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SSPICE IT!

Sustainability Skills Program for International Catering operators and Entrepreneurs through Integrated Training

SSPICE IT! – Sustainability Skills Program for International Catering operators and Entrepreneurs through Integrated Training

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|---------------------|--|
| WP | WP3 - Co-design and testing of innovative training programme for green operators and entrepreneurs in the catering sector |
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| Task leader | Pour la Solidarité |
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Module n°06

| | |
|--|---|
| THEMATIC AREA | How to set up a sustainable business model |
| SUB AREA OF REFERENCE | Entrepreneurship |
| HOURS | 15 |
| LEARNING OBJECTIVES | |
| <ol style="list-style-type: none"> 1. Define Priorities and Action Plans: Identify and prioritize sustainability goals and develop actionable plans to implement sustainable practices in their business model. 2. Make Decisions in Uncertain Situations: Develop the ability to make informed decisions in uncertain, ambiguous, and fast-moving situations, considering potential unintended outcomes. 3. Handle Fast-Moving Situations and Conflicts: Demonstrate agility and flexibility in handling fast-moving situations, conflicts, and competition to ensure the sustainability of their business model. 4. Co-operate with Others for Action: Collaborate with peers, mentors, and team members to develop innovative ideas and turn them into actionable plans that align with sustainability principles. 5. Learn from Success and Failure: Embrace a learning mindset and leverage both success and failure as valuable opportunities to learn and improve sustainable business practices. 6. Identify and Implement Sustainable Waste Management Practices: Recognize and implement practices coherent with sustainable waste management to reduce environmental impact and promote resource efficiency. 7. Develop a Sustainable Menu and Offerings: Create a menu focused on seasonal ingredients, produced locally, with smaller amounts of animal products, and expand plant-based dishes to align with sustainable food practices. 8. Select Sustainable Production Systems: Choose sustainable production systems for all food and consumables to reduce the ecological footprint of their business operations. 9. Communicate Sustainable Ambitions: Effectively communicate their sustainable ambitions and initiatives to staff and consumers, fostering engagement and awareness. | |

By achieving these learning objectives, learners will be equipped with the knowledge and skills to design and implement a sustainable business model that promotes environmental and social responsibility while delivering value to customers and stakeholders. They will also possess the essential skills needed to handle uncertainty, embrace continuous improvement, and work collaboratively to create positive and lasting impacts in their business and the broader community.

Skills Addressed

- Define priorities and action plans
- Make decisions when the result of that decision is uncertain, partial or ambiguous, with a risk of unintended outcomes
- Handle fast-moving situations promptly and flexibly to solve conflicts and face up to competition
- Co-operate with others to develop ideas and turn them into action
- Learn with others, peers and mentors, about both success and failure
- Identify and implement practices coherent with sustainable waste management
- Develop a menu focused on seasonal ingredients, produced locally, using smaller amounts of animal products in dishes and expanding plant-based dishes
- Select sustainable production systems for all food and consumables
- Communicate sustainable ambitions to staff and consumers

LEARNING ACTIVITIES

| Theoretical | Practical |
|--------------------|------------------|
| ✓ Student's manual | ✓ Group activity |

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INTRODUCTION

Contrary to people, whose lives are multifaceted and may vary greatly in their activities, **companies may wrongly be seen as one-dimensional**. Indeed, the focus of one business may be **limited to a certain area**, which is natural and according to its purpose. Nevertheless, the complexity of the business comes in the form of its **internal processes** – all the gears working together to produce an efficient and effective food menu. These processes can be bundled under the term **operations**, which describe the **day-to-day functions** of a restaurant or catering establishment, and range from service to procurement. Thus, in this module, you will explore various sides of operations and specifically what makes them sustainable in the context of a business model.



Source: <https://www.pexels.com/el-gr/search/sustainable%20restaurant/>

Viewing Restaurants and Foodservice as Systems

Adopting a systemic view is crucial for proper sustainable operations management. One way to divide the processes is into **inputs, throughputs and outputs** (Ekanem, 2017).

Inputs are the elements imported into a system and in our case raw materials, such as food ingredients.

Throughputs constitute the core of the system, which processes the inputs. The most common space associated with throughputs, in our case, would be the **kitchen**, where raw materials are stored, managed, cooked or discarded.

Outputs consist of the finished product, the **cooked meal (the product side)** along the **experience (the service side)** provided alongside it.

In addition, a **feedback loop** should be considered part of the system, in order to **gather information** from the customer and the surrounding environment. It is considered the system's **quality control** and is well compatible with the idea of a circular economy. By gathering as much information as possible, it is less challenging to optimize processes in a sustainable way.

Business as processes

By analyzing the aforementioned system, one can observe more clearly and define business processes, which is another way to **seek and find sustainability gaps**. Taking a closer look, business processes constitute a sequence of operations that aim at **delivering value internally, externally** or, more accurately, **both**.

One way to categorize operations (Dsouza et al., 2021) is by dividing them into:

- **Main operations**, which constitute the core, emphasise supplying value
- **Management processes**, which concern the monitoring of key processes and finally,
- **Supporting processes**, which refer to the surrounding tasks and procedures.

| Exercise 1: Assessment Questions | |
|--|--|
| Pre-requisites | / |
| Time | 1 hour |
| Tools | PC, Smartphone, internet connection, pen and paper. |
| Objectives | 1. Assessing the understanding of previous chapters. |
| Instructions | |
| In group or individually, answer these questions: On which of these components would you emphasize, to create an immediate impact on the sustainability of your establishment? Can you focus on multiple fronts at the same time with the same efficiency? | |

CHAPTER 1: Operational Decision-Making

In this chapter, learners will analyze decision-making on an operational level, conceptualizing processes and improving the speed and quality of implementation. They will recognize their importance in daily decision-making processes and thus structure them in a way that reflects their control and awareness of accountability.

We often view decisions exclusively as strategic decisions taken by top-level executives. However, **the managerial processes**, with which **high-ranking executives** are usually associated, only represent one of the three processes categories. With this in mind, **decisions can be taken at any stage of any process**, thus revealing that the little choices of everyone can make the difference between a sustainable business and one that is not.

This is especially true in catering and restaurants since there is a **great focus on the raw materials** and ingredients handled by chefs, cooks and other professionals in the sector.

1.1. The Agile Methodology in the Kitchen

The methods to achieving operational excellence in the kitchen or at the main hall go by many names and one of them is **agile**. To put it simply, agile refers to being able to both **create and adapt to change despite the challenges**, which may occur in an environment, rapidly (Agile Alliance, n.d.). While Agile is more commonly implemented in Software Development, it can be well **applied to any type of industry**. In the **Agile Manifesto** (The Agile Manifesto Authors, 2019), some of the points are completely industry-neutral.

For example, Principle 12 does not require any adjustments at all:

"At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behaviour accordingly."

To learn more about Agile Methodology, check the resource [here!](#)

| Exercise 2: Assessment Question | |
|---|--|
| Pre-requisites | / |
| Time | 1 hour |
| Tools | PC, Smartphone, internet connection, pen and paper. |
| Objectives | 1. Assessing the understanding of previous chapters. |
| Instructions | |
| <p>Check some of the Agile Principles below. As you will observe, they refer to software-related issues:</p> <ul style="list-style-type: none"> • "Our highest priority is to satisfy the customer through early and continuous delivery of valuable software." • "Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage" • "Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely." <p>Try to replace the highlighted text with details related to the restaurant and catering industries.</p> | |

While some may find it **discouraging** to tailor a methodology used in software development, it indirectly teaches you that **technology is more accessible than we often believe**. This is especially important for the adoption of **high-end technology in restaurants and catering establishments, as adoption is also a matter of behaviour and not just budget or integration**.



Another thing to note is that **strategic decision-makers** usually take **more time** to react **to bigger changes**, which concerns the managerial level of processes. In contrast, operational agility is highly beneficial, because **time is pressing when it comes to the preparation of meals and food-related demand**. Even the expiration date of food is a great example of how **time is of paramount importance**.

1.2. A/B testing

A good example of a practice, which is in accordance with the Agile Methodology is **A/B testing**. The menu engineering practice refers to the **simultaneous testing** of different options, in order to see which the consumers are best reacting to. This is a very helpful practice especially when **trying out new features**, such as a new customer loyalty program.

A/B testing helps you measure the performance of the menu to better understand whether you need to change something, like the composition of ingredients, to keep or remove a menu item, to adjust the price, feature certain elements and perhaps even create different categories.



Let's assume that the owner of a restaurant called "Green Grain" that prepares vegan rice bowls wants to test whether customers prefer **customizable bowls** or **pre-designed combinations**. For one month they divide their lunch service customers into **two groups**, one for each method. The restaurant asks for **satisfaction feedback** from each group and finds out which approach seems to get the most positive comments. Now, if the restaurant tried **one method at a time applied for every customer for a month, it would take two months to do the testing instead and probably confuse its customers**.

A/B testing teaches us that we can implement different procedures or processes at the same time. What do you think is an **advantage** of implementing tasks simultaneously?

1.3. The importance of task management

To build upon the reference **to A/B testing**, it is easier to adopt a philosophy of **arranging tasks effectively or achieving two different outcomes at the same time**.

An easy example to remember is making tea. When simplified, the tasks look like this:

- a. Pour water in the kettle (duration 10 seconds)
- b. Boil some water (duration 2 minutes)
- c. Prepare the teabag (duration 40 seconds)
- d. Pour the boiled water into the cup (duration 4 seconds)

Some tasks depend on other tasks. For example, you cannot **boil the water** without first **pouring the water into the kettle**. However, you can **prepare a teabag, while the water is boiling**. Even if the process of boiling the water was not automatic, you could still use the help of a coworker to run two tasks simultaneously. This highlights one of the advantages of automation, opportunities which technology can offer.

| Exercise 3: Assessment Question | |
|---|--|
| Pre-requisites | / |
| Time | 1 hour |
| Tools | PC, Smartphone, internet connection, pen and paper. |
| Objectives | 1. Assessing the understanding of previous chapters. |
| Instructions | |
| Based on the information given above, calculate what is the least time needed to make a delicious cup of tea. | |

Solution: **b** depends on **a**, and **d** depends on **b** and **c**. However, **b** and **c** can run at the same time, meaning that the duration of that stage is equal to the duration of the longest task (**2 minutes**). This means that a total of 2 minutes and 14 seconds is the time needed to make a cup of tea.

1.4. Not everything is as simple

Naturally, situations differ and can be extremely difficult to deal with. However, by **breaking down the tasks** into their simplest form, it is possible to find shortcuts and **combine tasks** or **task durations**.

This logic can also help with the conception of sustainable ideas. For example, it is possible to use **bread crumbs** for another product or use **escaping heat** from ovens to boil water for heating during winter.

1.5. Creating flow charts of workflows

A flowchart represents the flow of tasks and how they can be organized to improve efficiency. If you find it **difficult** to review the tasks in the form of **text**, consider flowcharts to be a great **visualization tool**. It is also very helpful for **breaking down tasks** and **organizing** them **into chunks**. In addition, visual representations are often more helpful to remember, which is great for **minimizing any mistakes** resulting in involuntary unsustainable behaviours, like forgetting to turn off a source of energy consumption.

Let's view it in practice! To use the example from before, **making tea** looks like this in a **picture-based flow-chart**:



As one may observe, the teabag is **not in the same sequence** as boiling the water, because it **does not depend** on it.

| Exercise 4: Assessment Question | |
|--|--|
| Pre-requisites | / |
| Time | 1 hour |
| Tools | PC, Smartphone, internet connection, pen and paper. |
| Objectives | 1. Assessing the understanding of previous chapters. |
| Instructions | |
| <p>Draw a flowchart displaying the tasks needed to be done to bake an apple pie. Calculate how much time is needed for each task and see if the correct sum matches your original expectations for the whole duration. Invite a colleague to do the same and compare how you have organized the tasks.</p> | |

CHAPTER 2: Sustainable Business Models in Practice

In this chapter, the learner will identify some of the popular business models and in what ways they can be more or less sustainable. Different models have varying processes, which makes the opportunities for a greener process also unique to each business model. Therefore, it is highly beneficial to review some of the more popular business models in the restaurant and catering industries.

2.1. Franchise Model

A franchise model is a way of conducting business, where a buyer, **the franchisee, buys the rights to use the name and branding of an existing company.** To a larger or smaller degree, **the buyer also adopts the menu and the core procedures** of the original company.

Franchising has both advantages and disadvantages because **culture is one of the more difficult aspects to transfer to franchisees.** However, if a culture supporting **sustainable development is genuinely turned into one of the core aspects of a deal** with a franchisee and there are **appropriate monitoring mechanisms** to observe, whether all practices are correctly implemented, then the expansion of a franchise can help with **the horizontal adoption of successful business operations** (Ackerman, 2018). One way to implement a successful franchise deal is to hire mentors from the original company, as they will be able to transfer practices and habits more organically to the personnel (Yetim, 2021).

2.2. Casual Dining

Perhaps the most common picture that comes to mind when the word restaurant is mentioned is casual dining. It is a model which offers a casual, relaxed atmosphere. However, it should **not be confused** with **fast food**, as the service and the quality of ingredients used are of a high standard.

2.3. Fine Dining

Fine Dining aims at delivering a **luxurious** experience, with an emphasis on **delicate flavours, technique and atmosphere.** Due to the high prices and smaller portions, the **food waste produced by consumers is minimal.** However, as chefs put a huge

emphasis on **high food standards** and especially **aesthetic elements, trimming foods and discarding** parts of fruits, vegetables or meat that do not paint the “canvas” in the right way, there is a significant amount of **food waste produced in the kitchen** (Bronte, 2017). Therefore, one must consider proper waste management or incorporation.

2.4. Buffet Model

The Buffet business model is **notorious** for the production of food waste. Instead of ordering by menu, meaning that a portion of meal preparation only starts when an order is made by a client, **the preparation of food volume is estimated on average**. In addition, a successful buffet communicates that there is enough food for everyone, even if every person tries every type of food (Kundamal, 2022).

2.5. Delivery Only

Many consumers **prefer to eat within their personal spaces or workspaces** or simply do not have **the time to cook**. Delivery is a simple solution to this category of problems consumers face. This means that sustainable **processes are related to delivery** (such as the use of bikes, e-bikes or EVs), **sustainable packaging** and **sustainable advertising**, through the use of **digital or online ads** rather than distributing brochures.

While some time ago delivery was **associated** mostly with **fast food or fast dining**, the **COVID-19 pandemic forced numerous businesses to change and rely solely on delivery**, which effectively changed their business models, at least temporarily. However, even after Covid-19, delivery has stayed and **is accepted by a wider range of establishments** (Gavilan et al., 2021).

2.6. Ghost Kitchen

Some restaurants, mostly fine dining ones, still **do not want to be associated with delivery**, as it is often linked to fast food or **budget brands**. After all, the atmospheric table at a well-designed restaurant is an important part of what a restaurant can offer but is unable to deliver home. However, **delivery keeps being a great source of revenue**, making it a compelling option to consider. So how can fine dining restaurants offer delivery, without altering their brand? The answer is **ghost kitchens**.

Ghost Kitchens are **virtual kitchens** that allow the delivery of food online or by telephone, without offering a place where you can eat or **take food away from**. This means that even a fine dining restaurant can create a **second distinct brand**, offering delivery.

Establishing a ghost kitchen in the first place signals that **the capacity of the restaurant is not used to the fullest** for the given equipment, space and number of

employees. The Ghost Kitchen can result in **improved sustainability**, as **the equipment is used at a bigger capacity** while the food in storage circulates more, **minimizing storage-related food waste**. At the same time, what would be seen as food waste at a fine dining restaurant may be **perfectly edible food ingredients**, which can be used for more casual dishes.

| Exercise 5: Assessment Questions | |
|---|--|
| Pre-requisites | / |
| Time | 1 hour |
| Tools | PC, Smartphone, internet connection, pen and paper. |
| Objectives | 1. Assessing the understanding of previous chapters. |
| Instructions | |
| <p>Most of the time, the actual business model will be a combination of the characteristics described in each distinct type mentioned.</p> <p>In this activity, you will find a description of a restaurant:</p> <ul style="list-style-type: none"> • Families frequently dine there • You have seen the same brand in three other cities • The restaurant claims it offers no delivery • You open your favourite delivery app and discover a brand that offers a similar menu with the same secret sauce. <p>Describe the combination of business model elements used.</p> | |

Solution: Casual Dining Franchise with a Ghost Kitchen

CHAPTER 3: Implementing Sustainable Operations

In this chapter, the learner will analyze the implementation of certain sustainable business operations processes or approaches, which can make a difference in the output of a restaurant or catering establishment. While elements of them have already been explored from the point of view of a business model as a whole, the learner will focus on the ones, which are the most effective in terms of sustainability and carbon footprint.

Have you noticed that using simple examples can make you remember complex concepts? This is what we will do here! After each process, we will refer to an example of just how simply these concepts can be analyzed.

3.1 Resource efficiency

Resource efficiency, defined as **the ratio between a given benefit or result and the natural resource use required for it**, is paramount for businesses seeking both economic success and environmental responsibility (NITI Aayog, 2017). In the context of a restaurant or catering establishment, resource efficiency can be achieved by optimizing processes to **use fewer ingredients, reduce energy consumption, and minimize waste generation**. For instance, efficient kitchen management can lead to the **production of meals with fewer ingredients**, ultimately **reducing costs and environmental impact**.

To make our carrot soup, consider slow-cooking methods or incorporating vegetable scraps for added depth, minimizing the need for excessive ingredients.

3.2 Waste Reduction

Waste reduction is a direct outcome of improved resource efficiency. By using **fewer resources** per output, **the generation of waste is inherently minimized**. In a restaurant, this could involve careful **inventory management, portion control, and implementing practices that repurpose or reuse certain ingredients**. Additionally, waste management strategies, including recycling, play a crucial role. Recycling acts as a buffer for waste that cannot be entirely prevented, contributing to a more sustainable waste disposal system.

You discover that some of the carrot waste is perfectly suitable for this Friday's carrot cake!

3.3 Sustainable Energy Sources

Energy consumption is a significant aspect of restaurant and catering operations, with **electricity and heating** being essential for food production. **Transitioning to sustainable energy sources**, such as solar energy and other renewables, is a key strategy for reducing the environmental footprint of these establishments. Implementing **energy-efficient appliances** and technologies can further enhance the **overall sustainability of energy usage** (Energy Star, n.d.). Sustainable energy should also be taken into account in distribution and delivery.

Instead of using natural gas, you prepare the soup on an electric stove, which uses electricity from a renewable energy source. One client ordered a tasty carrot soup to be delivered. The delivery will be done on a bicycle, creating zero carbon emissions related to transport.

CHAPTER 4: Developing a Sustainable Menu and Offerings

In this chapter, learners will analyze the importance of creating a sustainable menu, as well as sourcing seasonal and locally produced ingredients. They will identify the benefits of supporting local producers and reducing the carbon footprint of their food offerings.

4.1 Seasonal and Local Ingredient Sourcing

The initial element that forms the menu is the **sourcing itself**. What comes on the **plate**, must come first to the **kitchen**. Consider for a minute, **which dishes would be available on the menu**, if you were only able to **use ingredients just outside your prefecture and only during specific seasons**. Undeniably, under such circumstances, there would be much less variety. For example, it would not be easily possible to run a traditional **Mediterranean restaurant in a Scandinavian country**. For these reasons, **other strong points of the menu should be promoted**, such as the freshness of ingredients, while variations can be made to **foreign dishes** with **alternative local ingredients**.

Of course, there also remains a **positive social impact on the local communities through support to local suppliers**. Unfortunately, taste does not always inform of the farm's or garden's brand. Can you think of effective ways of communicating the **involvement of local suppliers**? Do you think that **good marketing and storytelling skills** are relevant to this?

4.2 Adopt the Concept of Food Miles

Food miles serve as a method **to gauge the distance that food travels** before reaching the end consumer. This approach provides valuable insights into the **environmental footprint** of foods and their components. It encompasses **not only the transportation of food** to consumers but also **the process of managing waste foods, transporting them away from consumers, and eventually to landfills** (FoodMiles, n.d.).

Due to the phenomenon of **globalization**, people often forget the geographies where ingredients originate. To have the learners discover just **how much distance** a single ingredient can travel, you can have them use a simple [Food Miles Calculator](#).

4.3 Promoting Plant-Based and Animal-Friendly Dishes

A restaurant or catering business should **respond to the growing demand for eco-friendly and health-conscious options** by expanding its plant-based offerings. **Reducing reliance on animal products** not only aligns with ethical principles but also addresses environmental concerns. Therefore, you can craft a menu that speaks to **diverse dietary preferences** while promoting sustainability. **Did you know that people who follow a plant-based diet account for 75% less in greenhouse gases** (Buckley, 2023)?

4.4 Size of Enterprise

The notion that small establishments have a negligible impact on the environment must be challenged. Even within confined spaces, innovative ideas can thrive. By fostering creativity and implementing sustainable practices, **small establishments can play a pivotal role** in the broader movement towards eco-friendly culinary experiences. Not only is the **collective action** of small business considerable but one should keep in mind that **any small business may become big one day**. By having more businesses grow sustainably, more surrounding businesses will be inspired to follow the same path. However, if the ingredients and materials are locally sourced, **a local supplier may not be able to keep up with the demand**. In this case, **the growing business should continue finding local suppliers**, contrary to the easier solution of switching to an international one.

4.5 Educating Chefs on Sustainable Practices

What, do you believe, is the role of the chef in the implementation of sustainable practices? Would you put their activity in managerial processes or main operations and why?

Empower your kitchen staff with the knowledge and skills to minimize food waste and embrace sustainable practices. From **reusing leftovers** to **managing overstock**,

cultivating sustainable habits in the kitchen enhances efficiency and aligns with a responsible culinary moral compass (Sengupta, 2022).

4.6 Eliminating Mistakes

In addition to continuously improving handling, and eliminating mistakes. Of course, **making mistakes is great for learning processes**. Ideally, however, it is desired to **eliminate mistakes that repeat themselves, as a result of their incorporation into their people's behaviour and thus do not provide learning value**. In this case, the correction of the mistake results in the **general improvement of processes**. (Klein, 2023).

CHAPTER 5: Communicating Sustainability to Employees Though Gamification

In this chapter, learners will recognize the importance of communicating sustainability through the use of gamification. By analyzing the relationship between process gamifications and employee engagement learners will understand important elements of communication and efficiency.

5.1 Understanding Gamification

Have you ever considered that working is more enjoyable when you look at everything like a game? Indeed, there is a way to achieve that, through a technique called **gamification** (Growth Engineering, 2023). The term refers to the incorporation of **game elements into otherwise mundane processes**, to give the learner or the employee the satisfaction of progress or achievement. In other words, gamification is commonly associated with **employee engagement**. Are you interested in learning more about Gamification in work settings? Check the Video [here!](#)

5.2 Is Gamification Digital?

Gamification can be **both digital and analogue**, or even a mix of the two, which means that it can apply to practical tasks as well. When the goal of gamification is to teach an employee in an engaging way (as in Learning and Development), then a **literal video game or a simulator** can be used for more practical demonstrations compared to a wordy manual. The use of a handheld video game console for teaching purposes has been implemented in the fast food sector (Walker, 2022).

5.3 Gamification as Protocol



source: <https://www.pexels.com/photo/pizza-and-monopoly-board-game-on-wooden-surface-4004418/>

To properly understand the **analogue implementation of gamification**, one must **view it as a board game**. A board game may seem complex at first but as one immerses themselves in playing it, they can find it **entertaining to understand how the different rules and procedures apply**. Viewing it in an unconventional way, one can see that **the board game is a set of standard operating procedures and protocols!** In other words, by **making it fun** for the employees to learn about sustainable processes and protocols, you are essentially **communicating the best practices** in a way that will be better absorbed by learners!



CHAPTER 6: Technology-Driven Continuous Improvement

In this chapter, the learner recognizes the importance of high-end technology in the restaurant and catering sectors. In particular, they will be able to describe in what way technological advances supplement the human factor and how they can help with the further improvement of sustainable operations.

6.1 Digitalization and Tradition

Some **traditional restaurants** have not changed **the way they operate for decades**, or even centuries. Consequently, it is easy to imagine catering and restaurants as **sectors that do not require technological change**. If anything, the traditional atmosphere offers the selling point of a business. However, the use of technological trends today, which can **benefit sustainability** is promoting digital transition, even in these sectors, whether the changes are visible or not.

6.2 Where is the improvement?

Countless small changes may be **branded as improvement** and, of course, all supporters of sustainability **welcome innovative thinking**. However, the main areas of digital transition could be defined as the following:

Smart Appliances: Stationary devices can become smart, with **elements of AI and the Internet of Things (IoT)**, such as smart sensors. Essentially, such features could help the system **analyze, predict and apply processes**, improving them **marginally** and **accumulating** positive impact over a long period (Alt, 2021).

Data Analysis: The multidimensional collection of data can help identify patterns, ranging from unsustainable customer behaviour to improvements in choosing suppliers when it comes to carbon footprint (Hassoun et al., 2023)

Remember that technological change can cause disagreements too and transformation can be met with resistance from staff. Hence, it is quite wrong to dismiss the human element when discussing digital transformation.

In addition, we have already referred to gamification as not being strictly digital in restaurants and catering. However, when it comes to the digitized processes, gamification can indeed be framed in a designed **employee-friendly user interface**.

| Exercise 6: Assessment Activities | |
|-----------------------------------|--|
| Pre-requisites | Having read Module 6. |
| Time | 4 hours |
| Tools | PC, Smartphone, internet connection, pen and paper. |
| Objectives | 1. Assessing the understanding of previous chapters. |

Instructions

This exercise should be realized, when possible, in group. Imagine a fictional sustainable business, then realize the following activities:

1. Defining Priorities and Action Plans

- Define three sustainability goals for your business model.
- Develop actionable plans for each goal, outlining specific steps and timelines.

2. Making Decisions in Uncertain Situations

Describe a scenario in which you had to make a critical business decision in an uncertain and ambiguous situation. Explain your decision-making process, including how you considered potential unintended outcomes.

3. Handling Fast-Moving Situations and Conflicts

Provide an example of a fast-moving situation or conflict you faced in your business model setup. Explain how you demonstrated agility and flexibility to address it effectively.

4. Co-operating with Others for Action

Describe a collaborative project in which you worked with peers or team members to develop innovative sustainability ideas. Explain how these ideas were turned into actionable plans aligned with sustainability principles.

5. Learning from Success and Failure

Share a specific instance of success or failure in your sustainability efforts. Reflect on what you learned from this experience and how it influenced your sustainable business practices.

6. Sustainable Waste Management Practices

Identify and briefly explain two sustainable waste management practices you have implemented or plan to implement in your business model.

7. Sustainable Menu and Offerings

Describe how you have created a menu with a focus on seasonal ingredients, local sourcing, reduced animal products, and expanded plant-based options in your business model.

8. Selecting Sustainable Production Systems

Explain your process for choosing sustainable production systems for food and consumables in your business model, considering ecological footprint reduction.

9. Communicating Sustainable Ambitions

Outline your strategy for effectively communicating your sustainable ambitions and initiatives to your staff and consumers, promoting engagement and awareness.

10. Measuring and Reporting Sustainability Impact

Explain the key performance indicators (KPIs) or metrics you use to measure the sustainability impact of your business model. Describe how you collect and report data on these KPIs to track and communicate your sustainability achievements.

CASE STUDY - Max Burgers



Source: <https://www.maxburgers.com/products/products/>

A **Swedish** restaurant chain - **Max Burgers** - has pioneered the world's first "*climate positive*" menu (United Nations Framework Convention on Climate Change, 2023), committing to removing more greenhouse gases from the atmosphere than its entire value chain emits.

Max Burgers measures and **labels each menu item with its CO2 equivalent**, nudging customers to make informed choices. The initiative builds on the success of the company's 2016 launch of plant-based "*green burgers*," which have significantly lower climate impacts than beef burgers. Max Burgers has implemented various measures to reduce emissions, such as using **100% wind power**, **adopting renewable packaging**, and achieving **minimal food waste**. Sales from their green burger range have surged, increasing by about 1000% between 2015 and 2018. The company aims to make every second meal sold without beef by 2022.

Beyond its operations, Max Burgers actively engages in discussions, encouraging other companies to adopt CO2-free labelling and **join the "Climate Positive"** movement for a climate-friendly food industry. Additionally, through its **carbon offsetting program**, the company has planted over two million trees, which is equivalent to removing 230,000 petrol cars from the road for a year.

FINAL TASK: Setting up a Sustainable Business Model in the Catering Sector

Final Task Module 6: Setting up a Sustainable Business Model in the Catering Sector

| | |
|-----------------------|--|
| Pre-requisites | Reading Module 6. |
| Time | 4 hours |
| Tools | PC, Smartphone, internet connection, pen and paper. |
| Objectives | 1. The purpose of this capstone project is to evaluate the learner's capacity to use the information and abilities acquired throughout the course to create a viable business plan for the catering industry. The learner will pinpoint requirements, come up with creative concepts, and draft a blueprint for a sustainable business strategy. |

Instructions

Parts of the procedure:

1. Select Your Business

Choose a catering business idea or an existing catering business you aim to improve sustainably. Provide a brief rationale for your choice.

2. Sustainability Goals

Define at least three sustainability goals for your catering business. Explain why these goals are important and how they align with the module's objectives.

3. Action Plans

Develop detailed action plans to achieve each sustainability goal. Include specific steps, timelines, and responsibilities. Justify your approach.

4. Implementation

Imagine executing the action plans within your project. Describe the challenges faced, the decisions made, and any modifications to the plan during implementation.

5. Outcome Assessment

Think about how you would evaluate the outcomes of your sustainability efforts. Imagine examples of data and evidences of the impact on the business, the environment, and society.

6. Presentation

Prepare a presentation that summarizes your capstone project. Highlight the most important aspects of your business model and its sustainability achievements.

7. Reflection and Peer Evaluation

Reflect on your capstone project experience, including what you have learned and how you would apply these lessons in future endeavours. If working in a group, assess your team's collaboration and contribution.

Criteria for Evaluation:

The capstone project will be evaluated on the following criteria:

- Relevance and applicability of the sustainable business model.
- Creativity, innovation, and comprehensiveness of the project.
- Realistic action plans and expected outcomes.
- Effective presentation and communication skills.
- Proper citations and references in the report.
- Collaboration and teamwork (if applicable).

Assessment Activities

| | |
|-----------------------|--|
| Pre-requisites | |
|-----------------------|--|

| | |
|-------------------|--|
| Time | |
| Tools | |
| Objectives | |

| WITH TRAINER | WITHOUT |
|--|--|
| <ul style="list-style-type: none"> • Capstone Project • Assessment Tasks | <ul style="list-style-type: none"> • Assessment Tasks |

ASSESSMENT TASKS

Instructions to Students:

The learner is now tasked with demonstrating his/her understanding and competence in setting up a sustainable business model. This assessment comprises various tasks and questions related to the learning objectives and skills the learner has acquired throughout the module. They should answer each question or complete each task to the best of their ability.

Assessment Tasks:

11. Defining Priorities and Action Plans

- Define three sustainability goals for your business model.
- Develop actionable plans for each goal, outlining specific steps and timelines.

12. Making Decisions in Uncertain Situations

Describe a scenario in which you had to make a critical business decision in an uncertain and ambiguous situation. Explain your decision-making process, including how you considered potential unintended outcomes.

13. Handling Fast-Moving Situations and Conflicts

Provide an example of a fast-moving situation or conflict you faced in your business model setup. Explain how you demonstrated agility and flexibility to address it effectively.

14. Co-operating with Others for Action

Describe a collaborative project in which you worked with peers or team members to develop innovative sustainability ideas. Explain how these ideas were turned into actionable plans aligned with sustainability principles.

15. Learning from Success and Failure

Share a specific instance of success or failure in your sustainability efforts. Reflect on what you learned from this experience and how it influenced your sustainable business practices.

16. Sustainable Waste Management Practices

Identify and briefly explain two sustainable waste management practices you have implemented or plan to implement in your business model.

17. Sustainable Menu and Offerings

Describe how you have created a menu with a focus on seasonal ingredients, local sourcing, reduced animal products, and expanded plant-based options in your business model.

18. Selecting Sustainable Production Systems

Explain your process for choosing sustainable production systems for food and consumables in your business model, considering ecological footprint reduction.

19. Communicating Sustainable Ambitions

Outline your strategy for effectively communicating your sustainable ambitions and initiatives to your staff and consumers, promoting engagement and awareness.

20. Measuring and Reporting Sustainability Impact

Explain the key performance indicators (KPIs) or metrics you use to measure the sustainability impact of your business model. Describe how you collect and report data on these KPIs to track and communicate your sustainability achievements.

Criteria for Evaluation:

- Responses demonstrate a clear understanding of the topics and skills covered in the module.
- Answers are well-structured, and concise, and address each component of the tasks.
- Appropriate examples, evidence, or real-life experiences are provided where necessary.

- Additional Material: Provide any relevant charts, diagrams, or documents to support your responses, if applicable.

Capstone Project Assessment: Setting up a Sustainable Business Model in the Catering Sector

Capstone Project Overview:

1. Select Your Business

Choose a catering business idea or an existing catering business you aim to improve sustainably. Provide a brief rationale for your choice.

2. Sustainability Goals

Define at least three sustainability goals for your catering business. Explain why these goals are important and how they align with the module's objectives.

3. Action Plans

Develop detailed action plans to achieve each sustainability goal. Include specific steps, timelines, and responsibilities. Justify your approach.

4. Implementation

Execute the action plans within your project. Describe the challenges faced, the decisions made, and any modifications to the plan during implementation.

5. Outcome Assessment

Evaluate the outcomes of your sustainability efforts. Provide data and evidence of the impact on the business, the environment, and society.

6. Presentation

Prepare a presentation that summarizes your capstone project. Highlight the most important aspects of your business model and its sustainability achievements.

7. Reflection and Peer Evaluation

Reflect on your capstone project experience, including what you have learned and how you would apply these lessons in future endeavours. If working in a group, assess your team's collaboration and contribution.

Criteria for Evaluation:

The capstone project will be evaluated on the following criteria:

- Relevance and applicability of the sustainable business model.
- Creativity, innovation, and comprehensiveness of the project.
- Realistic action plans and expected outcomes.
- Effective presentation and communication skills.
- Proper citations and references in the report.
- Collaboration and teamwork (if applicable).

Comments:

Provide constructive feedback on the capstone projects, emphasizing the practical applicability of the sustainable business model, the effectiveness of the presentation, and the depth of analysis. Encourage learners to reflect on their experience and the lessons learned.

Extras

1. Further Readings

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