



THE 2023

# IASDR Congress

Life-  
changing  
design

Milan 9<sup>th</sup>–13<sup>th</sup> October

PROCEEDINGS OF IASDR 2023

EDITORS:

Daniela De Sainz Molestina

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SCUOLA DEL DESIGN  
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# Life-Changing Design

Proceedings of the 10th Congress of the  
International Association of Societies of  
Design Research (IASDR 2023)

**EDITORS:**

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**Proceedings of the 2023 IASDR Congress**

International Association of Societies of Design Research International Congress

9 – 13 October 2023

Milan, Italy

[www.iasdr2023.polimi.it](http://www.iasdr2023.polimi.it)

Cover and congress identity design by Daniela de Sainz Molestina

Proceedings compiled by Lenny Martinez Dominguez

Editors: Daniela de Sainz Molestina, Laura Galluzzo, Francesca Rizzo, Davide Spallazzo



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ISBN 978-1-912294-59-6

<https://doi.org/10.21606/iasdr.2023.899>

Published by the Design Research Society

85 Great Portland Street

London, W1W 7LT

United Kingdom

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<https://doi.org/10.21606/iasdr.2023.316>

# Design futures to support sustainable food practices

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[doi.org/10.21606/iasdr.2023.521](https://doi.org/10.21606/iasdr.2023.521)

Planet Earth's temperature is rising every year and scientists agree that, if this trend persists, humanity will witness an irreversible damage (Schmitz, 2015). To tackle climate change and safeguard human and planet's health, a radical green transformation becomes urgent. The food sector represents one of the largest contributors to carbon footprint production and Earth's degradation. Approximately 20-30% of global human induced GHG emissions is due to food production, processing, and distribution (Fresán and Sabaté, 2019). In this scenario, cutting-edge technologies can be employed to foster innovations within the food sector enabling a green transformation and minimizing negative effects. To creatively envision the possible brighter futures of food, there is an emergent need for new design processes (Meyer & Norman, 2019). This is the aim of the Digital Creativity for developing Digital Maturity future skills (DC4DM) European project which disseminates an innovative educational model based on the Design Futures approach to equip new generations of professionals with a future-proof skill set to shape preferable future scenarios. After framing the connection between the food sector and climate change, the paper will introduce the Design Futures process providing a real-life experience of its application in multidisciplinary team of students.

**Keywords:** *design futures; food as medicine; green transformation; sustainable scenarios*

## 1 Introduction

To preserve international competitive advantage, Europe's economy should leverage the ongoing Digital Transformation (Digital Europe Programme). By integrating new digital technologies into their business processes, products, and services, private companies and public organizations could greatly profit from innovation while remaining environmentally sustainable and reducing greenhouse gas emissions. In addition, digital technologies are key enablers to protect people from environment-related risks, sustain their health and well-being and meet the EU Sustainable Development Goals (SDGs) aimed at providing companies and organizations with a real opportunity to grow and innovate. In the last few years, the European Commission has supported and promoted numerous initiatives and policies focused on enabling these transitions.



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The Green Deal Strategy is one of the initiatives to set concrete measures to reach net-zero greenhouse gas emissions by 2050 and decouple economic growth from resource use. Another example of action undertaken by the EU Commission to promote companies' transformations is the creation of a network of European Digital Innovation Hubs (EDIHs) to make companies more competitive and support them in dynamically responding to digital challenges. Indeed, EDIHs act as intermediaries between companies and technology by giving businesses access to technical expertise and experimentation enabling them to innovate by taking advantage of digital technologies' potential and providing companies with the opportunity to train the skills that are needed for a successful digital transformation. Among those skills, futures thinking becomes a fundamental ability for people and organizations. Futures thinking enables leaders and decision makers to explore possibilities of what the future might be by envisioning and anticipating alternative scenarios. By treasuring the connections provided by EDIHs, European companies will gain expertise and enlarge their know-how to develop research and future innovative projects that facilitate a more aware digital and sustainable transition.

The aim of this paper is to enlighten about the relevance of developing a future vision ability to enable a digital and green transition and to meet the strategic goals that EU is launching to face climate crisis. The authors will indeed show the potential of applying a Design Futures (DF) methodology to a significant problem of our current era: the need to transform the food chain into a sustainable and circular system. The DF methodology, developed by the IDEActivity Center and adopted to the DC4DM project, aims to guide people in catching glimpses of current signs of change that, in the future, could lead to new needs, imagining possible scenarios and anticipating design solutions that address those needs. It is a methodology that companies and organizations can use as a starting point for identifying and anticipating more effective decisions to address possible futures, strategically facing climate change.

## **2 Contemporary complex problems: climate change and sustainable food chain as boosts for green transformation**

Planet Earth's temperature is rising more and more every year and scientists agree that, if this trend persists, humanity will witness an irreversible damage (Schmitz, 2015). The world is indeed urging a radical green transformation to tackle human-induced climate change. Climate change is causing the deterioration of the ecosystem and indirectly having remarkable socioeconomic consequences. Among other serious impacts, climatic transformations are considerably damaging and threatening food and water security making it difficult for governments to meet the 17 Sustainable Development Goals for 2030 (IPCC, 2022). The European Agenda brings the global and social concern of climate change as a key topic to be tackled strategically. Greenhouse gases emitted by human activities are the main cause of climate change and are thus severely impacting economies and societies. Public opinion and awareness have steered political interest towards climate change related consequences, impacts, and risks. Nowadays, indeed, policymaking is increasingly focused on delivering and implementing pilot projects and experiments to counteract the negative effects of global warming in various sectors. In particular, the goal is to fund projects to (1) improve agricultural productivity and innovation as well as the health and well-being sector, (2) to foster food security and (3) preserve biodiversity reducing risks and harms (IPCC, 2022).

Europe is already dealing with the issue by aiming at reducing greenhouse gas emissions to at least 55% by 2030. As highlighted by the Intergovernmental Panel on Climate Change (IPCC), if temperatures on the planet keep on increasing, by 2040 global warming and climate change will seriously endanger natural and human systems causing biodiversity loss, degradation, and transformation of ecosystems. Food production and access will be particularly undermined which in turn will lead to scarce food security as well as low-quality nutrition (IPCC, 2022).

For these reasons, by 2050, Europe aims to become the world's first climate-neutral continent (EU climate action and the European Green Deal 2020). The European Green Deal (EGD), proposed in 2019, represents EU's commitment to the cause by introducing a growth strategy plan to meet United Nations' SDGs for 2030 (Fetting, 2020).

One of the eight key areas the EGD is concerned with is the so-called Farm to Fork Strategy aimed at making food systems fair, healthy, and environmentally friendly (European Commission, Food Strategy). With Farm to Fork, the EC has attempted to design a food policy that introduces measures and objectives regarding the entire food chain. Some of the key goals of the strategy are (1) promoting sustainable food consumption, (2) supporting the transition to healthy eating habits, (3) reducing the environmental and climate footprint of the EU food system, and (4) ensuring food security, nutrition, and public health.

## **2.1 A sustainable food system for a green and just transformation**

Everything on this planet, from its creation, transportation and use to its destruction or wastage, leaves a carbon footprint. Among others, the food sector represents one of the largest contributors to carbon footprint production and earth degradation. Approximately 20-30% of global GHG emissions caused by humans is due to food production, processing, and distribution (Fresán and Sabaté, 2019). Indeed, the entire food life cycle is remarkably impactful and polluting.

First, food production generally implies the use of fertilizers, pesticides, animal feed, water as well as other resources (such as electricity). Food processing then refers to crops' harvesting and animals' dispatching, or to the energy used to create secondary foods such as dairy products, for instance. In order to be produced and processed food is moved from farms to factories, then to retail units and ultimately from shops to people's homes. Food transportation is, in fact, one of the major carbon footprint's causes. It is also crucial to consider the amount of electricity required to refrigerate and cook food. Food storage and preparation is indeed another important aspect that impacts global pollution. Last but definitely not least is domestic thrown-away food and unsold food disposed of by retailers. Food waste is one of the biggest responsible for carbon footprint. To face environmental threats, the food system should be adjusted and taken care of to become sustainable and resilient. Due to the rising global population as well as the increasing consumption of meat and animal products, the deleterious impact of the food system is expected to increase more and more.

Initiatives like the Farm to Fork Strategy - at the heart of the EU Green Deal - are aimed at addressing food-related challenges and supporting radical changes towards a more sustainable food system through active public participation, involving national and local authorities, civil society, and industry. Implementing a robust and resilient food system while recognizing the interdependence of healthy people, healthy societies, and a healthy planet becomes vital to move towards a green, sustainable, and just transformation.

## 2.2 Healthy planet and healthy humanity

*“By 2025 we will be eating our way to a healthy planet and population, stemming from the unstoppable rise of public awareness of how our food impacts not only our individual health but the health of the environment. Our palates, hungry for ‘ecological public health’, will become more and more adventurous in using food as a tool for environmental action.”* (Sainsbury’s, Future of Food report)

The Farm to Fork Strategy also represents an opportunity to improve people’s lifestyles, health, and benefit the environment by creating a fair and just food milieu that eases the choice of healthy and sustainable diets, upgrades the quality of life, and reduces healthcare costs (European Union, 2020). Physical health is greatly dependant on food consumption which in turn, as mentioned, has a strong impact on the environment. Food is, in fact, recognized as the strongest lever to optimize human health and environmental sustainability on Earth (Willett et al., 2019). Nowadays people have rediscovered the value of food, they want to feel connected to it and prefer it fresh, less processed, and sustainably sourced (European Union, 2020).

New healthier and environmentally friendly ways to approach food are becoming increasingly popular. Diets can be considered healthy not just when they imply the right mix of nutrients or when they are associated with dietary patterns. From a holistic perspective, a healthy diet is also shaped by the way food is produced, distributed, marketed, chosen, prepared, and consumed. Therefore, a participated contribution is necessary from all stakeholders involved in the food chain – from citizens to producers - within an international and national shift commitment towards sustainable food practices. Such new behaviours can encourage and ease the development of a green transformation lowering the food waste, its environmental impact, and hopefully counteracting diet-related diseases.

Food can and should also be considered as a crucial factor that contributes prominently to the improvement of mental well-being. In the last decades, indeed, eating habits have been gradually losing their historical functions. Traditionally, food rituals were embedded in meal preparation, socialization, and interaction. Nowadays, it has become more common to consume food in solitude and the time dedicated to meal consumption is now lacking the features of aggregation and conviviality considered two of the many elements that enhance satisfaction at the table. In this context, thus, the pleasure and interactive component of eating together has been lost. In addition, the faster and more frenetic lifestyle of current times often contributes to an increase in people’s emotional stress which in turn translates into forms of depression, anxiety, and feeling of loneliness.

New technologies, such as Artificial Intelligence or Augmented and Virtual Reality, can facilitate the creation of immersive and multi-sensory eating and drinking experiences and, in addition, by leveraging the potential of wearable technologies they can also benefit individual’s mental well-being. Indeed, due to the increased attention given to people’s mental well-being and physical health, emerging technologies can be implemented and used in the food sector to develop and produce functional foods – namely those nourishments that, among others, can improve brain function, prevent aging, combat fatigue, or induce drowsiness, etc...

So, the overarching question is: how can digital emerging technologies be leveraged within the food sector to improve people’s mental wellbeing in the future?

### **2.3 The Future of Food enabled by cutting-edge technologies**

*“Coupling technological advances with sociocultural and policy changes can transform agri-food systems to address pressing climate, economic, environmental, health and social challenges”*  
(Barrett et al., p. 974, 2020)

It is renowned that the ongoing Digital Transformation is impacting every sector of the economy disclosing both unprecedented opportunities and unforeseen threats. Emerging technologies are supporting a radical shift in consumers’ preferences and behaviours paving the way for major implications concerning the ways and means by which food will be produced and experienced in the future. As a matter of fact, on the one hand, producers will profit from the notable improvements and innovations enabled by new technologies and, on the other hand, consumers will have access to safer and more affordable food. In this evolving context, companies, organizations and people should more than ever be prepared to face the multiplicity of uncertain futures, exploit technological breakthroughs to anticipate possible scenarios, steer innovation and take full advantage of digital technologies’ innovation capacity. A forward-looking gaze will help envision the future of food and nutrition, design new scenarios to meet consumer needs and open new markets and activities.

To develop alternative future scenarios starting from the innovative application of digital technologies it is essential to focus on the high-impact relationship between food and health. Demographics and climate change, unequal food distribution, scarce diet’s quality, accessibility of healthy foods, food waste, safety and diet-related diseases are some of the challenges that require a paradigm shift to rethink the food system. To enable such shift and minimize negative side effects, new technologies can be employed to radically innovate the food system. They can diversify production while reducing the external impacts and enable society to produce healthy, nutritional, and environmentally friendly food for everyone (Asseng S et al., 2021).

### **3 Design Futures to anticipate food’s alternative futures**

To face the ongoing transformations and take advantage from them to creatively envision the possible futures of food, there is an emergent need for new design processes (Meyer & Norman, 2019) which would support young generations in the development of a more future-proof skill set. Indeed, present transformations require rethinking and implementing the current educational models to align with the ongoing changes and technological disruptions. In this context, the ability to proactively anticipate changes, harness opportunities brought by new technologies and ease the transition towards desirable futures becomes paramount for individuals. As well as human creativity becomes an essential ability to help individuals navigate successfully and unlock multiple opportunities strategically.

In fact, the Digital Creativity for Developing Digital Maturity Future Skills (DC4DM) European Project has developed and implemented an innovative educational model that enhances digital creativity and maturity. The project recognizes the importance of digital creativity in developing a new generation of individuals who are equipped with the necessary skills to navigate this complex and rapidly changing digital landscape. By emphasizing creativity and innovation in education, the DC4DM project seeks to empower individuals to think critically, solve problems, and take advantage of emerging technologies to achieve their goals in different fields.

As already highlighted, to address today's constantly evolving digital challenges effectively, it is crucial to visualize future scenarios that consider digital technologies' potential uses and societal, environmental, economic, and political implications. As a result, a traditional Design Thinking process may not be sufficient for a forward-thinking and inventive approach, and therefore the DC4DM model has been updated to address the management of digital technology's future (Canina et al. 2021). The DC4DM model (Fig. 1) revises the traditional Design Thinking methods by integrating it with an elongated first diamond that recalls the well-known Futures Cone (Voros, 2001) to highlight the fact that the initial part of the Design Futures process implies a future-oriented gaze. Moreover, it incorporates an original Design Futures (DF) process to manage digital technologies' future effectively. The Design Futures method was created by IDEActivity and stems from the combination of Futures Thinking (FT), to anticipate potential futures, and the well-known Design Thinking (DT) approach.

Embracing a Futures Thinking mindset encourages designers to consider multiple possibilities and define a preferable future. This way, designers can anticipate the potential implications of digital technologies and develop innovative solutions to address them. On the other hand, Design Thinking provides a framework for generating concrete ideas and moving towards the preferred scenario.

Both Futures Thinking and Design Thinking are participatory, human-centered disciplines that emphasize the understanding of people's needs and desires. They also share a similar approach based on succeeding convergent and divergent phases. This configuration allows for the integration of Design Futures tools and approaches in the Design Thinking process, making it a futures-proof method.

When these two methods are combined, they create a powerful framework for innovation that considers both the present and the future. The Design Futures process, for instance, integrates Futures Thinking methods into each phase of the Design Thinking process. This allows designers to anticipate potential implications of emerging trends or technologies while also developing creative solutions that meet the needs of end-users.

By combining Design Thinking and Futures Thinking, designers can create innovative solutions that consider the multiple possibilities and potential implications of emerging trends or technologies. This approach can help organizations stay ahead of the curve and develop solutions that are both relevant and effective in a rapidly changing world.

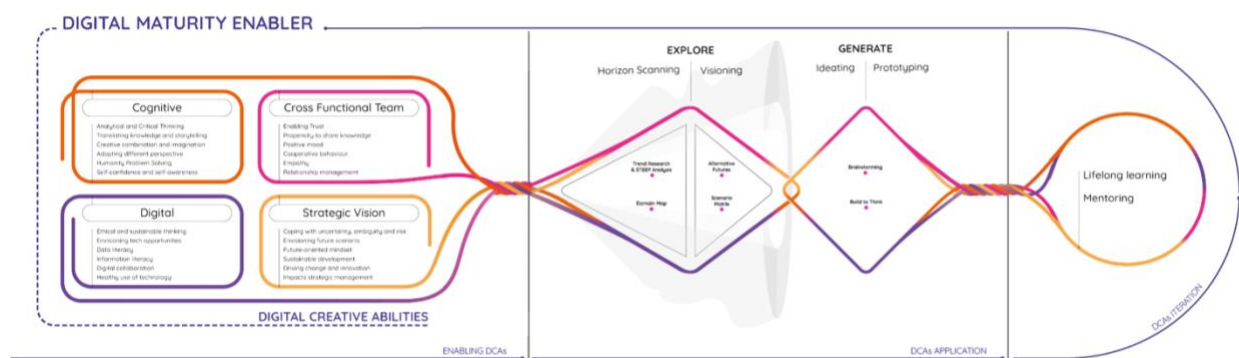


Figure 1. DC4DM process

The following paragraph will present a case study. This case study highlights the massive value of utilizing the DF methodology in practical settings, particularly in projects related to the food industry.



The project, which involved a team of Master students in a product design course at Politecnico di Milano, serves as an excellent example of how the DF approach can be implemented to create a sustainable and forward-thinking solution. Under the guidance of the IDEActivity team, the students were introduced to the DF methodology and tasked with designing a future-proof product that aligned with the overarching theme of "Food as Medicine." Through the application of DF principles, the students were able to develop a solution that was both innovative and feasible, showcasing the benefits of adopting this approach in real-life contexts.

### **3.1 Case study in education field: the Future of Food as Medicine**

What will be the future needs that will lead to new habits and new, more sustainable consumption scenarios in the domain of food? What are the important technological, social, economic, and political forces that will influence the food domain? What will Food as Medicine mean in 10 years?

This is the challenge faced by a team of students, in a 1-month Design Studio course at Politecnico di Milano (Anselmi et al., 2021). Using the DF process that includes a series of methods from both Futures Thinking and Design Thinking, the students developed four main scenarios about the Future of Food as Medicine in 2030, and a future design concept.

#### **3.1.1 Explore phase: Horizon scanning - Trends in the Food Domain**

The first diamond in the process is typically associated with the exploration phase. Within the first phase -Explore - Futures Thinking employs several tools to broaden the scope of DT, both expanding the timeframe and the range of possibilities in which it operates.

This phase aims to create practical perspectives on potential futures and opportunities. It involves analyzing social, technological, economic, and political indicators to shape and influence the future. Horizon Scanning and Visioning are two important steps that feature this first part of the process. They help identify emerging trends and construct possible scenarios to anticipate new design opportunities. Horizon scanning implies researching and identifying long-term trends and interesting developments that could impact the future of a specific field (Washida & Yahata, 2021). The trends can be identified through industry and government reports, scientific publications, patents, news, conferences, and surveys.

In recent times, food has become more "mobile" and is increasingly being eaten individually and in the shortest time possible. There is indeed a growing demand to optimize the time needed to prepare meals according to individual lifestyles. Individualism allows for greater personalization of food, which calls for the development of a food product that increasingly responds to, and is in line with, customers' specific needs, both in terms of quality of the product and the format available. It includes the creation of specific foods or food diets based on genetic heritage and the individual's specific diseases, or more simply, of single-serving packages aimed at reducing waste.

In 2030, the demand for individual solutions will start to impact traditional models of food consumption, with personalized meal kits and meal substitutes becoming mainstream. At-home DNA testing kits will become ordinary for personalized wellness that include diets, and benefits of blood-based solutions in drink, food and personal care will be widely acknowledged. The development of intravenous nanobots that continuously monitor body functions and vitals as well as micro robotics in the bloodstream to fight threats proactively and pre-emptively will be diffused. Some of the collected trends and signals are shown in Figure 2.

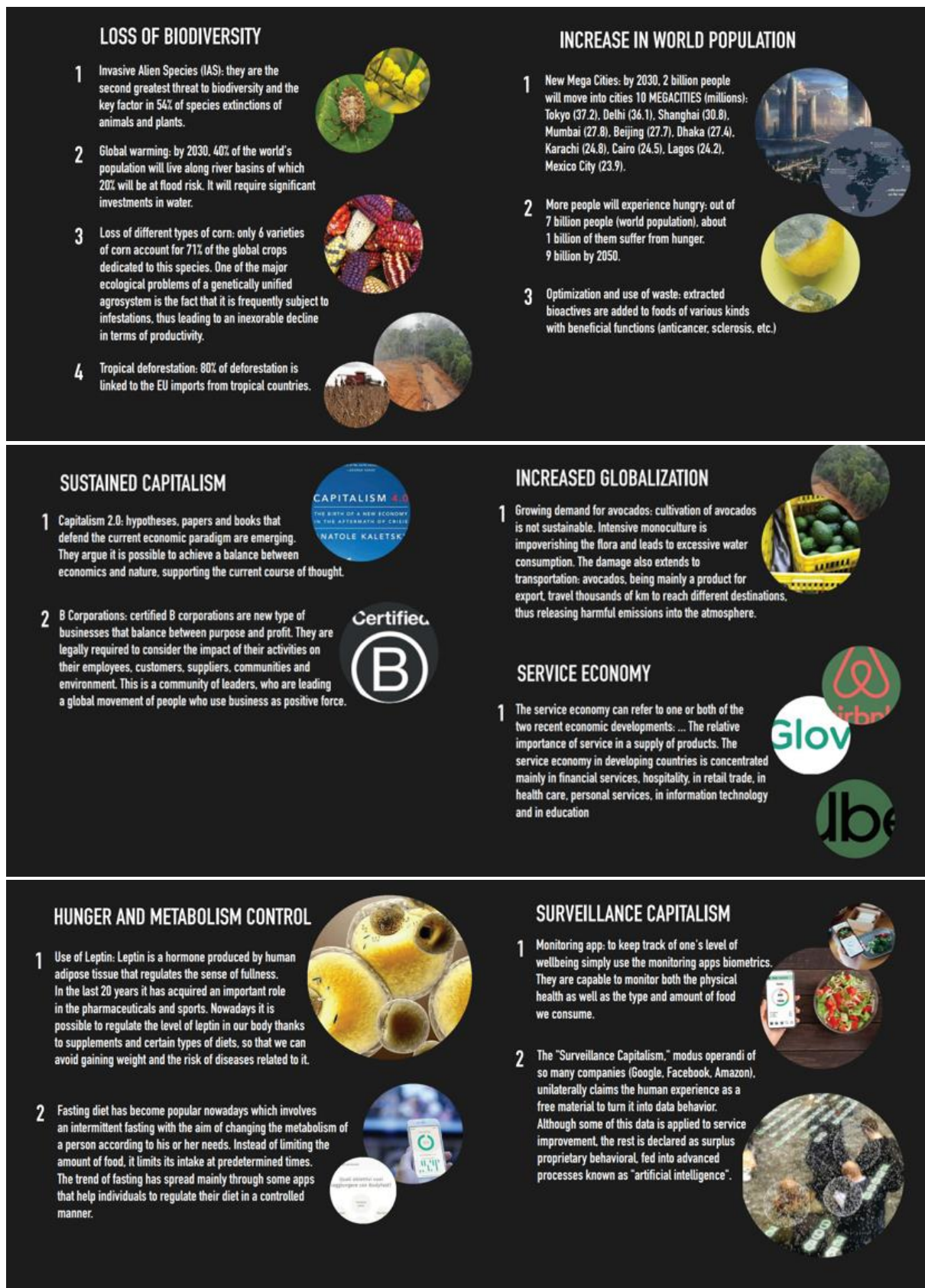


Figure 2. Trends related to the future of food

What will be the future domestic products that will allow individuals to personalize their everyday meal based on their lifestyle and needs?

### 3.1.2 Explore phase: Visioning - Scenario Building

Visioning is the process of creating clear and effective images of the futures that an organization wants to create. This helps align stakeholders and create a shared sense of purpose and direction.

Scenario generation involves designing and analysing possible futures to identify potential risks and opportunities. This helps organisations anticipate and prepare for a range of potential outcomes. In the DC4DM DF process the 2x2 Scenario Matrix is adopted to create alternative futures. In the context of Future Studies or Foresight, the 2x2 Scenario Matrix is a tool used to explore and evaluate possible future scenarios according to the combinations of two key variables or drivers of change. The matrix identifies and assesses potential future challenges and opportunities and develops strategies to address them.

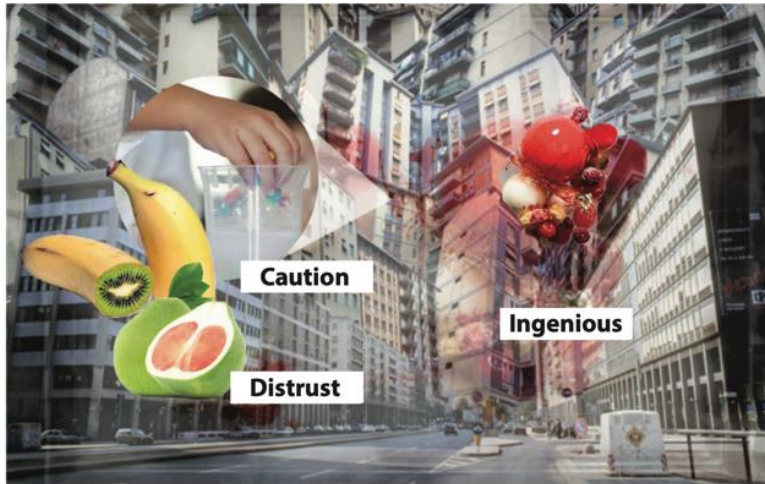
The two variables used in the 2x2 Scenario Matrix can be any relevant drivers of change, such as technological advancements, demographic trends, environmental factors, political and economic conditions among others. By examining different combinations of these variables, several scenarios can be developed to explore different possible futures. Using a 2x2 Scenario Matrix enables designers to identify and prepare for multiple plausible futures rather than relying on a single forecast or prediction. It encourages thinking beyond the present and encourages the exploration of alternative possibilities. Each scenario – depicted in each a quadrant of the matrix- is described through an assigned name (e.g. use metaphors or quotes) to evoke a sense of what this future might be and visualised graphically through moodboards, drawings, collages and short sentences.

Using the 2x2 Scenario Matrix and based on the collected trends, the following four scenarios were developed.

In 2030...

1. *One, none, a hundred thousand* (Fig. 3): the cities are crowded, and there is no place either to cultivate or farm. Most of the food is produced in laboratories to meet the growing demand of the population. Even though some food has disappeared, people are still able to express their preferences by diversifying their diets, albeit with difficulty, perpetuating democracy.
2. *Heterogeneity* (Fig.4): in the future there will be a lot of food, and numerous types and different modes of production. Anyone can build the relationship and interaction with the food according to their preferences. The wide range of diversity in modes of consumption is accommodated by inclusive thinking.
3. *1984* (Fig. 5): The food system has collapsed due to population growth and the loss of biodiversity. The political and social systems are stiffening, the food we eat, and the consumption mode has become totally controlled. People minimize waste by paying attention to how food resources are allocated to each individual. Food is conceived as a binomial of survival.
4. *Super Personal* (Fig. 6): algorithms and the Big Data revolution have brought personalization of well-being. We are surrounded by devices that monitor our lifestyle, daily life and determine our diet in order to make it efficient as possible.

## #1 ONE, NONE, A HUNDRED THOUSAND



The cities are crowded, and there is no place either to cultivate or farm. Most of the food is produced in laboratories to meet the growing demand of the population. Despite the fact that some food has disappeared, people are still able to express their preferences by diversifying their diets, albeit with difficulty, perpetuating democracy.

### Keywords

#laboratory

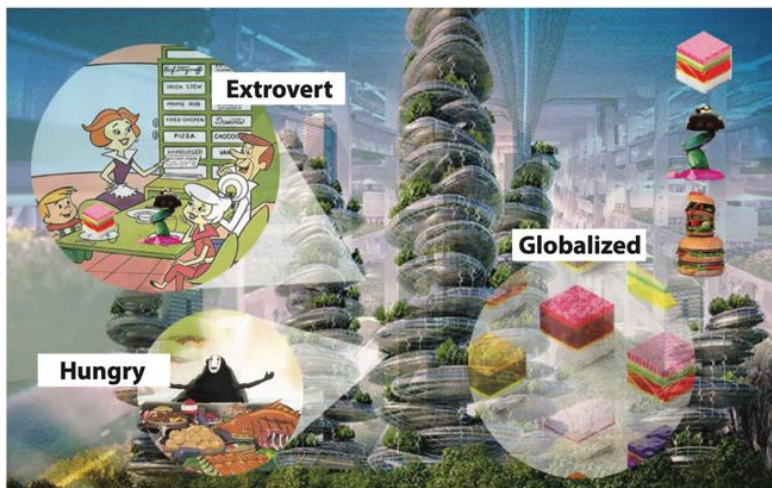
#bioactive

#enhanced food

#vegetables

Figure 3. Trends related to the future of food

## #2 HETEROGENEITY



In the future there is a lot of food, and numerous types and different modes of production. Anyone can build the relationship and interaction with the food according to their preferences. The wide range of diversity in modes of consumption is accommodated by inclusive thinking.

### Keywords

#km0

#botanical world

#city countryside

#C2C

#global culture

#cornucopia

#homemade

Figure 4. Scenario 2: Heterogeneity



### #3 1984



The food system has collapsed due to population growth and the loss of biodiversity. The political and social systems are stiffening, the food we eat and the consumption mode become totally controlled. People minimize the waste by paying attention to how food resources are allocated to each individual. Food is conceived as a binomial of survival.

#### Keywords

- #laboratory
- #necessity
- #collapse
- #distributed
- #zero waste
- #cornucopia
- #homemade

Figure 5. 1984

### #4 SUPER PERSONAL



Algorithms and the Big Data revolution have brought personalization of well-being. We are surrounded by devices that monitor our lifestyle, daily life and determine our diet in order to make it as efficient as possible.

#### Keywords

- #personal
- #awareness
- #obsession
- #health
- #self-medication
- #medicine
- #leisure time
- #personal coach

Figure 6. Super Personal

### 3.1.3 Generate phase: Ideating

The goal of the generation phase is to transform ideas into tangible solutions that align with the context and goals of the project. This phase involves generating innovative and technological ideas relevant to the envisioned future scenario.

The generation stage includes two phases: ideating and prototyping.

After defining the four scenarios that represent four alternative futures about the topic of Food as Medicine in 2030, the fourth scenario called Super Personal was selected as the most preferable to happen. Within this scenario, and thanks to the DF process, a new concept of food consumption and preparation guided by the following question is designed. *How will meals look like in 2030?*

The Super Personal concept is designed as a program that offers personalized nutrition for individuals, takes care of citizens' health, and aims at improving their awareness of new types of foods.

A new model of robot-kitchen is conceived with a 3D processor that communicates with a software developed through a collaboration between doctors, nutritionists, and Artificial Intelligence, who developed a database of dishes to be offered to citizens by varying their nutritional values (Fig. 7).

The intelligent system detects people's personal biometric data and proposes weekly ingredient boxes to help people adapt the meals to their daily activities. The proposed dishes vary only in taste and not in nutrients. The meal-box that includes freeze-dried plant proteins and bioactive-rich jellies is rehydrated, mixed, and processed in the robot-kitchen before being three-dimensionally printed and cooked, according to shapes and tastes people decide daily on the Super Personal app. This technological development of food that sees the creation of protein from air and maximizes nutrients from the few vegetables grown, has enabled the reduction of food waste working towards a positive-impact future.



Figure 7. Super Personal robot-kitchen

At the end of the course, a showcase of the work performed during the semester was requested through an experiential exhibition. Figure 8 shows the results of the exhibition on the Super Personal

project. The food of the future was presented. Visitors could actually taste the food and perceive closely the innovative meaning of food in 2030. As observable, the Super Personal project came up with unprecedented nourishment forms and configurations connected to the idea that in 2030 the norm will be personalized and self-produced food. New technologies, such as additive manufacturing, allow people to stretch their imaginations, envision new opportunities, and give shape to new scenarios.



Figure 8. Super Personal, final exhibition of the Concept Design Studio.

## 4 Conclusions

As time passes, the centrality of food appears more and more evident in our society. Food has recently started to be considered from a holistic perspective, not simply as a nourishment to fulfill physiologic needs but as an extremely powerful resource that makes people feel and live better.

In this regard, new products and services are being designed to encourage healthy behaviors and enable beneficial diets. The redesign of the food system has recently been recognized to be the first and foremost aspect to tackle to create a thriving society, a healthy planet, and an equitable future for all. There is, indeed, an increasing urgency for a structural change, a radical green transformation (Schmitz, 2015). Although, society is already witnessing notable changes brought by the ever-emerging digital technologies, it has become more and more evident that, in order to guarantee a livable future for all species, planetary boundaries and resources must be acknowledged and respected.

In this scenario, both the tendency to envision possible alternative futures as well as a future-oriented mindset become essential abilities that people must acquire to gain an active role in the desired green transformation.

Design Futures, as a design-led approach to face complex problems and conceive tangible solutions, is a valuable means to innovate the food system. It aims at supporting designers and creators in their endeavor to shape clear visions of what the future in a ten- or twenty-years timespan might look like starting from a deep understanding of the present. Through horizon scanning and the identification of promising drivers of change, designers can make hypotheses on the possible turn of events,

question their assumptions, and ultimately build the most preferable scenario to inform decision-makers. In conclusion, DF represents a unique chance for people to start tracing the outline of the best, sustainable and fair future for all, both for humans and the planet.

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**Acknowledgement:** This paper presents reflections from the research tasks carried out by the authors within the Digital Creativity for developing Digital Maturity future skills Project, which addresses the KA203 - Strategic Partnerships for higher education. This project has received funding from the EU Erasmus+ program under grant agreement No 2020-1-IT02-KA203-079913. The views expressed in this paper do not necessarily reflect the views of the EC.