culture of cybersecurity consumption so that the strategic industry could maintain or improve its levels of competitiveness within a context of progressive digitisation.

The grants programme was new, unfamiliar to its target market, and cybersecurity was not yet one of the purchasing priorities in industrial companies. It was therefore



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necessary to launch a parallel commercial effort to activate demand from the strategic sectors of the economy. Thus, the BCSC launched a series of awareness days for business associations. The sessions presented different situations contextualised to the profile of the companies and also to the different areas of the organisation (management, IT, industrial processes, office processes, etc.). The aim was to demonstrate the need that any company connected to the Internet has to protect itself against cyberattacks, while informing about the possibility of benefiting from the grants programme.

The awareness-raising actions had the desired effect and the first edition was a resounding success. Exceeding expectations, 102 cybersecurity projects were activated, providing a total grant of approximately €985,000 when the planned budget was €500,000. The second edition of the programme in 2019 doubled the numbers of the previous year, reaching 216 projects with a total subsidy of approximately €1.95 million. Five editions of the programme have now been implemented, totalling more than 1,200 approved projects and more than €10.4 million in grants.

Visibility and promotion of capacities

In order to unite the cybersecurity community in the region, the BCSC organised its first major event in November 2018. It brought together close to 1,000



people and was the first major meeting uniting supply and demand, as well as the fields of RDI and Education, two elements with great influence on the sustainability of the ecosystem and with a key role for future growth. Thus began a campaign for cohesion, visibility and promotion of the Basque cybersecurity sector, both locally and abroad.

It is important to note the global nature of the cybersecurity business. Bearing this in mind, and since the Basque CyberSecurity Centre is a regional organisation that acts on the local fabric, visibility and promotion actions have always had an international component. The events in the Basque Country have therefore included the presence of key global speakers who were offered the opportunity to contact local companies.

The lehendakari (Basque First Minister) Iñigo Urkullu attends the inauguration of the Basque Cybersecurity Centre facilities in 2018.

In addition to the events held in the Basque Country, the BCSC established an international presence together with the most internationalised Basque cybersecurity companies. Thus, in 2019 the Basque Country was the first European region to have a private side-event at the largest sector fair in the world, the RSA Conference in San Francisco, which was attended by some 80 people of interest from all over the world. This side-event had a second edition in 2020 that doubled the attendance numbers of the first event. The series was interrupted by the COVID-19 pandemic, but in 2022 its success was recognised by the European Cyber Security Organisation (ECSO), which was inspired by the Basque experience and asked for advice from the BCSC to organise the first edition in San Francisco of the "European Networking Night: Cybersecurity Made in

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Europe". In recognition of its work, the BCSC was granted the opening keynote of the conference on behalf of ECSO, giving great prominence to the role of the regions in the development of advanced cybersecurity ecosystems in Europe.

At a European level, always in coordination with Basque companies and responding to their visibility needs in specific locations, in 2019 the Basque Country set up a pavilion at It.sa in Nuremberg. This is one of the largest cybersecurity fairs in Europe and six companies from the region accompanied the BCSC. More recently, in 2022, together with the Cybasque cluster, a delegation of Basque companies was organised to explore the Italian market on the occasion of the Cybertech Rome conference.

The international visibility of our ecosystem has always been a priority for the BCSC, but not only from a perspective of market opportunities for companies. In a situation in which specialised talent is scarce and the volumes of investment in European cybersecurity companies are limited, it is especially important to attract people who may be seeking an exciting professional project and to attract the attention of investment agents. This might allow our cybersecurity companies to compete in better conditions against their rivals from other regions. For this purpose, the BCSC applied to host the European Cybersecurity STARtup Award in Bilbao in March 2023. This event brings together a large community of international investment agents who, in many cases, will have their first contact with the Basque Country and its cybersecurity companies.

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Creating a future in which cybersecurity is an essential part of industrial business

Within the field of cybersecurity as a business, numerous niches can be found that are at different levels of evolution. In 2019, in the knowledge that the Basque Country presented promising starting conditions thanks to its business fabric included in the White Paper's first edition, a study was carried out to determine what opportunities might exist to consolidate or even improve our international positioning. The result of this study should be the Strategic Plan for the creation of an Industrial Cybersecurity Hub in the Basque Country.

One of the key characteristics that conditioned the orientation of the study from the very beginning was the size of the region: the Basque Country is a small territory. After benchmarking our ecosystem against other advanced ones we came to two conclusions: it was clear that we were not going to be leaders in everything, although we discovered that we had a chance to stand out in certain areas. Therefore, to define our aspiration, we had no choice than to specialise our fabric within the existing cybersecurity niches.

The whole process made it clear to us that our best opportunity was to focus on specialisation, specifically in orienting products and services towards use cases and business challenges related to the protection of industrial control systems and processes. There were several reasons for

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this. In the first place, the existing offer abroad had a very low level of maturity; we were therefore starting off with a certain advantage. Secondly, there was an expectation of high growth in demand for this type of offer in the next decade. Thirdly, we had a local market that allowed us to develop scenarios for piloting solutions in clients with a highly innovative profile, and these solutions could later acquire a sectoral nature. Finally, the Basque Government was firmly committed to supporting this development, and convinced that cybersecurity was a key factor in maintaining the competitiveness of strategic sectors for the Basque economy and therefore in preserving the prosperity of the Basque Country. These are the reasons that make us believe that our plan, although ambitious, can be viable

In the time that has elapsed since the publication of our strategic plan, despite the slowdown caused by the COVID-19 pandemic, several initiatives have been launched to move in the direction outlined and to address certain identified areas for improvement. Among them are the six key actions that are listed below:

if we work along the established strategic

lines

 The creation of the Cybasque cluster was promoted. Cybasque is a strategic partner of the Basque Government with which a public-private partnership agreement has been signed, the content of which is the aforementioned strategic plan. Cybasque brings together more than 60 companies.









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- Collaboration has been structured with regulated educational institutions (universities and vocational training centres), but also with other nonregulated ones such as the "42 Urduliz" campus aimed at recovering talent from other professional sectors.
- An Industry 4.0 Digital Innovation Hub was developed that includes a node specialised in piloting cybersecurity solutions for industrial sectors.
- A network of relationships with mainly European international investment agents is being constructed. The BCSC led the European Cybersecurity Investment Platform project, which was financed by the European Investment Bank (EIB) and supported by the European Cyber Security Organisation (ECSO).
- Coordinated work has been carried out to align efforts with the priorities of the National Cybersecurity Strategy (by actively participating in the National Cybersecurity Forum) as well as the Retech call (framed within the Next Generation Europe funds).
- The computer emergency response team (BCSC-CERT) has been progressively

reinforced. This organisational function is the embryo from which the Basque Cybersecurity Centre will be able to expand its capacity to the next level, evolving towards the future Basque CyberSecurity Agency which is expected to be commissioned in the next few months.

The accelerated digitisation of society will require us to monitor and adjust the initiatives that guide our strategic plan. Significant changes, such as the evolution of the use of artificial intelligence and the future emergence of quantum computers, among others, will undoubtedly challenge current frameworks of action. This changing scenario may seem threatening, but it will also present a sea of opportunities for societies that have worked on the resilience of their digital economy and that, consequently, will be better prepared for the arrival of a disruption. The Basque Country is a territory open to collaboration and we firmly believe in the importance of establishing alliances with other complementary ecosystems, with trusted partners that will help us succeed on our journey.

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