

BCC Innovation

2022 Annual Report



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About BCC Innovation

As a Technological Center specialized in gastronomy, BCC Innovation's mission is to generate knowledge in this field and contribute to the advancement and enhancement of the entire food value chain. We strive to strengthen the efforts and positioning of all stakeholders involved, thereby benefiting society as a whole.

With a comprehensive and cutting-edge approach, we undertake research and innovation projects on both local and international levels. This is evident in the diverse range of projects we have had the privilege to develop throughout 2022, which we proudly showcase in this report.

Using gastronomy as our foundation, we recognize its pivotal role in shaping the cultural identity and heritage of a region. Consequently, we work towards fostering economic and social development while providing unique insights for the design and development of products and services. Our work is characterized by an innovative and disruptive mindset, where sustainability, health, environmental preservation, and digital transformation play crucial roles.

We collaborate synergistically with various types of companies, clients, suppliers, as well as Public Administrations. Noteworthy partnerships include the Basque Government, the Provincial Council of Gipuzkoa, the City Council of Donostia-San Sebastián, and our engagement in European collaborations. Moreover, we actively support the growth of technological startups, recognizing their increasingly significant contributions and creativity in shaping the future of gastronomy. Additionally, we collaborate with like-minded technological allies who share our values and vision for culinary research and innovation. Through these partnerships, we aim to create networks that add value to the projects we undertake, while also fostering a culture of shared knowledge and learning.

None of our achievements would be possible without the dedicated team of professionals at BCC Innovation. Our team comprises experts from diverse fields such as sensory sciences, health and nutrition, sustainability, territorial development, digital transformation, and, of course, a culinary team consisting of internationally renowned research chefs with extensive experience in prestigious restaurants.

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Introduction

2022 was a year filled with incredibly interesting projects in which we continued to develop the 360° Gastronomy concept which is both part of our vision and our DNA as a technology centre.

We worked closely with companies that are designing new products which attempt to combine cutting edge developments and culinary science with sustainability and health. Several of the challenges revolved around the use of microalgae or insects as a new source of protein, and, for a further year, we observed how the notion of plant-based foods remains one of the major focuses in the gastronomy and food industry, which led to us continuing our efforts regarding vegan desserts and charcuterie.

In addition, thanks to the Basque Government's programme for supporting the hospitality industry (also known as HORECA, an acronym of Hotel, Restaurant and Catering), we collaborated with numerous restaurants and helped them to extend their culinary offering by creating new ranges of meat products, flavoured butters, and organic cheeses and by repurposing surplus vegetables, among other things. As we have been able to observe on a first-hand basis, the food service sector is constantly innovating itself.

In the area of research, we continue to increase our presence in Europe. For example, we are currently working with four countries from the Mediterranean basin on redesigning the selection of food offered in school cafeterias. The goal is to make the food on offer more attractive to children and, in turn, even healthier. The project also pursues an especially aspirational goal; not only is it contributing to improving the health of future generations but at the same time it is helping to revive culinary techniques and customs that had fallen into disuse, helping to preserve our cultural heritage. This is an aspect that is extremely relevant to the concept of gastronomy we foster at BCC Innovation and thus makes the project very special for us.



Lastly, it is worth mentioning that although we are a relatively young Technological Center, commencing our journey in 2018, we have emerged as a prominent authority in the gastronomic sector. We are proud members of the Basque Network of Science, Technology, and Innovation, as well as the National Network of Technological Centers. Our goal is to continue generating new knowledge, ensuring that gastronomy remains a driving force for development across all regions.

Over the course of the last few years, we have gone deep into the woods and undergrowth of the Iberian Peninsula, into the mountains and the most typical landscapes of its different regions, with the intention of categorising the small treasures they hold: their wild plants. Garlic mustard (*Alliaria petiolata*), wood sorrel (*Oxalis acetosella*), apple mint (*Mentha suaveolens*), plants of the Malva genus and dandelions (the *Taraxacum* genus) contribute the required touch of freshness, acidity, a bitter taste or spiciness to the culinary creations we prepare. We recorded all this scientific and culinary knowledge about wild plants in the book *Silvestre: La Gastronomía de las Plantas*, which was published in 2022.

Gastronomy's great transformational capacity at a socio-economic level led us to travel during the year to countries such as Ecuador, Jamaica, and Israel.

- + 90 projects**
involving research, innovation and providing advice for our clients
- + 10 gastronomy-related events**
national and worldwide
- + 200 organizations**
with which we have interacted







In one case, our goal was to foster research, innovation, and entrepreneurship, creating a more robust value chain; in another, it was to showcase the richness of the raw materials found in the country. Lastly, we wanted to connect our ecosystem with other leading innovation ecosystems, because in today's environment, innovation must be open and collaborative.

All of this was possible thanks to a magnificent team comprising chefs and researchers who put their creativity, expertise, and passion into everything we do at BCC Innovation.

Begoña Rodríguez
Director of BCC Innovation

BCC Innovation Projects

Of all the projects developed in 2022, we present those we consider best to reflect the wide diversity of initiatives of BCC Innovation.

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PROJECT #1 / BCC INNOVATION

INSEKNIOR

One of the aspects of BCC Innovation is represented by research into new food formats.

The current system no longer functions as it did in the past. The times, the ways in which we relate to food and our attitude towards it have evolved. Therefore, we need to explore other paths and unconventional productions systems which can help to switch to more sustainable formats: in essence, to find a different way of approaching gastronomy that is beneficial to both people and the planet.

Our technology centre has tackled this aspect from diverse perspectives and areas. For many years, we have been working on developing products using novel foods such as insects, microalgae and mycoprotein.

On the trail of the arthropods

It is calculated that by 2050 not only will the global population have reached 10 billion people, but 15% of these will be aged over 60 years old.

This already represents a huge challenge, not just from the demographic point of view but also from an environmental perspective, given that we need new sources of protein that are more sustainable than the current options. Considering this data, the big question arises: how are we going to feed the entire population?

Inspired by this challenge, we started a project called INSEKNIOR (a name drawn from 'insect' and 'senior'). It aims to develop a new range of products based on insects (the *Tenebrio molitor* species) as a new, alternative source of sustainable protein, oriented towards the senior community given the nutritional needs of this population segment.

The INSEKNIOR project has developed meat analogues that use raw materials of vegetable origin and include insect flour from the *Tenebrio molitor* species, as well as liquid and semi-solid prototypes containing insect fibre (chitin), as novel alternatives for people who may suffer from dysphagia (difficulty swallowing).

This initiative was the result of a collaboration involving the following companies – Ausolan (a catering company specialising in communities, and the coordinator of the project), Insekt Label Biotech (a biotech company engaged in insect production) and the Leartiker and BCC Innovation technology centres (who were responsible for formulating projects incorporating insect flour and insect fibre, respectively).

It must be taken into consideration that *Tenebrio molitor* is one of the four insect species that the European Union has included in the list of novel foods. However, these are new ingredients which culturally have not been eaten in Europe. This prompted BCC Innovation to take the preliminary step of conducting an exploratory study involving more than 400 consumers, which enabled it to identify expectations and opinions about consumption of insects. The enlisted team determined which types of products they would consider appropriate for insects to be incorporated into, identifying insect flour as a substitute for cereal-based flours and dry pasta as the most widely accepted products.

INSEKNIOR

When developing new products using insect fibre, BCC Innovation's culinary team based themselves on traditional recipes using locally sourced products such as Reinette apples to create a version of the cold soup known as ajoblanco, Goierri black beans to create hummus, and raw courgette mixed with banana to create a smoothie, among others. The prototypes developed were assessed from a nutritional perspective and their physico-chemical and instrument-based properties.

The surrounding environment as well as the range of foods we can find around us influences the dietary habits of the population and, therefore, people's health. In turn, it is society itself who has placed limits on what we consider can be usable and beneficial in feeding ourselves. Inseknior encompasses this, the effective use of resources and the satisfaction that comes from looking ahead. At BCC Innovation, we consider that this is a key pillar in being able to engage in innovation comprehensively and significantly.

The project, focusing on developing products that incorporate novel foods, has been funded by the Basque Government as part of the aid scheme for cooperation (Department of Economic Development, Sustainability, and the Environment) and co-funded by the European agricultural fund for rural development (EAFRD).



PROJECT #2 / BCC INNOVATION

CITA GO-ON

One of our main focuses in our health research is the ageing process.

The goal is to promote healthy ageing through nutritional and culinary interventions. These types of interventions seek to encourage healthy eating through nutritional education and culinary skills.

With our participation in the CITA GO-ON project, which launched in 2021, we wanted to advance the idea among those in this age group that eating healthily is an important factor for our health and, at the same time, we wanted them to be actively involved in the research processes.

Living for more years is not enough; quality has to prevail

BCC Innovation maintains that gastronomy contributes a holistic, interdisciplinary view to research into health, and we work with this perspective in mind.

In line with this, and in order to build the framework for the project, the initiative included two key elements:

Tackling the socio-demographic challenge of an increasingly long-living society

We are living for longer. However, our increased longevity has been linked to a greater prevalence of chronic non-communicable diseases (CNCDs), such as cardiovascular diseases, neurodegenerative diseases or cancer. This is why the efforts of the scientific and medical community need to focus on seeking ways to foster an old age which avoids multimorbidity and disability as much as possible. Unhealthy lifestyles such as poor diet and sedentism, which are so widespread nowadays, have been identified as one of the main contributing factors which would need to be addressed by the various sectors.

Combining the 'what' with the 'how'

Most people find it more straightforward to think about the relationship between 'what' we eat and the quality of our diet. However, looking beyond our choice to eat healthy foods, we are starting to understand that the 'how' of what we eat, of our chosen food, is equally or even more important. Understanding that the way our food is processed affects the quality of the compounds formed inside it is a field of study we have delved into for one essential reason – the fact that all these compounds can have a significant impact on people's health.

All this took shape as part of the CITA GO-ON project, led by the CITA Alzheimer Foundation. To bring it to life, the initiative sought to develop a multimodal intervention process to prevent cognitive impairment.

CITA GO-ON

Although it is well known that physical exercise, cognitive training and promoting healthy lifestyles can help reduce the risk of dementia, the effects of this type of intervention are unclear or limited.

However, before continuing the development process, it was important to lay down the corresponding foundations which, in this case, would be the goals. We therefore endeavoured to identify what we wished the impact of the project to be, its central thread and the role that we, as a gastronomy tech centre, wanted to play in the community, as well as defining the way forward. We realised there were three concepts that characterised our ambitions regarding the whole process. We wanted to:

1. Serve as a stimulus. At BCC Innovation, we want to be a proactive driver of healthy eating habits among the population; our desire (and the driver of our day-to-day work) is that this research and its findings result in clinical practice.

2. Empower. Empowering people by offering guidelines on healthy eating patterns and by contributing the necessary culinary know-how to achieve effective health management.

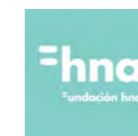
3. Study. Studying and researching the impact of preventive strategies that could in the future be adopted or transferred to the field of healthcare.

Working with the CITA Alzheimer Foundation, the aim was to generate a project which nurtures lifestyle habits and, at the same time, monitors risk factors, primarily those related to the illness we know as Alzheimer's disease.

The research project focused on the efficiency of fostering cognitive stimulation, monitoring and identifying risk factors, and at the same time teaching that quality is a factor which, as human beings, we should aim for. This occurs through promoting healthy eating habits, increasing physical activity and improving emotional intelligence and psychosocial health, and all this with the goal of preventing Alzheimer's.

The people who joined the project as participants were randomly assigned to one of the two groups belonging to the study. The first group became part of a two-year structured intervention, during which participants are provided with different intervention elements to impact their quality of life, on both an individual and a collective basis. Meanwhile, the second group was given the health recommendations offered by the WHO (World Health Organization). To measure the impact of the intervention, the groups are monitored, including regular medical testing, so that once the study ends it is possible to see the progress (physical and mental) of each of the participants

We want to look ahead to the future with optimism, with the hope that gastronomy, as a driving force for change, can encourage in society an awareness about food that has a positive impact on the health of the population. Empowering people with regard to their health by addressing their dietary routines includes dispelling mistaken beliefs about food and offering tools that encourage home cooking (preventing this from being seen as a difficult, frustrating and time-consuming chore).



CITA GO-ON

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We are able to affirm that the multidisciplinary teamwork performed by researchers and chefs is generating solutions that meet people's nutritional needs and suit their tastes and preferences – as has been put forward in a number of scientific studies, one of the key strategies for changing dietary habits may lie in the importance of emphasising the pleasure of eating, not solely in the health-based aspect of foods – thereby combining know-how to give pleasure to both the palate and the whole body.

The project is led by the CITA Alzheimer Foundation, working with the following institutions: BCC Innovation, the Biodonostia Health Research Institute, the University of the Basque Country, Achucarro Basque Center for Neuroscience and the Public University of Navarre. It is also supported by internationally prestigious institutions such as Sweden's Karolinska Institutet and the US Alzheimer's Association. The initiative has been funded by the Basque Government, Fundación HNA and the State Research Agency of the Government of Spain's Ministry of Science and Innovation.

Gastrokop

The range of cuisine offered by our restaurants is being refreshed.

At BCC Innovation, we've had the opportunity to develop projects in conjunction with different establishments in the Basque Country's HORECA sector, which have sought to encourage the use of local produce.

The project known as Gastrokop had the aim of fostering participation and cooperation by the gastronomy sector in disruptive initiatives. Working alongside many different restaurants, we were able to design and create new ranges of meat products, flavoured butters, and organic cheeses, among others.

Gastronomy means enjoyment, and we as a Technology Centre focused on gastronomy want to contribute our grain of sand to the hedonic aspect of food through our cross-cutting science-based approach.

The project has been funded by the Basque Government's Department of Economic Development, Sustainability, and the Environment.



PROJECT #4 / BCC INNOVATION

DELICIOUS

The habits we learn at home, from childhood, impact and define the way we eat in our adult lives.

If we understand how we eat, how we cook and how we handle food in our day-to-day diet, we can adapt all this to meet our needs. In turn, if we understand dietary guidelines, the nutritional value of foods and their impact from early childhood, we will be able to lead more conscious lives which are tailored to our respective profiles.

Five territories, one recipe book and 200 ways to feed yourself.

Understanding how we eat at home, not just at restaurants, is essential.

Professionals from the areas of Culinary Science, Sensory Analysis and Health have worked together on a project with international reach through which, over its two-year duration, is attempting to solve a growing problem among the younger population: childhood obesity. Through teamwork in their respective professional areas, an exhaustive study was conducted regarding situation in several Mediterranean-area countries as part of DELICIOUS.

We need to obtain a clear picture to know how we feed ourselves, what products we choose and how we cook. Our everyday routine matters. This is why the project has studied every aspect, from the length of time a food spends in the oven to water usage and the amount of food scraps generated. By gathering all this information together, a better understanding was gained of people's everyday lives, not just in our own region but also in new territories and new cultures.

The interesting thing about this project is that it has achieved a broader understanding of the word 'diet', a term that can trigger negative emotions in some people when heard. Some of the activities carried out under the DELICIOUS project conveyed a new view of this idea, presenting it not only as the nutrients which are behind our food, but also the way it is cooked, the relationship people have with the different ingredients and their physical activity level, as well as psycho-social factors. These are the elements we are interested in protecting, and this is why research has been conducted into how to prevent undesirable ideas and habits linked to food choices from being generated. Children need considerable interaction with foods through different everyday activities, such as the moments spent shopping for ingredients, cooking the meals and being seated at the table.

DELICIOUS

Studies looking at how these moments are perceived, and the relationship that children have with food, have been tackled from the sensory analysis area. This uses different strategies to understand what they prefer, what emotions the different foods cause in them and their sensory properties, and how to foster healthy choices which are, at the same time, also pleasurable.



DELICIOUS attempts to tackle the problem of the increasing prevalence of childhood obesity in Mediterranean counties – Spain, Portugal, Italy, Lebanon and Egypt – through education, physical activity and healthy, sustainable gastronomy.

The project brings together different disciplines that are included in the 'Mediterranean diet', understood to be the whole set of skills, knowledge, rituals, symbols, and traditions relating to crops, harvesting, fishing, animal husbandry, conservation, processing, cooking and, in particular, sharing and consuming foods defined as Intangible Cultural Heritage (ICH) and protected by UNESCO. Through culinary innovation, nutrition, and the use of different sensory analysis tools, we have developed a series of activities that will help to prevent the encroachment of diets which are less suitable for children.

The role of BCC Innovation in 2022 consisted of assembling 200 recipes from some of the many different types of Mediterranean cuisine and delving into and highlighting the most typical flavours from this geographic context. The information was collected through domestic avenues, based on interaction with families in the various locations and collaborations with schools in each country. Research is key in order to understand the flavours, aromas, and ingredients in each place; even when you are a chef, it is not until you taste dishes in their original setting that you can perceive their differences and tiny, characteristic nuances. We are aware that this initiative focuses significantly on families and particularly on children, therefore it is incredibly important to understand how they eat at home to appreciate all their needs and adapt the recipes and new products accordingly.

Carrying out an international project in which several countries are participating is both a challenge and a learning process. The use of different languages and the relationship of each culture with its ingredients and ways of cooking mean that the local gastronomy in each region is unique and provides new ideas for reviving the value of the Mediterranean diet, making the work complex and enriching.

The collaboration with the consortium's members and the warm welcome given to the research team in each participating country facilitated their immersion into the different gastronomic cultures, aiding understanding of the importance of each step in the process, from procuring the ingredients to the moment the children eat them.

Drawing on this database of recipes, which rose to 200 in number, and on the responses given in interviews by different actors in the children's food value chain in each region (school cooks, school cafeteria staff, nutritionists, parents, etc.), we began the process of reformulating and innovating around traditional recipes.

The goal of reworking the recipes was to apply innovative processes that extol the colours, tastes and textures of Mediterranean culture and diet while maintaining its essence. It also aims to foster the use of sustainable and healthy cooking techniques and encourage children to choose and enjoy a diet considered to be exemplary at a global level.

As a team, we are not looking to be recipe creators but to talk about how we cook or want to cook through the lens of these cultures.

Furthermore, with the goal of ousting current-day poor eating habits (such as excessive consumption of added sugar through processed foods), the knowledge gained through the project will be used to design new, healthy snacks for children and teenagers, which are tailored to the tastes, preferences, and moments for their consumption in each of the participating countries.

We are searching for the pleasurable and healthy, but we do not want to be characterised by creating taste explosions inspired by something developed in a restaurant. We want the everyday. Through this process we have come to know how families eat on an average Monday or what their table holds during their festivities.

We have also come to know the warmth there is behind being invited into someone's kitchen, what is prepared for friends and acquaintances and which tasks children can take on, plus more. Cooking, true cooking in everyday life, is something we have to constantly reaffirm, because the world rarely acknowledges it as such.

The consortium is made up of 10 organisations from five different countries: EDELVIVES (project coordinator) (Spain), AIJU TECHNOLOGICAL INSTITUTE FOR CHILDREN'S PRODUCTS AND LEISURE (Spain), BCC INNOVATION, THE GASTRONOMIC TECHNOLOGICAL CENTRE OF THE BASQUE CULINARY CENTER (Spain), CONTACTICA S.L. (Spain), LCI TECHNOLOGIES (Spain), ASSIUT UNIVERSITY (Egypt), PROVINCIA D'ITALIA DEI FRATELLI MARISTI DELLE SCUOLE (Italy), UNIVERSITÀ DEGLI STUDI DI CATANIA (Italy), CONGRÉGATION DES FRÈRES MARISTES AU LIBAN (Lebanon), PROVINCIA PORTUGUESA DA CONGREGAÇÃO DOS IRMÃOS MARISTAS (Portugal).

The project is funded by the European Union's PRIMA (Partnership for Research and Innovation in the Mediterranean Area) programme, under the Section 1 Agri-food IA scheme.



PROJECT #5 / BCC INNOVATION

Dynamic Calendar

The product is what determines the quality of any gastronomic proposal.

The how, who and where of the process of producing the raw materials we use is relevant – they tell a story which is transmitted. If we transfer this way of thinking to the everyday, to what we eat in our daily lives, we must ask ourselves the following question: what can I eat and when can I eat it?

We want to eat seasonal foods and break away from the idea that our palate is unaware of the calendar

But what does seasonal mean? It is a term that has accompanied us through our daily lives and at BCC Innovation we wanted to explore it further.

And this is how we began the Dynamic Calendar project, also known as Gastro Egutegi in Euskera (Basque). Addressing this question means taking into account the collective imaginary that different sectors have about seasonal goods, the vast majority of which are linked to the limitations concerning the handling of the product.

We define seasonal products as being those which in an associated period, and without much human intervention, may satisfy certain production activities, and this is repeated on a cyclical basis. There is an infinite number within the spectrum of seasonality, variables that include greenhouses, pesticides, and assisted irrigation, etc. This being the case, to move forward with the project, at BCC Innovation we took as our first criterion that we would limit ourselves to crops that the Ministry of Agriculture considers to be natural.

Due to the number of factors present, seasonality exists as a dynamic concept which changes depending on the region. Therefore, we had to create our own. We considered it necessary to begin with the notion of distance, as we have a need that corresponds to a specific time frame and location, and therefore the concept of understanding how far away the product is in terms of length and time.

In line with this thinking, we drew the conclusion that we had to design a tool that could inform users which products are in season and different ways to manage the catalogue. In order to be able to build the structure, we began by gathering information from different key sources: restaurants, technology centres and producers (such as vegetable suppliers). We identified the different players as sources of knowledge and, above all, as stakeholders who work with the issue of seasonality from a comprehensive and honest perspective.

Dynamic Calendar

We are interested in what the entity developing a product has to tell us, the opinion of the restaurant owner and that of the person entrusted with delivering the vegetables to the doors of different establishments. It all counts.

Thanks to all this input, we began to design our Gastro Egutegi, or Dynamic Calendar, for the hospitality sector, with the intention of enabling chefs in restaurants to know what produce is in season in their local region. Dealing with the spectrum of opportunities allows people to be conscious of where the products they eat are grown, notice what they have around them and gain a better understanding of what local production is all about.

The design of the project's app is easy to use: you set your radius and indicate the location and the app informs you which products are in season. However, its input needs are considerable so it can provide users with answers.

We have met this requirement through databases containing historical crop information so that, in line with the date for which users are seeking out products, they can find out what may be available at that time. In essence, the goal is to feed more information into the app and make it increasingly smart. This may be achieved by satellite images, meteorological data or information provided directly by farmers, so that the app does not only provide information based on historical data but is also able to predict what may happen, based on variables being measured at that very moment.

Its initial viability has been tested in five scenarios and with five different establishments.

The restaurants involved in testing this proposition were keen to add the tool to their general logistics, specifically for the process of creating their seasonal menus.

Thus, at the time the restaurant has been designing its menu, the dynamic calendar has allowed it to consult which products will be available during that period. This has encouraged them to choose to include seasonal products in their menus, whether they are products they normally use or different foods from what they are accustomed to, from apricots, lettuce, garlic, and zucchini to raspberries. It is important to mention that in addition to announcing the products that are in season, the app also provides their market prices, so that users can see how the price can fluctuate and comprehend that it is a direct indicator of their seasonal nature.

Initially, our approach focused on the hospitality industry. However, BCC Innovation also intended to make this knowledge available to the general public. For users, in their everyday lives, the calendar leads to a new field of knowledge and opens their eyes to understanding that although it is important to know when local mushrooms are in season, or artichokes and tomatoes, there are still several layers to be discovered and examined. We want to place the spotlight on foods that are perhaps less commonly used, as we believe this will help increase everybody's shopping options and provide gastronomy with greater nuances that enrich individual experience. This was the work of a year in which, from the perspective of innovation, we understood that our new product should contain a differential factor: continual change.

We observed that although there were other seasonal calendar options in the marketplace, these were of a more static nature, while we were interested in generating a living organism which could shift and evolve in line with the developments faced by the industry itself, a product of the environment.

One of the challenges involved in this initiative was obtaining harvesting information; this is because the sector has not embraced the practice of constantly gathering data, but rather retrospectively collects annual information. It is known that, in accordance with the archetype for our region, each grows their own crops and there is little feedback between the different groups, meaning that it is difficult to unify the information and get a clear look at the complete picture. The aims of this project included generating synergies with the productive sector and working together to obtain reliable, up-to-date information that the various stakeholders can use.



PROJECT #6 / BCC INNOVATION

Gastrovalue

Zero-kilometer, local producers, and locally produced products.

These are concepts that are currently taken for granted in the gastronomic sector. The general public has become aware of their importance and has incorporated them into their daily lives. At BCC Innovation we consider it vitally important to understand how the food system works within the gastronomic ecosystem of a territory.

The product must adapt to the social conditions of its environment, demonstrating the complexity of gastronomy in each locality.

Gastrovalue is a project designed to create a foundation that contributes to the economic and social development of the territories.

In this regard, and in order to achieve the creation of products that would fit into the European market, we have taken into account the characteristic inputs of each of the countries in which we develop this product.

- Coconut and cocoa in Jamaica
- Coffee in Ghana
- Kava in Vanuatu

We considered that we were working with three completely different countries, cultures and food systems and thus strategic partners have been key in developing this initiative. Through their participation, we have been able to connect with local producers and understand how the land really works. In Jamaica, we managed to establish a relationship with the local actors that enabled us to gain a general overview of the situation. We travelled to the country and focused on understanding the relationship that people had with these raw materials; we also analysed the environment, considering its strengths and weaknesses.

We looked, for example, at coconuts. Why is coconut water production in the country not more structured? The main problem is that fresh coconut water is a highly perishable product with a very short shelf life. Applying thermal treatments such as pasteurisation or sterilisation to prolong its shelf life has a negative effect on its taste and appearance. Therefore, the marketing chain of this product is very short, and exportation of the fresh product is not viable. Plus, it must be harvested individually and precisely, making the process very hazardous. The person doing the harvesting has to climb the palm tree and directly remove the fruit. This is risky, as the region does not contain the resources necessary to make harvesting standardised and safe. The dangers, benefits, strengths, and weaknesses result from the concept of the territory, comprised of idiosyncrasies and climatic factors.

Gastrovalue

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As we were working on becoming familiar with the space and the people, we built the basis of what the products would be. We undertook an analysis of trends so that these developments can be adapted to the needs of the European market. This means that we have created a product that enables its producers to be true to what they consider to be their production, and which also meets market needs, generating a result which is full of cultural identity and at the same time democratic.

At this point in time, we still have two countries to explore, each with its own specificities that we have yet to study. Local gastronomy reflects social reality, and it is necessary to be aware of it. It is essential for us to closely examine each of these points in order to truly communicate the message of these products which aim to be commercially attractive, and which are at the same time deeply rooted in their place of origin.

All the knowledge generated in this project has been disseminated to society. In this way, it is available to be used by anyone, both research centres and producers, and tailored to their own needs. We provide them with the basic foundations and they can reinterpret them for their own situation.

The project is funded by the International Trade Centre (ITC) and Jampro (Jamaica Promotions Corporation) and SRC (Science Research Council) have also collaborated in the project.



PROJECT#7 / BCC INNOVATION

FOODRUS

Taking sustainability as its focal point, 2022 was an important year in advancing the European project known as FOODRUS.

The project was born out of the food industry's need to make progress in sustainability, supported by data that many of us are already aware of but which it is always important to underline: the food system is responsible to a large extent for greenhouse gases; one in every three food items is thrown away; and food waste for the EU represents €143 billion, among other things.

'Citizen science and the circular economy, an opportunity to reduce food waste.'

The food system is a fundamental axis from the social and economic point of view that must progress on sustainability.

The data demonstrates significant shortfalls in the sector, such as the need to improve the management of all resources (raw materials, energy, people, etc.) and to incorporate more efficient practices in all the segments of the food value chain, from primary production to end consumer. The food system is a pivotal element from the social-economic perspective and must advance on the way to sustainability. In this respect, reducing food waste and incorporating circular economy practices has become a key strategy and an opportunity to transform the sector.

The FOODRUS project focuses on improving the resilience and sustainability of the agri-food system by reducing wastage of food items throughout the food value chain. Through this initiative, the goal has been to approach sustainability through many different types of collaborative innovation, including technological, social, organisational, and fiscal innovations.

This makes it possible to demonstrate that sustainability should be tackled from all areas aided with a vision that integrates different points of view to achieve transformation.

The FOODRUS project seeks to address these challenges by creating resilient food systems in nine European regions through circular economy solutions. The development and testing of the solutions was carried out via three pilot projects in three countries – Spain, Slovakia, and Denmark – taking one food in each country for demonstration purposes. In Spain, it focused on ready-to-eat salads; in Slovakia, the focus was on bread, a product with deep roots in the country; and in Denmark, it focused on reducing meat and fish consumption as a preliminary step to shifting to diets more centred on vegetable consumption.

One of the key elements of this project was its participative approach. During the development and testing phases, it enabled active participation by a broad range of people in the co-creation processes, drawing from all fields (public, private and citizens).

BCC Innovation was responsible for designing the methodology for incorporating citizen science into the project, with the goal of actively involving the general public in generating know-how, one of the European Union's priorities to connect research and society.

An innovative strategy was applied, involving converting the locations for the activities into what is known as living labs, spaces where real things happen and therefore the data reflects the real-life environment. At the beginning, we developed a theoretical model which contained the characteristics that a space should have to be classified into the category of living lab. We also endeavoured to provide the pilot schemes in all three countries with the tools to enable them to carry out the measures successfully.

To this end, a social programme was designed that included suggested activities such as demonstration workshops, co-creation sessions and events, always seeking to improve everyone's awareness, engagement, and participation to maximise the project's goal

The context of each country, with its customs and culture, is a factor that affects the way in which the different strategies are carried out at an operational level. From local solutions to global problems. Therefore, a survey was conducted to understand the social context for each of the pilot programmes first hand. It polled 377 people in the three countries, which made it possible to identify the key messages to reach the audience in each country more effectively when talking about sustainability and food.

The research projects we carry out seek to find solutions for the real problems faced by society with society. Projects such as this contribute to advancing our understanding of how we can reduce food waste, an essential aspect to make progress towards sustainability.

The FOODRUS project has received funding from the European Union's Horizon 2020 research and innovation programme and will run from 2020 until 2024.



PROJECT #8 / BCC INNOVATION

HORECA ZERO

Food waste and the circular economy were also at the heart of other initiatives we have carried out with the food services sector.

The HORECA ZERO project, which we developed with the cooperation of restaurants in San Sebastian such as Akelarre, Espacio Oteiza and LABe has enabled us to design a methodology to help restaurants reduce food waste by repurposing their surplus stock. The methodology incorporates circular economy practices and environmental impact criteria to improve decision making.

Small steps to incorporate for a more sustainable practice

A methodology that includes circular economy practices and environmental impact criteria to improve decision-making.

Under the initiative, training was given to the restaurants' staff about the circular economy and food waste, clarifying concepts which are often confused, such as food loss, wastage, and waste. The training phase was followed by a period of data collection with the restaurants to find out which foods had the greatest potential for reuse. Once the food items we wanted to work with had been selected, circular solutions were sought, such as composting, creating new dishes using fish bones (for example) or selecting specific elements for collection to produce bioplastics or biodiesel. An environmental impact assessment was conducted for each solution.

This information helps us to become conscious of how important it is to incorporate criteria such as environmental impact into our decision making.

On the one hand, it helps us to understand the effect on our environment of the processes and products we choose, thereby improving our knowledge and awareness, and secondly, it provides us with data we can rely on when choosing one solution over another.

All these small steps and tools are necessary to aid the progress of the restaurant and catering sector in terms of sustainability. Incorporating these types of practices can give rise to business opportunities and improve the restaurant's value proposition, as well as achieving a positive impact from an environmental and social perspective.

The HORECA ZERO project, funded by IHOBE as part of its call for eco-innovation projects, is being carried out between 2022 and 2023.

LABe - Digital Gastronomy Lab

LABe – Digital Gastronomy Lab is many things.

To start with, it is a space for experimentation and testing in a real context of technology, with a functioning restaurant that is open to the public. It is, in short, a living lab and a benchmark for the Gipuzkoa Provincial Council. This has enabled the team to use it as a testing ground for new solutions and learning with a high degree of trustworthiness. Having a team and equipment at this level has enabled us over time to achieve a level of reliability that is eye-opening regarding what can work and what not, and we believe that this is thanks to the fresh perspective provided by users and the operations themselves.

‘Digital transformation as a stimulus for change in gastronomy as well’



Overall, our goal was to advance the digital transformation of the value chain and drive its digitalization. In order to make headway in this process, we focused on optimising and automating operations by using digital tools. One instance of the work carried out over the course of the year was focussing on improving stock management and gaining a better understanding of customers.

As regards automation, we are interested in showcasing the potential of applying concepts such as artificial intelligence, technology, image processing (artificial vision), voice and natural language processing technologies.

We are also working on designing hardware that meets the needs of the market, mainly about preserving and processing food.

With an eye on the future: metaverse, Web3 and gastronomy

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We are interested in investigating what new interactions can be generated between people in the digital world, taking into account that it is a paradigm in the process of construction. Any rapprochement between people with these digital universes interests us, focusing particularly on the relationship between human beings and food in a developing environment.

Thus, at LABe we have immersed ourselves in the metaverse, exploring the relationship between gastronomy, Web3 and new virtual environments. The metaverse and Web3 comprise a reality which cannot be ignored, and certainly not from the perspective of gastronomy, one of the phenomena which respond most rapidly to new contexts and challenges.

LABe, as a living lab, was launched to investigate and co-create the cuisine of the future, with a digital approach. We believe that it is the time to experiment and design potential relationship models and patterns for interaction, to plan solutions and consider other, more immersive formats. To this end, several collaborative ventures have been launched with OneRare, the first food sector platform to be devoted to the metaverse, to explore how to generate a gastronomic ecosystem inside the metaverse.

The unusual thing about LABe is that the information used to design the projects is drawn from a range of different sources, including users. Inside this space the contribution of these stakeholders goes beyond passive participation as subjects whose behaviour is studied; instead, they are seen as people who are involved in thinking up and co-creating solutions, products, and services.

When we mention users, we are not only talking about diners-users, but also referring to people who often belong to the same industry, such as cooks, serving staff, managers, and researchers.



Despite all this, one question always comes up: what is a living lab?

Living labs function within a real-life environment for testing and experimentation, and can range from a house to a school, a city to a restaurant. We have already mentioned how important it is to have people involved who are active users, because it is through the participation and collaboration of interested parties with a shared interest that we can achieve results which can be applied in a real setting. One of the most important factors which has characterised these users is the awareness they have of being part of the project, which counterbalances other, more passive approaches in which these actors are simply seen as subjects whose behaviour must be examined. The technological component in these cases is essential, as it enables feedback about the innovation process to become standardised and comparable.

Under this co-creation system, users have been able to participate in different stages of the innovation process: ideation and conceptualisation; implementation of the product or service; and assessment. For each of these stages, there is a varied array of potential methods that can be used to include their perspectives and the interested parties.

LABe is a toolbox, a place whose resources make it possible to measure different elements, ranging from colorimetry of a raw material to the composition of a food, to the degree to which a diner sweats upon tasting a dish.



The restaurants of the future

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Restaurants are transforming into ecosystems of digital solutions that generate, store and process data. The process of searching, selecting, and managing bookings is handled from digital devices such as mobile phones and tablets, which replace server notepads; along with this, a number of manual tasks are being rendered obsolete. This has brought us to a defining moment where it is essential to address the digital transformation sweeping through the HORECA sector, indicating that now is the time for deep reflection.

Over the course of the years, it has been possible to observe clearly what changes have burst into the market: increased adoption of digital payment systems, timetable and booking software, QR code menus, POS terminals, personalised interaction with each customer, robots (human-assisting robots for collaborative working environments) in restaurants, use of drones for delivery operations and the zenith of the takeaway concept, among others. Some of these are undeniable trends that already represent consolidated elements in the sector, while others, which are still at an early stage, symbolise the small seeds which have already been planted.

In an article for [The Spoon](#), Brita Rosenheim, one year after the pandemic, stated: 'we did find one bright spot from the pandemic: many of our past predictions around tech adoption were significantly accelerated, shrinking from years to months.' The same is true of the Spanish market, where venues that used to only accept cash payments have come to adopt POS terminals, QR codes on menus, booking engines and delivery platforms. The entrepreneurial fabric is proposing niche solutions, with increasingly specific interactions. We can therefore say that in the current scenario, there is a solution for each need and that everything is increasingly made to measure.

BCC Innovation seeks to contribute to the transformation of the chain linked to gastronomy and food, by contributing stand-out expertise to companies, regions, and entrepreneurs.

In that context, this report has two main goals:

The first is to illustrate an outline of the current range of technological options for restaurants available in Spain. Many of the technologies it includes have multiple functionalities; even with this being the case, to make it simpler, we have decided to place each solution only in the category where it best stands out or for which it is most well-known. We have then created three macro categories: front office, back office, and a combination of the two. The solutions highlighted in the infographic were compiled in July 2022, and therefore it is likely that new solutions have emerged, and others have ceased to exist.

Goal 1

The second goal is to combine the present context with technologies that are breaking through in other industries to imagine a restaurant containing the interrelated developments that we expect to become assimilated into the market by the end of the decade. This means imagining a future with one foot in the present, backed up by tangible evidence. All this is undertaken with a 360° vision of the restaurant, focusing especially on digital innovations and without losing sight of the values of LABe and the 10 success principles for businesses in Digital Gastronomy.

Goal 2



The current status of digitalisation in the restaurant and catering industry

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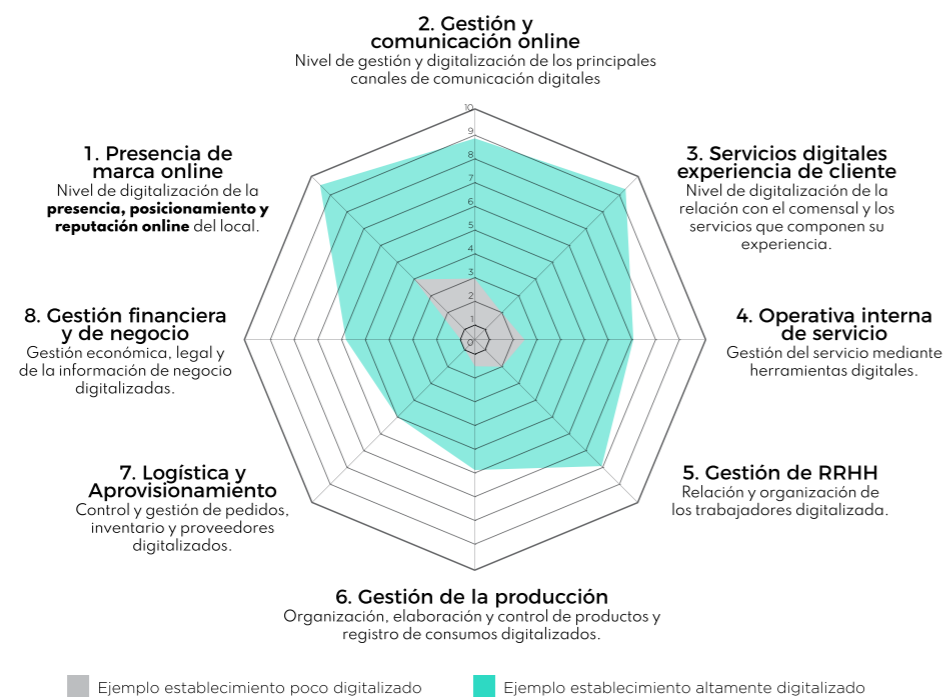
At BCC Innovation, and working closely with Delectatech, we launched the first report to measure the digitalisation status of more than 240,000 establishments (bars, restaurants, and cafes). To achieve this, we built the Digital HORECA Profile (DHP): a measurement standard through which to analyse an establishment's digital maturity level to obtain key data about digitalisation in the sector and create a manual to make digitalisation easier for those responsible for the establishments.

Within this large sample, one of the main elements was that of finding Early Adopters; that is, those venues with an above-average digital score which are leading the way in terms of digitalisation.

It is crucial to identify these actors, as they will help us to define the contribution we want to make to the gastronomy and food value chain both locally and globally.

This report has given rise to the report 'Status of digitalisation in the restaurant and catering industry in the Basque Country', a free report which measures the digitalisation status of over 10,681 establishments in the Basque Country, using the artificial intelligence engine developed with Delectatech.

The report was supported by The Food Global System, the Provincial Council of Gipuzkoa and the Department for Economic, Sustainable and Environmental Development of the Basque Government.



Culinary Action!



Culinary Action! promotes entrepreneurship and new businesses in the field of gastronomy and food.

Since 2014, it has been attracting entrepreneurs, students, companies, industry, and society to a shared space with the aim of having a real socio-economic impact on the gastronomy sector. It catalyses disruptive innovation by promoting startups and sustainable projects that are challenging the food system, such as food tech, res-tech, and agri-tech projects.

Culinary Action! is the gastronomy entrepreneurship programme offered by the Basque Culinary Center and Hazi, and is part of The Food Global Ecosystem, a Basque Government-backed public-private partnership comprising 60-plus companies. Through this scheme, the Basque Country is seeking to attract innovative projects, entrepreneurial talent, and technology startups from the agri-food sector.

Restaurant incubator

The first incubator for gastronomic restaurants was created with the goal of acting as an agent and benchmark of change for the new generation of gastronomic restaurants, helping to generate ideas and projects that contribute something distinctive in terms of innovation, quality, and approach.

The first edition of this programme took place in 2022. Of the 10 entrants which were selected to participate, seven of them completed the incubation process and had the opportunity to be part of a nine-week stay and support scheme at the LABe –Digital Gastronomy Lab, Living Lab for gastronomic innovation at the Basque Culinary Center. There, they were offered mentoring and weekly bootcamps with industry experts.

The first gastronomic restaurant incubator is backed by institutional support from the Basque Government's Department of Economic Development, Sustainability and the Environment and the Gipuzkoa Hotel and Restaurant Association, and the collaboration of La Salve and Araven.



Global FoodTech Accelerator

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The Global Foodtech Accelerator is an international initiative aimed at promoting and supporting innovation and new business models in the gastronomy sector in areas such as health, digitalisation, sustainability and sensoriality.

In 2022, approximately 40 projects were submitted to the programme. Twelve were selected to participate and given the opportunity to attend a two-day in-person bootcamp in Madrid, Amsterdam, or Berlin. At these events, various stakeholders in the entrepreneurship ecosystem and the gastronomy and technology sector provided guidance for the entrepreneurs during a range of dynamic activities aimed at improving their business models. This helped in strengthening the business models of budding gastronomy enterprises in Europe, fostering a qualitative improvement in the soundness and consistency of projects, and preparing them for the subsequent investment process. It thereby contributed to encouraging entrepreneurship and strengthening startups from the gastronomy industry, and to generating value for the food market.

Through this initiative, Culinary Action! and Impact Hub (the promoters of the programme) have once again underlined their commitment to promoting sector-based innovation and new business models in areas such as health, digitalisation, sustainability and sensoriality.

The programme has enjoyed the support of ImpactHubBerlin and ImpactHubAmsterdam in disseminating and implementing the initiative in Europe, as well as institutional collaboration from Hazi, Eusko Jaurlaritza-Gobierno Vasco, Onekin! and The Food Global Ecosystem. Culinary Action! is part of the lines of action and initiatives that will take place under GOe (Gastronomy Open Ecosystem).



On the Road



Culinary Action! On the Road is a travelling international competition set up by Culinary Action!, an international entrepreneurship programme for foodtech startups. It kicked off in September 2022 and took place through competitions in New York (US), Buenos Aires (Argentina), Copenhagen (Denmark), Tokyo (Japan) and Tel-Aviv (Israel), in collaboration with local partners.

In 2023, we celebrated the second edition of this initiative geared towards startups that devise new products or services that help to transform gastronomy value chain players, from chefs, head waiters and managers to producers, distributors, diners, etc.

The On The Road scheme has welcomed companies that build hyper-local food systems in areas where there have been economic disadvantages or disadvantages due to lack of racial or climate equity, startups that perform tokenisation of the assets of the supply chain through NFTs and businesses that have developed vegetable proteins or processes through which they achieve the sensation of sweetness in products, as well as methods to transform vegetables into powder.

In short, the competition is a platform to bolster projects that are building the gastronomy of the future

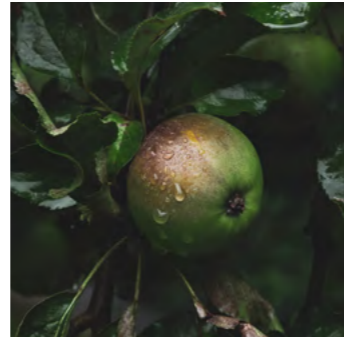
GOe - Gastronomy Open Ecosystem

GOe (Gastronomy Open Ecosystem) was launched to meet the challenges to be faced by society.

This represents a forward-looking commitment from the Basque Culinary Center which – in conjunction with the Basque Country Regional Government, Gipuzkoa Provincial Government and Donostia-San Sebastian City Council – seeks to promote and bolster entrepreneurship, research, and innovation with regard to gastronomy, while always maintaining a 360° view.

This new space for innovation and co-creation will mean a unique opportunity for the tech centre and for the Basque Culinary Center's own Faculty of Gastronomic Sciences and will strengthen the city's status as a benchmark for gastronomy at an international level.

According to Begoña Rodríguez, director of BCC Innovation, 'GOe is going to enable us to have much greater, much more fluid, interaction, among the different actors operating in the system: technology centres, universities, companies, startups, business angels, different administrations, etc. But above all, it will make it even easier for citizens to become more familiar with the world of research and innovation. GOe will be a venue where this interaction is going to occur in a simpler and more natural way.'



Ultimately, we want to make Donostia-San Sebastián and, hence, the Basque Country, an international benchmark for innovation. GOe is a space which aims to be the catalyst for the transition of our ecosystem to one that is even richer in interaction between different actors, in attracting new talent and in contributing solutions to the major challenges we are facing, of which there are many (including climate change, a growing population which is putting strain on the food system, and healthy and sustainable eating, to mention just a few). With all this, we are preparing our own recipe – the evolution of our own ecosystem towards an even more attractive version, version 5.0 for food and gastronomy.

The building where the initiative will be housed, designed by the Danish architecture firm Bjarke Ingels Group (BIG), will include spaces for research, innovation, and learning, from a more technical angle to a creative perspective.

We also have GOe Community, a digital platform; collaborative, comprehensive and forward-looking, this is a space oriented towards co-creation and innovation, which aims to bring together companies, groups and other online communities through events and dialogue. It is a meeting place where members can actively connect and communicate with each other, generating new spaces for dialogue and interaction. The platform was launched to bring together people from every corner of the planet with a common idea: to explore the boundaries and the future of gastronomy, with a spirit of openness and collaboration.

Digital Talks

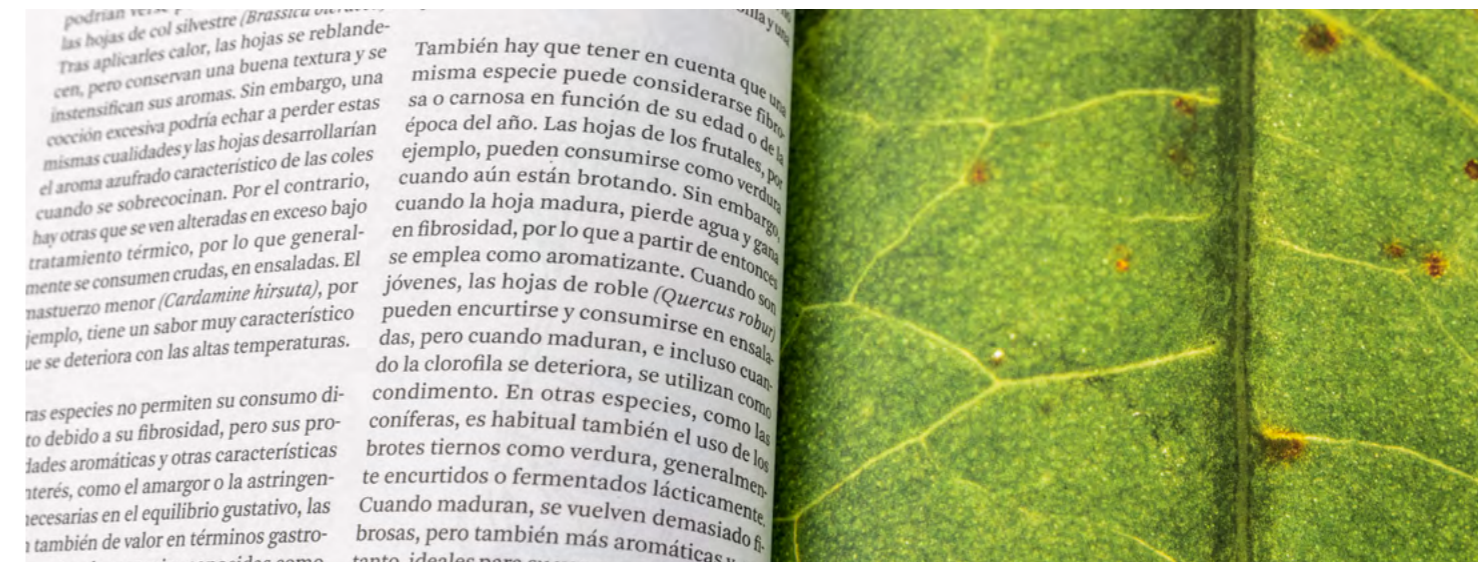
In 2022, we once again organised our Digital Gastronomy Talks, an initiative which informs the HORECA sector about the latest technological developments in the gastronomy industry.

Under the title 'Restaurant and Catering Staff in the Digital Age', we welcomed participants from a range of different Human Resources profiles, who shared with attendees the challenges they have come up against in the hospitality industry in the post-COVID environment. The digital resources available to alleviate the situation were analysed from a digital viewpoint.



Silvestre: La Gastronomía de las Plantas

The book 'Silvestre: La gastronomía de las plantas' is the result of years of work. It is a catalogue of wild plants and herbs from the Iberian Peninsula which highlights their great gastronomic potential. Together with Planeta Gastro and in collaboration with botanists and cooks, we have published a manual which reveals their potential and value for being transformed into thrilling gastronomic discoveries and multiplying the opportunities for experimentation and enjoyment. The manual also includes essays and reflections touching on both natural and cultural aspects, as well as tips on how to obtain the different plants and herbs.



Events

At BCC Innovation we generate knowledge that we seek to apply to society, whether through projects or through the events which we organise every year.

Sustainability and Climate Change

In 2022 we held the 11th Sustainability Conference under the title 'Will climate change alter the way we eat?' alongside the Gipuzkoa Provincial Council. This event, through different members of the sector, reflected on how the food system must transform and the role of gastronomy in the process. Focusing on climate change, one of the major challenges we must face as a society in the next few years, we encouraged a more proactive and open attitude and attempted to raise awareness among the general public.



Networking / visibility of BCC Innovation and the professional network

One of the aims of BCC Innovation, as mentioned earlier, is of course to work towards ensuring that the knowledge generated at the centre is communicated to citizens to enrich and aid society in its evolution in what are increasingly changing times. We therefore consider it important for our centre to be present at and participate in events such as Food 4 Future, where our stand helped to raise our visibility and gave us a platform to explain our value proposition as a technology centre.



Media coverage

Restaurantes digitalizados para dar un paso más allá de los TPV o QR

- Tecnologías como el 'blockchain' o la IA 'esperan' para optimizar procesos
- Un informe de BCC Innovation busca impulsar la transformación digital del sector



La pandemia ha acelerado la digitalización en restauración, pero queda mucho camino por recorrer. *El*

Maite Martínez
Bilbao • 6:00 • 27/12/2022

La transformación digital es uno de los grandes retos de la hostelería. Tecnologías que ya se aplican en otras industrias como la inteligencia artificial, la realidad virtual o el blockchain están preparando su inmersión en el sector que llegará en un futuro no tan lejano.

INFORMA
Soluciones de venta

La única opción con ASNEF Empresas y EBE Morosidad

SOLICITA DEMO GRATIS

Se buscan voluntarios de entre 60 y 85 años residentes en Gipuzkoa para un proyecto para la prevención del alzhéimer

Las personas seleccionadas llevarán a cabo un programa de salud y bienestar durante dos años donde se trabajarán distintos aspectos de su día a día



DV

El Diario Vasco

Utilizan la neurocomputación para ayudar a diseñar alimentos saludables

Ibermática logra modelizar las señales cerebrales para entender su reacción ante sabores dulces, con el objetivo de reducir el consumo de azúcar.



Utilizan la neurocomputación para ayudar a diseñar alimentos saludables

FOOD RETAIL & SERVICE 22/09/2022 - 12:51h

El Instituto Ibermática de Innovación (i3B), junto con BCC Innovation, Be Food Lab y la Universidad de A Coruña, han dado un paso más en el ámbito de la neurocomputación.

SABER MÁS

Así comen y gastan en comida los españoles:

Food Retail

El Economista

europapress / país vasco

Un 15,9% de los restaurantes y bares de España tienen un alto nivel de digitalización y el 42,8% página web



Un 15,9% de los restaurantes y bares de España tienen un alto nivel de digitalización y el 42,8% página web. BCC INNOVATION

Europa Press País Vasco
Publicado: lunes, 28 noviembre 2022 18:08 (actualizado)

Madrid, Barcelona, Baleares y Málaga lideran la transformación digital en la restauración según un estudio de BCC Innovation y Delectatech

SAN SEBASTIÁN, 28 Nov. (EUROPA PRESS). El 15,9% de los restaurantes, cafeterías y bares de España están altamente digitalizados y el 42,8% de los establecimientos tiene página web, según las conclusiones del primer informe masivo que ha medido el estado de la digitalización en estos establecimientos, elaborado por BCC Innovation -centro tecnológico especializado en Gastronomía de Basque Culinary Center- y Delectatech -startup de Barcelona especializada en Inteligencia Artificial para el sector de FoodService-

Europa Press

Gastronomía en el metaverso

EL BASQUE CULINARY CENTER PONDRÁ EN MARCHA INICIATIVAS COMO LANZAR 'CRYPTO-PINTXOS' QUE COSTARÁN 25 EUROS

Basque Culinary Center, a través de LABe Digital Gastronomy Lab, se adentra en el Metaverso para explorar la relación entre gastronomía y los nuevos entornos virtuales a través de diferentes iniciativas, entre ellas cenas que se pueden pagar con NFTs, Crypto-Pintxos, entornos de investigación en el Metaverso o tokenización de contenidos gastronómicos. En su desembarco en el Metaverso, LABe Digital Gastronomy Lab -laboratorio de Innovación y Transformación Digital para la gastronomía del futuro situado en Tabakalera- contará con un espacio virtual en OneRare, la primera plataforma



Dos clientes brindan en el restaurante de LABe. Foto: Gorla Estrada

dedicada al metaverso del sector alimentario para explorar la generación de un ecosistema gastronómico en el que construir experiencias innovadoras e inmersivas entre la comida y las personas, o buscar nuevas formas para estimular los sentidos combinando la realidad física y la digital.

Otra de las acciones de LABe consistirá en lanzar una colección de 400 NFTs (token no fungibles, es decir, unidades de criptomonedas únicas u objetos digitales exclusivos) de Crypto-Pintxos, elaboraciones generadas de forma aleatoria por un algoritmo, además de una edición especial de 10 NFTs con pintxos de Euzkadi escogidos por el equipo de BCC Innovation. Todos los NFTs saldrán a la venta a partir de este próximo miércoles por 25 euros y servirán como llave de acceso para espacios exclusivos en el Metaverso LABe.

Finalmente, se organizará, gracias al apoyo de una investigación realizada alrededor del proyecto por el Centro DLT de la Universidad de Malta y de Speculative Futures Tel Aviv, la primera cena NFTada que se celebrará el 18 de julio en LABe Restaurant. Se trata de una velada diseñada y servida por el equipo del mismo restaurante que dará acceso a espacios exclusivos en su metaverso LABe; una iniciativa que marca un hito en la gastronomía digital y explorará las posibles interacciones de la Web3 en el contexto de un restaurante.

Los aprendizajes generados durante el evento serán discutidos en un artículo científico con el objetivo de que sea publicado en una revista especializada en diseño y food studies a finales de año.

“Es el momento de plantear modelos de negocio disruptivos y experiencias inmersivas. LABe nació para investigar la gastronomía del futuro en clave digital, y hacer que dialoguen gastronomía y Metaverso es un reto apasionante”, resume Joxe Mari Aizega, director de Basque Culinary Center. -NG.

Noticias de Gipuzkoa

Eye tracking para decidir el menú ¡más exitoso!

Noticia seleccionada por América Móvil. María de los Angeles Pita Reyna. 9 agosto, 2022



El proyecto BEGI DIGITALA estudia, empleando tecnologías de eye tracking (tecnología de seguimiento ocular), el impacto que la información de diferentes alimentos y elaboraciones presentados en un menú tiene en la elección de los comensales.

Se trata de una investigación de BCC Innovation, el centro tecnológico en gastronomía de Basque Culinary Center, empleando dispositivos desarrollados por IRISBOND. El objetivo del proyecto BEGI DIGITALA es saber si se puede usar la tecnología eye tracking para

America Retail

El GOe, “estrategia de futuro” del Basque Culinary Center

El Patronato del BCC asegura que el nuevo edificio llevará “la innovación y la investigación” culinaria “a otro nivel”

DDONOSTIA – El Patronato del Basque Culinary Center (BCC) realizó ayer un balance “positivo” de este año y aprobó el Plan de Gestión 2023, que fija el ecosistema de innovación GOe (Gastronomy Open Ecosystem) como “estrategia clave de futuro”.

El máximo órgano del Basque Culinary Center celebró en la sede que la Facultad de Gastronomía tiene en Donostia su reunión anual, que concluyó con un balance “totalmente estimulante” de este ejercicio, que ha traído consigo la recuperación de todas las actividades presenciales.

Durante el encuentro también se presentó y aprobó el Plan de Gestión 2023, que fija las diferentes líneas que marcarán el futuro de la institución, entre las que destaca

orientada a llevar el conocimiento gastronómico, la innovación, la investigación y el emprendimiento a otro nivel”. “Aspira a atraer talento de todo el mundo, a trabajar con las empresas y a estar vinculado con la ciudadanía”, explica el Basque Culinary Center, que adelanta que a lo largo de los próximos meses se presentarán acciones para avanzar en el desarrollo del proyecto.

Además, la Facultad de Gastronomía anunció para 2023 el lanzamiento de nuevos programas formativos que responden a las necesidades del sector y contempla fortalecer las cuatro áreas de investigación del BCC Innovation: salud, sostenibilidad, análisis sensorial y digitalización. El director general de Basque

Noticias de Gipuzkoa

Elikagaiak ez botatzeko eta karbono isurketa gutxitzeko egitasmoa abian da Gipuzkoan

GARA / DONOSTIA

Gipuzkoako sukaldaritza sektorea 3.992 enpresak osatzen du, eta ostalaritzaen Barne Produktu Girazionario (BPG) 94,8 enpresaren da, baina beraz, eraldako enpleguaren %6,2 ere. Sektore garantziosua da Gipuzkoako ekonomian, bezala. Egunero ingurumen arazoak aintzat hartuta, horiek gutxitzeko ahalekin egiten diren, sektoreak horretan duen inplikazioa murrizteko eta eredu zirkular baterako trantsizioa bultzatuz.

Aldi batetik, lurradakinen bolamena murritzea date helburu (bataz ere, plastikoko ontziak), bata iraralden karbono-aitzina gutxitzea ere. Hori lortzeko, Aclima Iuska Autonomia Erkidego ko ingurumen klusterrak eta BCC Innovation-ek, Basque Culinary Center-en eta Gipuzkoako Foru Aldundiatan laguntzarekin, “Circular Cooking: sukaldaritza eta ostalaritza sektorearen eta ekonomia zirkulararen arteko hibridazioa” proiektua garatu dute.

Egitasmoan jasosten denaren arabera, sektoreak honako puntuak lantze behar ditu: lehenagaitza, garraioaren ondozko inplikazio murriztea.

Ostalaritza eta sukaldaritza sektorea jasangarriago izan dadin «Circular cooking» egitasmoa jarri dute martxan Aclima ingurumen klusterrak eta BCC Innovation-ek. Eredu zirkular baterako trantsizio prozesurako ibilbide-erria zehaztu dute.



Gara

Gastronomia etorkizunera begira

2022/10/01 | Elhuyar Iturria: Teknopolis

DIETETIKA/ELIKAGAIAK

BCC Innovation Basque Culinary Center-eko zentro teknologikoa da, eta gastronomian espezializatutako munduko lehena. Besteak beste, osagai eta proteina berriekin esperimentatzen dute. Etorkizuneko sukaldaritza nolako izango den irudikatzea ere bere eginkizunen artean dago.

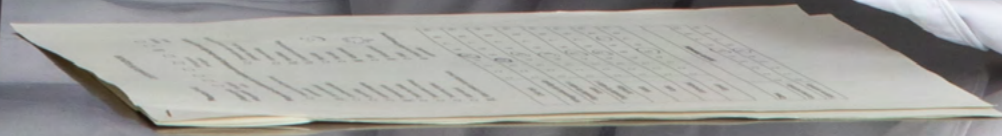


Fitxategia deskargatu

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