

"We will face

a choice:

We can go back to the world as it was before or deal decisively with those issues that make us all unnecessarily vulnerable to crises."

ANTONIO GUTERRES

SECRETARY-GENERAL OF THE UNITED NATIONS

How to plan for recovery?

At BCC Innovation, the first technological center focused on gastronomy in the world, we have developed this document as an exercise that allows us both to explore the current socioeconomic panorama and to create scenarios for the months and years to come after the global crisis initiated by the COVID-19 pandemic. With it, we aim to shed light in the process of strategic decision-making of organisations throughout the gastronomy value chain, thus strengthening their competitiveness and resilience.

It has never been clearer that our realities can change very rapidly and that today's actions shape what is possible tomorrow. Through the creation of scenarios, we want to create a space of possibilities, exploring beyond what is "probable" and what is "preferable".

We are facing a "transition period" towards a new context that we don't know what would be like. The length of this period of change will depend on the time it takes to develop, test, and disseminate a vaccine, or to acquire collective immunity. Developing future-ready strategies at this time and despite the uncertainty, will result in the strengthening of our organisations.

In these moments of uncertainty towards the future, at BCC Innovation we seek to connect with our mission "to transform the gastronomy value chain by providing knowledge to private sector and public administrations", and in doing so, helping in the design of strategies and policies that promote innovation, and ultimately promoting economic and social development.

BCC Innovation
Gastronomy Technology Center



Now, better than ever, we know that "black swans" occur, that they are not mere hypotheses or theories, and therefore,

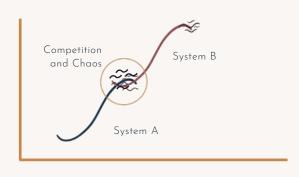
What is your organisation doing to reinvent itself after the initial shock?

At BCC Innovation, we hope through this document, to inspire thought in your organisation and help you promote innovation.

A unique moment for innovation

Change surrounds us. Change tends to follow a unique and characteristic pattern. Although the pattern repeats itself, it often surprises us.





Source: Steven R. Southard, "The S Curve of Change. Adapted by Basque Culinary Center.

A predominant system is born, experiences growth and reaches a state of maturity over time.

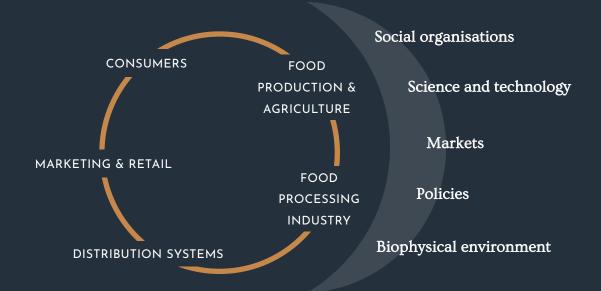
When a system expires, a space of chaos and competition arises among many competing possible new systems, until the next system experiences growth, dominating the others.

Innovation is an ongoing process that strengthens organisations that have internalized it as an ongoing practice. However, we are currently in a particularly challenging and unique time, and innovation will be key to transition successfully towards a new system.

We look at change throughout the entire food & gastronomy value chain

At Basque Culinary Center, and in our Gastronomy Technology Center, BCC Innovation, we understand that gastronomy isn't just about fine dining, nor cooking, it's a collection of relationships in which very different agents intervene and whose common denominator is food. Its form is therefore more that of an ecosystem of interconnected variables in which the actions that are generated in one context directly affect the rest. In addition to purely culinary issues, gastronomy has to do with natural environments,

technologies, forms of production, distribution, marketing and consumption, and also with the dialogue between knowledge, identity, proximity, sustainability, biodiversity, balance, health, food safety and traceability, among others. To this matrix we must also add companies, farmers, fishermen and livestock owners, designations of origin, distributors, scientists, institutions, research centres, women chefs, male chefs, restaurants and many more, not forgetting the consumers, who give meaning and force to this entire chain.



This foresight exercise is built on the basis of this new understanding of gastronomy, and based on it, we analyze possible changes throughout the entire value chain (including its interaction with other relevant sectors, among others: health, tourism...).

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Why think about different scenarios?

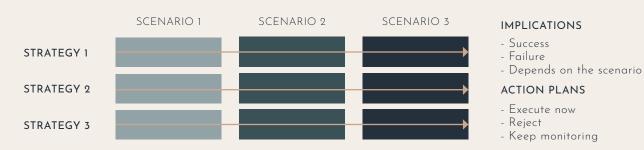
Scenarios help us visualize the possibility of unexpected situations happening, since it is precisely these situations that take us by surprise or shock us.

If we are in a permanent state of refusal to consider possibilities that seem "exaggerated," it is likely that in situations of change, we are among those who "did not see it coming."

The idea is **not to predict "the" future**, but to help think and explore the complexity of "what lies ahead", detect emerging problems and

anticipate some possible impacts and implications, questioning what is obvious (also "normal") and explore the limits of what is (and is not) reasonable.

The goal is to take these scenarios as a starting point to test new strategies for your organisation. This exercise will help understand the possible implications and develop robust and resilient action plans.



Source: Government of Alberta Foresight Toolkit. Adapted by Basque Culinary Center.

Political and economic uncertainties

In formulating the scenarios presented in the next pages, we have taken as a reference the uncertainties presented in the following questions.

The development of these variables and their interaction will have a direct effect on the food system, from producers and the agrifood business to the consumer.

How to reopen and activate the economy?

How to reopen the borders?

What is the probability of successive waves of infections?

Will there be robust international cooperation?

How will the economy behave?

Continuation in L, U, $\sqrt{\text{ or W}}$?

Specifically, in the gastronomy sector, how will the consumer change? How will all of the above impact on the business model of existing organisations?

Post COVID-19 scenario archetypes

For the development of the scenarios, we used Jim Dator's "Four Futures" model, as it allows to observe multidimensional change in a flexible way and analyze complexity, while generating differentiated scenarios, classifying change into four groups.

The arrows next to the description of each scenario are the graphic representation of the scenario, in broad socioeconomic terms (eg. GDP growth). They're intended to guide us on what may the changes be in terms of future growth.

Continuation: 'Business as usual'

Society tries to return to a state of conservation of the previous system as quickly as possible.



Discipline: 'Keep calm and carry on'

After a prolonged period of "chaos and transition", control measures and restrictions are promoted with the aim of a rapid recovery.



Collapse: 'Systemic Failure'

Existing problems worsen and feedback into each other. Increasing tensions and paralyzed or overwhelmed systems.



Transformation: 'Lessons learned'

The period of "chaos and transition" is used to reorganize, resulting in better systems. New, more resilient, fairer and more sustainable systems emerge, taking lessons learned from the previous system into the new one.



Key elements of each scenario (1/2)

Each scenario responds differently to the **uncertainties** we have identified in the **macro-level context**. Our analysis as sector specialists focuses on the **keys of each scenario throughout the food and gastronomy system**.

		CONTINUATION	DISCIPLINE
MACRO-LEVEL CONTEXT	Reactivation of economic activity	Rapid	Slow, informal economy
	Successive waves of infection	No	Prolonged state of alarm
	EU economic cooperation	Yes	Yes
	Consumer behaviour	Back to previous patterns	More conservative
	Border reopening	Yes	Yes, with strict restrictions
FOOD SYSTEM & GASTRONOMY		- Consolidation of large players, rise in open innovation - Aggressive marketing to increase demand - Increased digitization for hygiene, profitability and new sales channels - Accelerating trends: "conscious consumer" and "ready to eat" - Consumer with a "double or nothing" attitude, "make up for lost time". Quick adaptation to new biosafety measures	- Protectionism for large industries - Expansion of government aids (from companies to banks) - Reduced consumption, preference for mid-range and "traditional" goods - Consumers seek balance between safety (trust) and price. Preference for traditional, local brands The private sector seeks to transmit tangible value to consumers and solidarity. Rise of social recognition of experts Digitization for traceability and new consumer experiences

Key elements of each scenario (2/2)

Each scenario responds differently to the **uncertainties** we have identified in the **macro-level context**. Our analysis as sector specialists focuses on the **keys of each scenario throughout the food and gastronomy system**.

		COLLAPSE	TRANSFORMATION
MACRO-LEVEL CONTEXT	Reactivation of economic activity	Disorganised, lack of institutional support	Reorganization, emergence of new economic activities
	Successive waves of infection	Yes, with intermittent lockdowns	Yes, with massive testing for control
	EU economic cooperation	No	Yes, under sustainable development terms
	Consumer behaviour	Austere	New behaviors
	Border reopening	No, only for imports / exports	Yes, with restrictions on movements of people
FOOD SYSTEM & GASTRONOMY		 Restructuring of the agri-food sector due to lack of foreign labor. Extensive cease of activity of SMEs and unemployment. Disruption of the local market due to low prices of imported food. Consumer in a state of paranoia, massive distrust. Reduced product range, the consumer is limited to essentials and the price is the only purchasing decision factor. 	 Incentives to reactivate the economy, new jobs and formats. Collaboration and cooperation. Booming production and consumption of local goods. Emphasis on sustainability and biodiversity. Big data for prediction and curbing food waste. Acceleration of healthy eating trends: flexitarianism, alternative protein, moderation Boom of "DIY" movement.

Inside the scenarios

The four scenarios that we have developed are based on a comprehensive foresight exercise developed by BCC Innovation, that include an analysis of the possible impacts on the Food sector.

Signals of the scenario

Snapshots of today that allow us to visualize how the present could lead to the given scenario

Keys to the big picture scenario

The main ideas that define the scenario in its particular economic, political and social context

Impacts on Food & Gastronomy

Focus on the different sectors of the food value chain: production, food processing industry, distribution, marketing and consumers

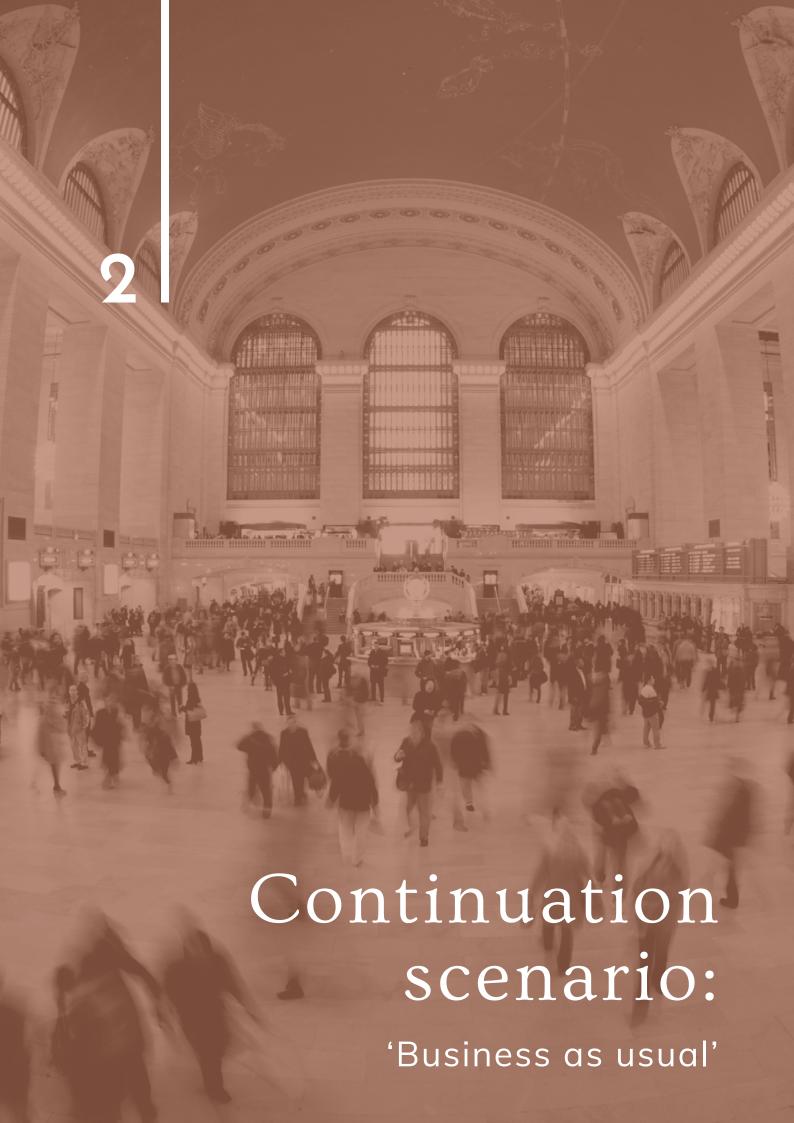
Challenges

The challenges and risks that your organization may encounter in this scenario, with an emphasis on the "greater risk"

Opportunities for your organisation

At BCC Innovation, we have identified a number of opportunities for organisations in the food sector. These are general ideas, which can be tailored to each company through an in-depth analysis of your business.

Note: Some of the signals, as well as the impacts, may present themselves in more than one scenario.



Signals of a continuation scenario

Liquidity policies are being put in place

"In the area of monetary policy, in the specific case of the Economic and Monetary Union, the Eurosystem has approved large-scale purchases of financial assets, with the aim of facilitating both private agents and tax authorities in the euro area to benefit from reduced financing costs, and have taken various measures to favor the provision of bank credit"

Banco de España, Macroeconomic scenarios of reference for the Spanish economy after COVID-19

Which makes a continuation scenario possible

"Economists are largely in agreement that the rebound will start in the second half of the year, but are currently divided on whether the recovery will begin in the third or last quarter. Recent announcements of coordinated monetary and fiscal stimulus are making this V-shaped outcome more probable."

Deloitte, COVID-19: Orchestrating the recovery of organizations and supply chains



Keys to the big picture scenario

Consolidation of big players

Small businesses are under threat of disappearing, further promoting the recovery of large players (large corporate catering businesses, hotel chains...). There is liquidity in the market (after years of boom before the crisis) and investors are looking for opportunities once the state of alarm is lifted. Favorable climate for startups. For small businesses, pre-coronavirus concerns remain dormant. Increase in open innovation and finding new problem solving approaches, sometimes by bringing in experts.

Continuation of growing economic inequality

Postponed retirements with a trickle down effects in society. Economic policies for liquidity geared towards easing mechanisms for personal debt (mostly for purchasing consumer goods).

Consumers with a "double or nothing" attitude, "make up for lost time"

Rapid loss of social distancing habits, and normalization of new biosecurity measures.
Rising biased popular belief that a future pandemic is less likely. High demand for novelty.
Ready-to-eat, convenience food trend resumes.
Notable rise in going out, seeking to date, socialize.

Aggressive marketing to increase demand

Through digital and experiential channels, companies seek to assure the consumer that the spaces are safe and recovery is stable.

Aggressive adoption of digital tools for sales, profitability and for communicating about the company's biosecurity measures in place.



Impacts on the Food & Gastronomy sector

Fickle production in a volatile market (market fluctuations towards stabilising)

Supply chains have to adapt quickly, largely due to rapid behavioral changes and consumer demand resulting of the lockdown period, that still impact the market in spite of being in "continuation mode". Small producers are especially vulnerable, risk of cessation of activity.

Food processing industry under increased scrutiny. Supply-based planning.

Increases in quality control throughout the value chain. Food and beverage companies review sourcing strategies and plan based on the resilience and agility of their supply chains, as well as their sales channels. New terms for global trade. Decreased capacity (from customers to production lines).

Distribution seeks new channels

Suppliers seek to mitigate losses by diverting supplies to retail stores. Boost advanced analytics to model demand with greater precision. E-commerce and distribution networks must be optimized and streamlined.

Aggressive marketing, incentives for consumption increase

- Digitization: Rise of new channels for the food sector (social media, content platforms, e-learning, influencers, community groups, etc.). Creation of communities around brands. Online customer service strategy becomes vital.
- Review of pricing and promotion strategies.
- Aggressive strategies to increase demand. Innovation in contactless collection and delivery services. Delivery is further promoted.

Reinforced consumer trends, rapid adoption of new measures

- POS digitalization boom with robotic counters, shop & go, payment methods, etc. that limit human contact. Card payment (contactless) and payment apps (Apple & Google Pay, Bizum). Digital receipts & menus.
- Higher hygiene and safety standards: expectation of individually packaged cutlery, salt and pepper along with wipes on each table, washable placemats substitute the tablecloth. Much more frequent and visible cleaning routines.
- Consolidation of multinationals in less mature markets.
- Two types of consumer: those who increase their consumption to "make up for lost time" and the "conscious" who want to focus their consumption on products more aligned with their health and sustainability values. Both continue to seek for convenience, ready to eat formats.

Challenges in the continuation scenario

- Possible wave of consumer backlash to biosecurity measures in the medium term, due to the measures perceived negative effect on sustainability practices (such as the use of single-use plastics, use of single-use masks, etc.). In addition to rejection of measures that are perceived to restrict individual freedoms.
- Small and medium businesses along the food value chain at risk
 of closing, push governments towards taking extra measures
 (rescue of small companies, remission of rents, tax amnesty...).
- Failures to achieve customer visibility of systems for food security (HACCP), with the consequence of loss of trust.
- Need for business model innovation: "it is worth analyzing
 how the company can be organized to be as light and efficient
 as possible, restructuring and converting the points of sale
 into "high-performance machines". Risk of lost opportunities if
 businesses only focus on biosafety protocols, without rethinking
 sales channels and strategy. COVID replaces the focus on
 operations and costs.
- Despite the trend towards normality, a decrease in
 establishments capacity is maintained (from customers to
 production lines), possibly resulting in a drop in productivity/
 income, with a greater impact on smaller players.

The great risk

in planning for a continuation scenario is to ignore the structural drivers of the current crisis.

Opportunities

for your organisation in a continuation scenario

New products or services designed to satisfy the consumer's need for novelty "making up for lost time" after lockdown, either due to its celebratory nature or because it is better aligned with their values.

- Adapt existing products to new formats/uses.
- Design new consumer experiences around your products.
- Boom of local products and services, both customized.
- Innovation in short cycles and new product development with rapid market testings. Spin-offs.
- Implementation of open innovation strategies.

New communication and marketing campaigns

- Campaigns to increase customer loyalty to the brand through consolidation of mature products.
- Identify new consumer niches for products that have so far been unsuccessful. Innovate in communication with consumers.

New initiatives in delivery

- New take away formats, for outdoor group experiences in picnic mode among others
- Restaurants that market some of their products such as sauces and ready-to-eat meals. Just as haute couture brands reach the mass market in the form of perfumes and glasses, could we have see accessible goods in the market from fine dining restaurants?

Space design

- Modular/liquid/changing architecture (based on needs).
 Maximize ROI per rent costs.
- High-end and/or fresh product vending machines.
- Infrastructure and equipment for low-touch economy.
- Food storefronts to become larger and more striking, to leverage as another promotion channel (although purchases may be finalized on online channels).

Sales channels
diversification for food
producers. Regain space in
convenience, corner, small
neighborhood stores.

New tourist experiences in less known/visited places;
Spain continues its leadership in tourism, however the offer diversifies due to a residual fear of contagion (empty beaches without crowds, rural accommodation, gastronomy with local traceability). Guided trips in small groups, experiences in local houses...

Digital tools allow us to generate our own data to better understand the consumer and therefore be able to segment and personalize products and strategies for promotion and customer retention.



Signals of a discipline scenario

As the alarm state continues, recovery becomes more dependent on the public sector

"All the components of demand will be affected by the pandemic, except consumption and public investment, which play a stabilizing role. Private consumption, which for several years has been the backbone of economic growth in Europe, will contract approximately 9% in both the EU and the euro area this year. However, this sharp drop is forecasted to be concentrated mainly in the current quarter, as the lack of opportunities for consumption (due to business closures) results in "forced savings". Then it is expected to start recovering quickly once the containment measures are lifted."

European Economic Forecast, Spring 2020

However, the interdependence of sectors can generate unforeseen impacts

In general, the effectiveness of the economic measures taken will be decisive for recovery. "The high weight of the retail & trade sectors, with 12% of the GDP, and that of tourism, with 15%, and its foreseeable slow recovery, will cause the economy in general to not be able to recover quickly".

Juan José Herranz, professor of finance at the ESERP business school

With a lack of support from the public sector, a recovery in "L" is projected for the hospitality industry, which will have a direct impact on the entire food & gastronomy value chain.

Manufacturing industries that depend on hospitality in Spain

Food

101mm€

Annual turnover

+440K

People employed

30%

of spending is in the bar & restaurant category

Beverage

17mm€

Annual turnover

+50K

People employed

+65%

of beer is consumed in hospitality outlets

+60%

of spirits is consumed in hospitality outlets

25%

of **soft drinks** is consumed in hospitality outlets

Source: EY y Bain & Company, "Impact of COVID-19 in hospitality in Spain" Adapted by Basque Culinary Center.

Keys to the big picture scenario

Informal economy and black market

Boom in barter, informal economy, products and services on the dark web. The "forbidden" economy arises, driven by protectionist measures mostly for large players and strict regulations on trade (due to biosafety measures, rise in taxes...).

Restrictions on movement and individual freedoms

Prolonged alarm state. Hyper regulation, recentralization, causing tensions between regions and central governments. Aids to maintain employees, liquidity for companies through soft loans and easing payments, promotion of specific sector policies for tourism or leisure. Surveillance status, digital monitoring of citizens. Strategic global travel with safe-conduct passes only; restricted local travel. Preference for remote working and homeschooling for a prolonged period of time. Home delivery dominates. Fall of liberties and privacy.

Trend acceleration: back to the "roots", comfort

Change in business models, towards local, midrange businesses. Neighborhood restaurant boom. Market growth for local products and well-known brands, consumption of novelties decreases. Consumption of more traditional products.

Technology more present than ever

Artificial Intelligence systems that can be trained in hours instead of weeks, multi-sector application. Rise in contactless and augmented reality technology. Blockchain for traceability. To prevent the spread of the virus, education is transferred to online platforms. For education that requires manual skills, training modules with virtual reality are generated for doctors, cooks, operators... Culture moves to the virtual world as a permanent access alternative: museums, cinema, theater, opera, etc.



Impacts on the Food & Gastronomy sector

Production organized with public sector incentives

Production is reorganized due to lack of migrant workers (movement restrictions). Call from governments for citizens to go to the agriculture sector: license to work in agriculture and still collect unemployment benefits. Security and traceability take on a greater importance, use of the blockchain to provide solutions. Systematic elimination of potentially infectious animals.

Food processing industry devoted to consumption in the home

Industrial patriotism: protectionism. Intensive use of technology to promote home deliveries and movement of goods throughout the food & gastronomy value chain. Rise of packaged products to meet increased consumption at home. Shopping for ready-to-eat and ready-to-cook foods in supermarkets, which consumers tend to prefer over restaurant food delivery for safety reasons.

Highly coordinated distribution

Challenges arise from supply chain interruptions and reduced consumption, with an immediate impact on companies' P&L. Capacity building for home delivery of food: new partnerships emerge between transnationals and local players, in models such as cold storage warehouses. Added staff shifts to existing warehouses, use of hybrid pickup models and retail stores such as "dark" stores. Greater connectivity to match needs with resources, both nationally and locally.

Marketing towards consolidation and promoting "contactless" exchanges

Automated check-out in stores and supermarkets. Consolidation of "mature" products on supermarket shelves to increase customer loyalty to the brand. Personalization and innovation of online shopping and "contactless" food delivery.

Consumption mainly in the home

"Familiar" foods: change in business models, from large events to mid-range food outlets. Neighborhood restaurant boom.

Local and well-known brands dominate over international brands in all categories.

Comfort foods and premium products on the rise.

Boom of home cooking: Consumer concern about biosecurity in establishments.

Purchase for home cooking predominant, rise in popularity of online cooking videos.

Changes in consumer interests: low cost/high quality (surge of alternatives to "do/finish at home").

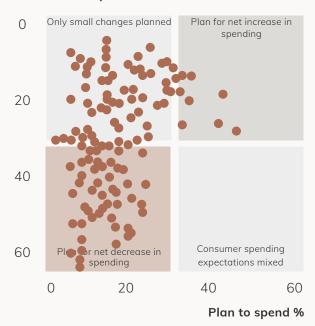
New digital experiences: Seniors become the new users of online shopping to avoid buying in person. For more innovative consumers, a boom in gourmet experiences at home with the use of technologies such as virtual reality and augmented reality.

Challenges in the discipline scenario

- Possible difficulties for restaurants and companies whose strategy focuses on international clients.
- Possible use of technology to control the population, in principle to manage infection hotspots, will generate highvalue, real-time data on the consumer.
- Challenges in 1) brands consolidation,
 2) new product development and 3)
 communication strategies that reinforce
 the value of the product in a scenario of reduced spending.
- With the goal of consumer trust building, the need arises for collaboration with experts, technicians/authority figures.

In mature markets like Spain, consumers plan to spend less

Plan to spend less %



Source: Boston Consulting Group. Edition 1: COVID-19 and the Emerging-Market Consumer—Five Trends to Watch. Adapted by Basque Culinary Center.

The great risk

for organisations in this scenario will be to ignore that the consumer has shifted, resulting in missed opportunities in establishing itself as a "trusted" brand on time.

Opportunities

for your organisation in a discipline scenario

Innovation in the range of products and services offered

- In hospitality: simplification, appeal to traditional flavors use of trusted inaredients.
- Retail: new products to satisfy consumer changes.

New spaces

- Supermarkets hold warehouses near cities, to ensure immediate distribution.
- Boom of Central Kitchens: sanitary measures at scale, less need for qualified personnel, improvement of profitability in the medium term.

Investments in technology

- Devices: proximity sensors, contactless everything, therma imaging cameras, filters and air flow systems, surface and utensil disinfection.
- New generation consumables/supplies: made of materials that indicate shelf life through color change, selfdisinfecting materials.
- Low touch: Paperless (QR, image projections on walls),
 secure collection lockers, secure vending.
- Revenue generation linked to own data
- HACCP control systems.

Scenario based planning for sales and operations

Delivery

- New startups delivering quick "work meals" home (remote working, home schooling).
- "Restaurant at home" experiences, new delivery formats for "last touches at home".
- Opportunities for creating alternative business models (from delivery and packaging to technology development).

Networking

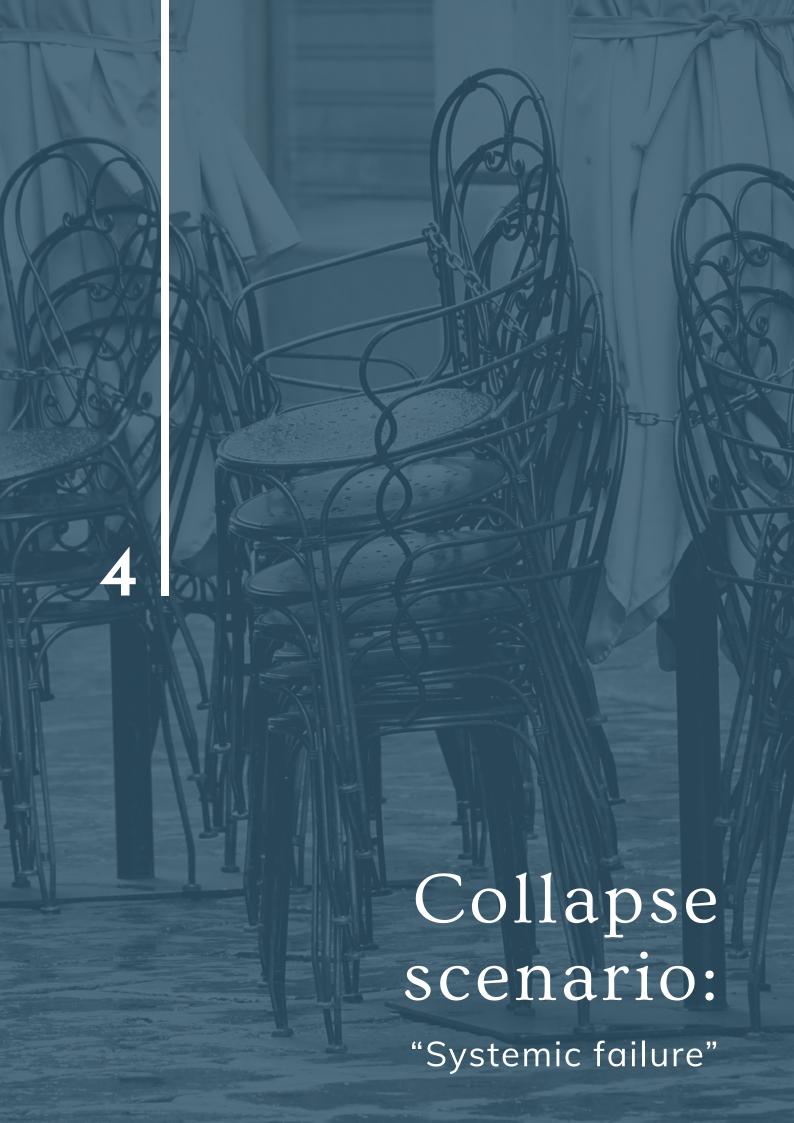
Collaboration between actors throughout the value chain to respond to demand and diversify supply, creating new opportunities for all collaborators.

New spaces

Proliferation of *txokos*(Basque gastronomic societies), for low cost social activities, also serving as an informal, local distribution point. Gastronomic coworkings.

Boost to gastronomic culture

New quality/origin certifications. Communication strategies to make traceability systems more accessible.



Signals of a collapse scenario

Global value chains cause a trickle-down effect of COVID-19 economic impact

"There is an additional mechanism to amplify this crisis: the interruption of national and international production chains. Currently, there is a great interdependence between different companies. The impact of a crisis like the current one is greater in this context. If a company is affected by the material impossibility of producing due to sanitary problems, this forces others from the same production chain to stop or modify their production plans due to lack of intermediate inputs or output of their product."

Francisco Alcalá, Ivie, University of Murcia and Center for Economic Policy Research

The fall in demand is causing disruptions in the food & gastronomy sector

"Around the world, crops will be wasted because workers are forbidden from working, cannot travel to the fields, or do not want to work for fear of contracting the virus. Meat processing plants in the US have been closed down due to COVID-19 outbreaks. Farmers in the US and the UK have been forced to ditch milk because demand from restaurants and cafes plummeted under closure."

Amy Gunia, Time Magazine

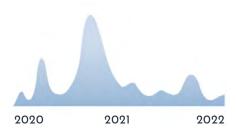
POSSIBLE SCENARIO 1

Peaks and Valleys



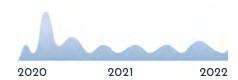
POSSIBLE SCENARIO 2

Fall Peak



POSSIBLE SCENARIO 3

Slow Burn



Source: Center for Infectious Disease Research and Policy, modified by New York Times. Adapted by Basque Culinary Center.

"We must be prepared for at least another 18 to 24 months of significant COVID-19 activity, with hot spots appearing periodically in various geographic areas"

Keys to the big picture scenario

Successive waves of infection, with intermittent lockdown periods

Rule of fear, which leads to greater political and social turmoil, resulting in the closure of borders or disjointed policies. Fall of international tourism; great impact on the economy.

Disruption of national economies

Lower oil prices and successive virus outbreaks paralyze the agri-food sector and food processing industry, which propels and makes cheaper the import of foreign products to supply demand. Local market destabilization. Drop in exports of local product due to drop in international demand, difficulty in distribution and lack of labor. Economic recession.

Social tensions

ERTEs* are not effective, placing thousands of people in a precarious situation. Increase in cases of violence and abuse.

The "digital divide" affects seniors (digital non-natives) and minors from more vulnerable families (missed school years). Increased poverty and social unrest.

Fragmented cooperation, local decision making

Difficulty in decision making and for return to normal activity. Greater inequality between countries and fragility of the EU. Less European aids. Massive disappearance of SMEs. High unemployment rates.

Paranoia

Purchase of "insulating" gadgets (for example, bubbles or partitions for personal spaces in the public sphere, pandemic kits, etc.). Hypersafety as a commodity in products and services. Increased mentality 'us' vs 'them'. Isolated eating. High-end delivery as a sign of status. Massive mistrust.

*Temporary Employment Redundancy, a measure launched by the Spanish government, where employee salaries will be covered up to 75% in the lockdown and successive exception periods, to curb unemployment rates.



Impacts on the Food & Gastronomy sector

Discontinued production, market destabilization

Lack of workforce at harvesting due to fear of contagion. Shortages in small businesses and price increases due to the hoarding of large players. Lack of migrant workers due to border closures, need to cover with local workers but without strong policies that encourage it. Surpluses from the primary sector of other countries that are heavily subsidized (France and Germany) or products from South America, are bought at minimum prices, destabilizing the local economy.

Local industry at a disadvantage, widespread difficulties

Loss of margins due to disruptions in supply, instability of demand and adjusted prices to keep competitiveness. Liquidity problems in categories severely impacted by lack of movement (eg. tourism or hospitality) and loss of purchasing power (eg. alcohol, new brands, gourmet). Closure of SME and micro-SME manufacturers.

Distribution migrates to the gig-economy

Precarious-flexible contracting in agriculture and deliveries to the final consumer (loss of quality jobs, gig economy). Highly fluctuating prices due to instability in freedom of movement.

Bulk focused marketing, price promotion

Focus on lowering prices. Promotion for purchase in bulk. Store closings. Reduced opening hours and service.

Limited consumption, rule of prices

- Ultra-processed food purchases dominate, increasing obesity and other metabolic diseases related to poor diets. Added problems to a collapsed healthcare system.
- Reduction of meat/fish/fruit consumption.
- Increased consumption of single-use plastics
- Mistrust of Spain from foreign tourists, due to COVID-19 high infection and mortality records. Serious impact on country's brand and image.
- Imposed self-sufficiency: rebuilding survival skills. DIY and repair economy boom.
- Massive reductions in working hours. Unemployment, consumers with reduced liquidity and increased time: e-learning, resource optimisation, do it yourself.
- Emergence of jobs in home care for the elderly and children who cannot attend school.

Challenges in the collapse scenario

- How do we better manage capital and ensure cashflow in a prolonged interruption period?
- Reformulate product ranges based on local value chains, more resilient to foreign lockdown periods that can interrupt supply. Private labels with lower prices to maintain competitiveness. Could the "low cost with values" trend be established? How could quality be offered at a lower price? In this sense, good after-sales and repair service will be key.
- Poor diets arise from prolonged periods at home, lack of purchasing power and lack of culinary knowledge, raise the challenge of improving diets at affordable prices.
- Maintain a flexible strategy based on scenarios and with permanent vigilance of signals of change: activation vs. closure of new sales channels, communication with new customer segments (public sector, B2C) vs. withdrawal from markets, strengthening of the online channel vs. strengthening physical presence or other traditional channels; consolidate vs. innovate
- Creation of new alliances or partnerships to strengthen competitiveness.

Consumption projections for the next semester in Italy:

EDUCATION

IN-HOME ENTERTAINMENT

FRESH FOODS

HOUSEHOLD CARE

MEDICAL PROCEDURES

PACKAGED FOOD

VITAMINS AND SUPPLEMENTS

CHILDREN'S CLOTHING

Given changes in consumption projected for the next 6 months,

How can our strategy adapt to new consumer priorities?

Source: Boston Consulting Group. Edition 1: COVID-19 and the Emerging-Market Consumer—Five Trends to Watch. Adapted by Basque Culinary Center

The great risk

in this scenario will be to confuse what is urgent with what is important: being able to allocate resources to strategies that can be extended after the first wave of response.

Opportunities

for your organisation in a collapse scenario

Strategy

 Given the status of Spanish gastronomy in the market, how can we capitalize on this value in new industries and more resilient ventures?

New product development

- In a scenario of low price differentiation, is it possible to develop healthy, cheap and delicious products?
- Byproduct upcycling.
- Development of functional foods/supplements that boost the immune system at reduced prices.

Marketing and communication

Development of leisure content to promote a culture of "collaborative gastronomy", Edu-tainment and Gastrotainment.

Back to luxury, exclusivity in small niches

- Exclusive dinners with chefs at home.
- VIP samples of premium products.
- Premium baskets.





Signals of a transformation scenario

Public administrations around the globe seek to take advantage of the crisis to create more egalitarian societies

"In Spain, the minimum vital income will begin to be collected in June and will have an annual cost of 3,000 million. The Minister of Inclusion, Social Security and Migration, José Luis Escrivá, has announced that the new social benefit may be requested during the month of May and could be received as early as June. On whether the measure should be temporary or permanent, Escrivá has defended the need to "correct" the recommendations of international organizations such as the OECD, as Spain is top of the list in countries with problems of severe poverty."

Diario Expansión

"The report on the new climate economy estimates the creation of more than 65 million new jobs."

Antonio Guterres, UN Secretary General



Signals of a transformation scenario

And this may set precedents for change in global economic dynamics

"Amsterdam will adopt the 'donut' model to repair the post-coronavirus economy. Deputy Mayor of Amsterdam Marieke van Doorninck says: "I think it can help us overcome the effects of the crisis, it may seem strange that we are talking about the period after that, but as a government we have to try not to resort to easy mechanisms."

Daniel Boffey, The Guardian



The "donut" establishes the minimum we need to lead a good life within planetary limits, those derived from the UN Sustainable Development Goals and agreed by world leaders of all political leanings.

Source: Kate Raworth, Oxford University. Adapted by Basque Culinary Center.

Keys to the big picture scenario

International cooperation

In the wake of the pandemic, transparency and cooperation between states is established to prevent and address global problems, such as the urgency of climate change. Transnational corporations work with local SMEs with which they are connected around the world and cooperate, rather than compete.

Green New Deal and extension of the welfare state

Focus on building more egalitarian and inclusive societies that are more resistant to pandemics and climate change. Reconstruction of economies in the framework of sustainability, in commitment to the fulfillment of the SDGs. New alternative indicators to GDP, social and environmental welfare metrics.

Expansion of investments in sustainable mobility, renewable energy, retrofitting of spaces, research and innovation, recovery of biodiversity and circular economy. Creation of new jobs in the new "climate economy".

Regained social status of the agriculture sector and decentralized local networks

After episodes of shortages, decentralized local supply networks emerge. Public recognition of merit towards professionals working in "essential sectors", leading to economies of merit, will farmers be the new brand ambassadors? Big data and artificial intelligence emerge as prediction tools for resilience and improved distribution. 3D and 4D printing supply local needs with support of global networks.



Keys to the big picture scenario

Rise of self-sufficiency, "do it yourself"

Given the precedent that pathologies related to poor diet and lifestyle (diabetes and obesity) worsen the prognosis in patients with coronavirus, there is a greater awareness of health and diet. Accelerating trend towards healthy and sustainable food, plant-forward: push for local food, lab-grown, high-tech family gardens. Hobbies on the rise: cooking, building, farming. Sustainable practices gain prominence (repair, reuse, recycle). Urban exodus to the countryside accelerates.

Accelerating trend: new forms of work and education

Distributed and smaller offices (decentralization). Rise of remote working and increased use of communication technologies. Skill-based extracurricular activities with focus on resilience to social distancing (programming, finances...). Business future thinking: a more futuristic, collaborative and open business strategy to face changes and be more resilient.



Impacts on the Food & Gastronomy sector

Local production and biodiversity

- Local farming. Rejuvenation of the rural environment that boosts local economies.
 Push for precision agriculture (sensors, artificial intelligence and robotics), for increased efficiency (eg. resource management).
- Increased biodiversity in crops, recovery of traditional species (forgotten crops), which in addition to nutrition, provide greater genetic diversity to ecosystems and make them more resilient, creating a buffering effect against future pandemics.
- Chefs communicate more about the producers and suppliers they work with, so small producers diversify their sales channels, which grants them greater control and flexibility to redirect their product in case of disruptions.
- Urban and balcony gardens for increased self-sufficiency.

Circular and collaborative food processing industry

- Sustainability as the predominant value that companies adopt and communicate.
 The circular economy is established. Use of byproducts and plastics reduction. Use of whole produce leads to consuming previously discarded parts (eg. stems, leaves...).
- Companies in the sector join forces to provide personalized solutions to the consumer: optimized matching of needs and resources, which flow between players on demand (raw materials, packaging, channels, machinery).

Distribution of short chains with global technology

Shorter distribution routes. Increased zero emissions transport (less greenhouse gases). Technology allows better monitoring of stocks and demand.

Balancing international and local solutions: support to improve efficiency in the global supply chain, but also to guarantee locally distribution to end users, in many cases through community organizations.

Impacts on the Food & Gastronomy sector

Direct sales, person-to-person

Farmers and consumers look for alternatives for direct buying/selling through e-commerce, using mobile apps. Fairer prices for producers. Increased promotion of consuming local.

Shopping districts return to the city center, displacing large shopping malls. Opportunity for new "authentic and personal" stores in buildings and at street level.

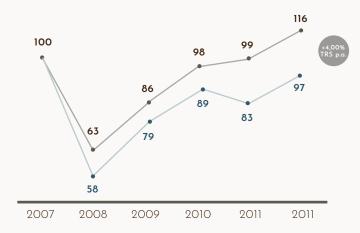
Ethical consumption

- Golden Age for DIY creativity: Never before have citizens been so empowered and the tools
 to create and display their projects so easy to access. Collectivism, alternative economy, local
 economy is dynamized.
- Collective rescue initiatives, such as "adopt a bar" and "when we return". Solidarity funds and shared economy: gift vouchers, new uses for spaces (coworking in restaurants off peak hours)
- A before and after of coronavirus in the way of consuming air travel: "One of the few good things that this crisis is going to have is that we are going to rethink our consumption model and we are going to be more sensitive to sustainability"
- Greater focus on health and wellness, focusing on increasing immunity through more exercise and healthy eating, as a form of preventive medicine. Less collapsed sanitary system.

Challenges in the transformation scenario

- In a society that is going towards a change in values, the consumer seeks higher quality products and perceived longer-term benefit, how can we supply this demand?
- The role of the chef and gastronomy
 in the new paradigm: people not only
 tend to cook more, but they also want
 someone/something to teach them how
 to do it. Generating greater visibility of
 the chef's societal value
- The paradigm around haute cuisine
 is rethought by a generation that has
 seen two major crises in a short time.
 Will trends such as positioning in
 rankings and lists and the visualization
 of their work through large conferences
 continue? How will a highly trained
 sector adapt to this new scenario?
- The use of technologies, ethics and privacy must be guaranteed through transparency. What data will be used and what will be shared?

Example based on companies that leveraged the 2008 crisis to innovate



- BCG 50 Most Innovative Companies (as identified in 2007)
- Morgan Stanley Capital International (MSCI)
 World

Source: Boston Consulting Group - COVID-19. BCG Perspectives. Adapted by Basque Culinary Center

The great risk

is in not identifying the transformation scenario in time and missing out on opportunities for innovation.

Opportunities

for your organisation in a transformation scenario

Digitalisation

- Personalized online chef services, eg. who proposes recipes based on what the person has in the pantry.
- Conferences and information flow from chef to society, without intermediaries.
- Devices designed and tested from the chef's usability experience.
- Digitalisation has been implemented in the restaurant space so that routine tasks that were previously performed by chefs and service staff, which do not involve human contact, intelligence or creativity, have been delegated to technology.
- Creation of exchange platforms of byproducts and surplus from the agri-food sector for upcycling purposes, preventing goods exiting the value chain.
- Direct purchase platforms from producers. New pickup points, lockers.
- Integration of artificial intelligence at all stages of the value chain, to obtain data for greater precision and prediction
- Analysis of the carbon footprint of food and menus.

Open innovation

- In gastronomy, as in other sectors, citizens, the private sector and the public sector collaborate through open innovation systems or living labs. Through co-creation, technology-based prototypes are tested and developed with the aim of improving wellbeing of the population.
- Organizations formulate strategies with intergenerational thinking, between multidisciplinary teams that allow us to visualize future horizons more clearly and inclusively.



Opportunities

for your organisation in a transformation scenario

New Tourism

Mass tourism is regulated through access fees, profitability no longer falls on large volumes of business. Tourism moves from cities to rural spaces. Agri-tourism, travel to learn not only gastronomic cultures, but also agricultural cultures.

New product development

- Through investment in R&D, identification of different population segments for product customization
- Sale of products to finish at home eg. seeds to grow your own urban garden (B2C from the agricultural sector).
- Zero waste packaging boost (bioplastics, edible films...).

Marketing and communication

- Marketing strategies in the labeling of products that highlight nutrients related to the immune system.
- Open-air gastronomy, pop-up experiences.

New spaces

- Reactivation of the main markets of cities as cultural, social and experiential epicenters, places to organize experiences and introduce new local ventures.
- Sharing economy: rental of spaces for own urban gardens, small businesses...

Gastronomy and Health

- Taste and perception research, aimed to develop healthier and more sustainable products and strategies for consumer acceptance.
- Wearables or devices as tools for health monitoring. Wearables communicate with restaurants, which allows for personalisation.
- Importance of accessibility and usability of tech and wearables, especially for the senior population, whose access to it has been more recent.



The future belongs to those who dare to dream it

This crisis has revealed the vulnerability of our global supply chains to various risks, such as the possibility of incurring large food losses when produce cannot be marketed in their usual channels.

Additionally, different administrations around the world are making radical decisions during the current crisis, which may involve geopolitical changes.

This panorama will bring positive, negative, anticipated and unforeseen consequences in the gastronomic-food sector. When facing this panorama, it is important to remember that in the past we have faced different crises and we have the capacity to emerge stronger after them.

In moments of uncertainty, it becomes especially important, not only the "what to do", but the "how". After stabilizing, it is important to understand what path we want to follow and not lose sight of new opportunities in realities that are transforming at a dizzying pace.

Going forward, some key questions arise, that we hope will help kickstart important conversations within your organisation:

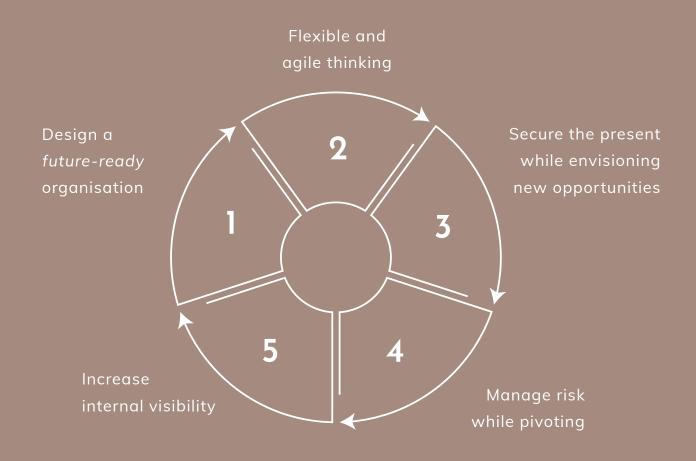
- Will COVID-19 impacts significantly change corporate culture? How will the future of work in the gastronomic-food sector develop?
- How can we collaborate effectively with the public sector and add value to society? How can we further collaborate with players along the value chain?
- What will the competition landscape look like in the future?
- How has the consumer changed their preferences and food priorities? And the markets? Will these changes be lasting or only temporary?
- What new trends will appear in the food space?
- Are our business models still relevant in the post-COVID-19 world, or should they be adapted?
- How is the acceleration of digitalisation brought about by COVID-19 managed?

And last but not least,

How do we get out of this crisis stronger?

How do we build capacities for the future?

Ideas to keep in mind building your next steps



- **Design a** *future-ready* **organization.**Build foresight capacity: continuous development of analysis capabilities based on scenarios. Design visions and strategies that are attractive to both internal talent and the market. Rethinking strategy based on what drives the organization and its values.
- Flexible and agile thinking: Design a flexible action plan. Open and participatory innovation involving players all along the food value chain (or intersectional fields). Multidisciplinary teams. Speedier execution: launching new products, establishing alliances...
- Secure the present while envisioning new opportunities: Establish new frameworks for more agile spotting of new opportunities and bringing them to action, while ensuring cash flow/funding and focusing on talent.
- **Manage risk while pivoting:** Risk analysis and management. Understand the need for paradigm shifts within your organisation.
- **Increase internal visibility:** Improve visibility at all levels. Permanent communication with the different stakeholders.

BCC Innovation

A 360° value proposition throughout the gastronomic value chain

Research

Health, personalized gastronomy we study the relationship between personal characteristics (genetics, microbiota, etc.) and food needs

Sensory analysis and Consumer

Behaviour we study the relationship between the sensory properties of food and human perception, the characteristics of the individual and the context of consumption.

Sustainability, food byproduct upcycling through different culinary techniques.

New ingredients development at our initiative <u>BCulinary Lab.</u>

Innovation

Culinary Innovation

- New products lab-level formulation for the food processing industry.
- New culinary techniques adaptation for NPD.
- Gastronomic offer design.
- Evaluation and sensory tastings with chefs and consumers.

Technological innovation identification and development of new business opportunities in co-creation with the companies and startups of our network (open innovation).

Entrepreneurship

<u>Culinary Action!</u> Promotion for new business development and startup creation:

- Awareness: workshops, Talento >30 forum, HIP...
- Pre-incubation
- Incubation
- Acceleration

LABe - Digital Gastronomy Lab

Strategy

Food Foresight strategic foresight practiced by food experts.

- Project Gastronomía collaborative initiative

Regional development design of strategic programs for social, cultural, economic and brand transformation through gastronomy as a multidimensional phenomenon.

Annex

& references

Annexes

SIGNALS OF A SCENARIO

A signal is **something in the present that has the potential to grow in scale.** A signal may be a new policy or news item that captures our attention and points to greater impact - even globally.

Signals are **useful for people trying to anticipate a highly uncertain future.** They tend to capture emerging phenomena earlier than traditional social science methods do. Unlike trends, they direct our attention to possible innovations or emerging realities before they become obvious. In this way, they are more likely to reveal possible future disruptions.

CHALLENGES

We have identified the challenges of each scenario with the aim of facilitating **risk management.**

Risk management is a structured approach to manage uncertainty related to a threat through **identification**, **analysis and evaluation**, **and then establish strategies** that are aimed at mitigating it.

Knowing the risks helps us transfer them, avoid them, reduce their negative impact and/or accept the consequences through an informed decision.

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Additionally, due to the unprecedented nature of the national and international economic and public health challenges caused by COVID-19, which change rapidly from day to day, the report is based on circumstances that occur as of the date it was written and, for definition, cannot take into account the information, interventions or circumstances that occur after this date.

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