



Module 7



| INNOVATION AND GREEN DESIGN | |
|------------------------------------|--|
| Duration: | 5 hours |
| Learning objectives: | <ol style="list-style-type: none"> 1. Sustainability and product innovation: new techniques to design in a conscious manner. 2. Innovation with sustainable approach: how to ameliorate processes. 3. Environmental impact assessment and eco-design 4. Understand the concept and importance of business model innovation in driving sustainability. 5. Develop strategic thinking skills for integrating innovation into business operations. |
| Sub-Modules: | <ul style="list-style-type: none"> ● 7.1 Product Innovation: Developing new products with sustainable practices ● 7.2 Process Innovation: Improving business processes for sustainability ● 7.3 Business Model Innovation: Creating innovative and sustainable business models ● 7.4 Green Design: Principles of eco-design for products and services |
| Resources and devices: | <ul style="list-style-type: none"> ● Slides presentation ● Case studies ● Green Business Plan template |
| Assessment approach: | The assessment is designed to evaluate both understanding of innovation principles and the ability to apply them in real-world scenarios. It combines individual and group-based formative tools. |

| | |
|------------------------------------|---|
| <p>Skills/abilities developed:</p> | <ol style="list-style-type: none">1. Design Thinking and techniques to assess overall impact of products, how to innovate sustainably.2. Sustainable innovation in processes to enhance efficiency.3. Environmental impact assessment and eco-design4. Strategic planning for integrating sustainability into business models.5. Critical analysis of existing models to identify opportunities for innovation.6. Application of sustainability principles in business contexts. |
|------------------------------------|---|

Submodule 7.1

Product Innovation

→ **Skills:**

1. Product innovation
2. Design thinking
3. Sustainability

| |
|---|
| PRODUCT INNOVATION: DEVELOPING NEW PRODUCTS WITH SUSTAINABLE PRACTICES |
| Activity 1 - Sustainable Design: where to begin with? |
| Duration: 1.5 hour |
| Specific Learning Objectives <ol style="list-style-type: none">1. Product innovation2. Design Thinking3. Sustainability |
| Methodology, Resources and Devices Frontal learning, discussion. Tools: Slides |
| Description of the activity and Key Concepts The sub-module aims at delivering key competences needed to incorporate sustainability into product design stage. Product innovation: definition and examples Accounting sustainability at design stage: design thinking with the definition. Sustainability in product innovation: definition within the context. Example of product innovations, best practices for sustainability and lesson learnt. ESG is introduced as an example on how to measure, assess and communicate sustainability for companies. |
| Assessment Google Form: closed option questionnaire E.g.: Q1: The extension of a line of product can be considered a product innovation? Y/N Q2: Post launch evaluation is part of the product innovation process? Y/N Q3: ESG stems for Ecology Social Government? Y/N |
| Skills/Abilities developed |

- Product innovation
- Design thinking
- Sustainability

Further readings, activities, materials, best practices

None



Co-funded by
the European Union



GSMESKILL

Developing VET Entrepreneurial Green
Mindset and skills for Small-Business
Development





PRODUCT INNOVATION: DEVELOPING NEW PRODUCTS WITH SUSTAINABLE PRACTICES

Sub-module
7.1



7.1 Product Innovation

WHAT IS PRODUCT INNOVATION?

Product innovation is the process of creating a new product—or improving an existing one—to meet customers’ needs in a novel way.

3 types of product innovation:

- **Sustaining innovation**, in which a business consistently provides the highest quality products to its best customers
- **Low-end disruption**, in which an emerging company enters at the bottom of the market, providing a “good-enough” product with a low-profit model
- **New-market disruption**, in which an emerging company creates a new segment in an existing market and moves upmarket, gradually rendering the incumbent products obsolete



7.1 Product Innovation

The difference between the three types of innovation lies in their relationships to the existing market.

Low-end and **new-market disruption** are both types of disruptive innovation, meaning they're used by companies with fewer resources to challenge well-established businesses.

A sustaining innovation is one that targets the top of the market—that is, the people willing to pay the most—and directly competes with the incumbent products that own that segment. While a new entrant may have some success breaking into the top of an existing market, the incumbent business is likely to put up a fight.

When seeking innovation opportunities for your product, consider both types. Sustaining innovations will allow your business to stay relevant in its current market and continue delighting its top customers, while disruptive innovations will allow you to break into other markets or create a new market segment.

Product Innovation

7.1 Product Innovation



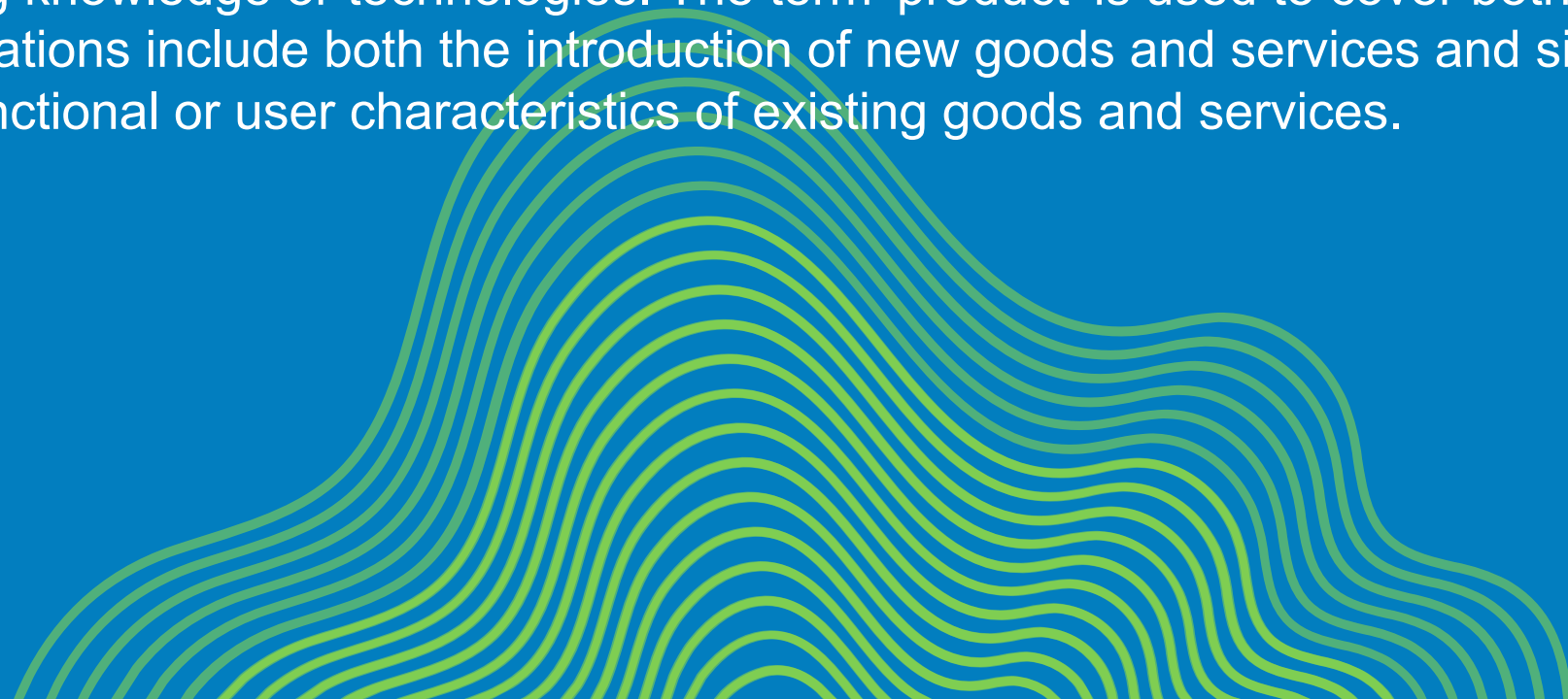


Product Innovation

7.1 Product Innovation

A product innovation is the introduction of a good or service that is new or significantly improved with respect to its characteristics or intended uses. This includes significant improvements in technical specifications, components and materials, incorporated software, user friendliness or other functional characteristics.

Product innovations can utilise new knowledge or technologies, or can be based on new uses or combinations of existing knowledge or technologies. The term 'product' is used to cover both goods and services. Product innovations include both the introduction of new goods and services and significant improvements in the functional or user characteristics of existing goods and services.





7.1 Product Innovation

The difference between the three types of innovation lies in their relationships to the existing market.

Low-end and **new-market disruption** are both types of disruptive innovation, meaning they're used by companies with fewer resources to challenge well-established businesses.

A sustaining innovation is one that targets the top of the market—that is, the people willing to pay the most—and directly competes with the incumbent products that own that segment. While a new entrant may have some success breaking into the top of an existing market, the incumbent business is likely to put up a fight.

When seeking innovation opportunities for your product, consider both types. Sustaining innovations will allow your business to stay relevant in its current market and continue delighting its top customers, while disruptive innovations will allow you to break into other markets or create a new market segment.



7.1 Product Innovation

PRODUCT INNOVATION PROCESS

- **Idea Generation:** The process begins with brainstorming and research to generate product innovation ideas. These ideas can stem from customer feedback, market trends, or technological advancements.
- **Concept Development:** The most viable concepts are then developed (product features, design, and market fit).
- **Prototyping:** Preliminary version of the product to test feasibility and functionality.
- **Testing and Feedback:** Often involving focus groups or pilot customers to identify any issues and gather feedback to refine the product.
- **Commercialization:** After successful testing, the product is ready for launch. Marketing strategies are developed to introduce the product to the market, and sales channels are prepared to meet demand.
- **Post-Launch Evaluation:** Gathering data on customer satisfaction and product performance, allowing companies to make necessary adjustments.



7.1 Design Thinking

DEFINITION

Design thinking is a non-linear, iterative process that teams use to understand users, challenge assumptions, redefine problems and create innovative solutions to prototype and test. It is most useful to tackle ill-defined or unknown problems and involves five phases: Empathize, Define, Ideate, Prototype and Test

Reference Design Institute



Product Innovation

7.1 DESIGN THINKING

DESIGN THINKING



Empathize

Understanding people



Ideate

Generating your ideas



Define

Figuring out the problem



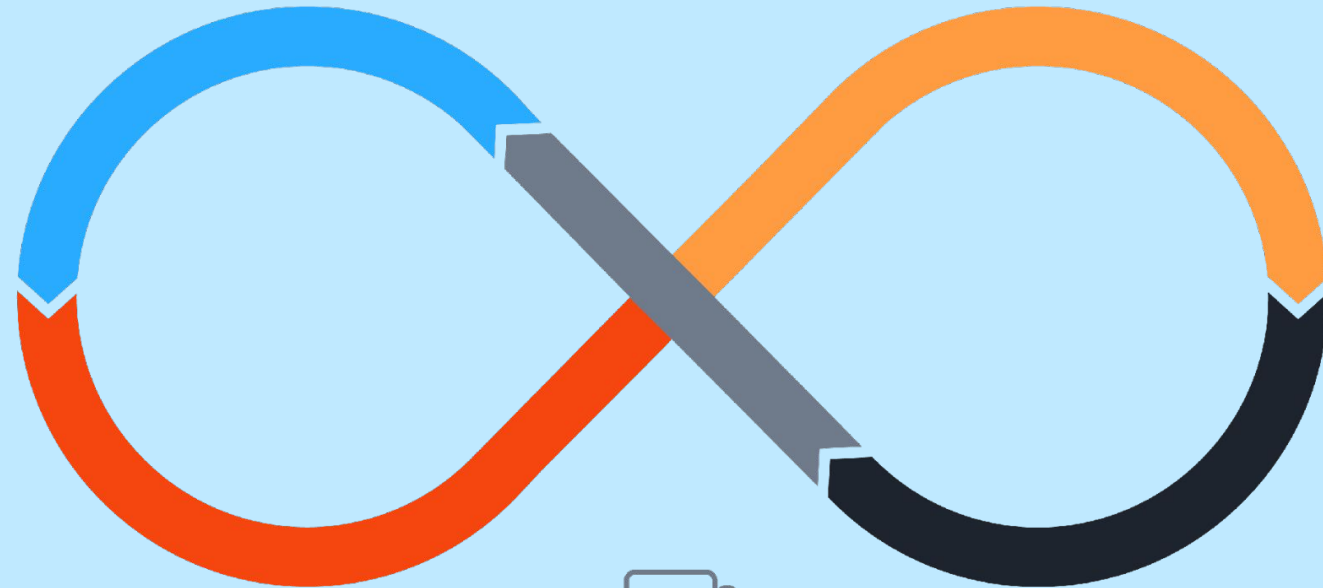
Test

Refining the product



Prototype

Creation and experimentation





7.1 Design Thinking

DEFINITION

Design thinking is a non-linear, iterative process that teams use to understand users, challenge assumptions, redefine problems and create innovative solutions to prototype and test. It is most useful to tackle ill-defined or unknown problems and involves five phases: Empathize, Define, Ideate, Prototype and Test

Reference Design Institute

Example of sustainable innovation in legacy product type

As circular economy grew in the EU context, a product innovation unveils:
Product as a service and related business model

examples: mobility (car, bikes, scooters), household electrodomestics (washing machines)

The innovation covers the revenue model and intruduces a pay per use modality, with little to no modification to the legacy products



7.1 Sustainability

DEFINITION by UN

First introduced by UN in 1987 Brundtland Commission

“meeting the needs of the present without compromising the ability of future generations to meet their own needs.”

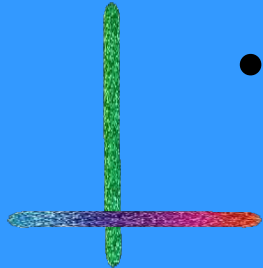
Reference UN



7.1 Sustainability

3 dimensions of sustainability

- **Social**
- **Environmental**
- **Economic**





7.1 Sustainability

NO SHARED AND UNIVOCAL DEFINITION FOR SUSTAINABILITY

Context matters: Currently relevant aspects that are shaping sustainability as a variable to be accounted in business practices:

climate change, climate crisis, over-consumption, environmental degradation, social awareness
Context creates the need for:

business activities and consumption patterns must align better with environmental and societal needs.

Business model redesign may be a key to radically improve sustainable performance to create greater environmental and social value while delivering economic sustainability, as suggested by Stubbs and Cocklin (2008), Porter and Kramer (2011), Yunus et al. (2010), and FORA (2010).

Reference: A value mapping tool for sustainable business modelling
Corporate Governance, Vol. 13 Iss: 5, pp.482 – 497 DOI: <http://dx.doi.org/10.1108/CG-06-2013-0078>
Bocken, Short, Rana, Evans



7.1 Sustainability

NO SHARED AND UNIVOCAL DEFINITION FOR SUSTAINABILITY

Context matters: Sustainability in Business

Sustainability in business refers to a company's strategy and actions to reduce adverse environmental and social impacts resulting from business operations in a particular market.

Reference: IBM



7.1 Sustainability

NO SHARED AND UNIVOCAL DEFINITION FOR SUSTAINABILITY

Context matters: Sustainability in Business

Examples of sustainability in business:

- *Improving energy management efficiency by using alternative power sources and carbon accounting.*
- *Reducing greenhouse gas (GHG) emissions, preserve water resources and eliminate waste.*

Reference: IBM



7.1 Sustainability

NO SHARED AND UNIVOCAL DEFINITION FOR SUSTAINABILITY

Context matters: Sustainability in Business

How to measure it? ESG

An organization's sustainability practices are typically analyzed against environmental, social and governance (ESG) metrics.

Reference: IBM

7.1 Sustainability



ENVIRONMENTAL

- Climate change
- Pollution
- Water and marine resources
- Biodiversity and ecosystems
- Resource use and circular economy



SOCIAL

- Own workforce
- Workers in the value chain
- Affected communities
- Consumers and end-users



GOVERNANCE

- Governance, risk management, and internal control
- Business conduct



Co-funded by
the European Union



THANK YOU

DISCLAIMER:

GSMESKILL PROJECT N. 101091883 FUNDED BY THE EUROPEAN UNION. VIEWS AND OPINIONS EXPRESSED ARE HOWEVER THOSE OF THE AUTHOR(S) ONLY AND DO NOT NECESSARILY REFLECT THOSE OF THE EUROPEAN UNION OR THE EUROPEAN EDUCATION AND CULTURE EXECUTIVE AGENCY (EACEA). NEITHER THE EUROPEAN UNION NOR EACEA CAN BE HELD RESPONSIBLE FOR THEM.



Submodule 7.2

Product Innovation

→ **Skills:**

1. Process innovation
2. Efficiency improvement
3. Sustainability

| |
|--|
| PROCESS INNOVATION: IMPROVING BUSINESS PROCESSES FOR SUSTAINABILITY |
| Activity 1 - Sustainable Process Innovation: From Efficiency to Circularity |
| Duration: 1.5 hour |
| Specific Learning Objectives <ol style="list-style-type: none">1. Process innovation2. Efficiency improvement3. Sustainability |
| Methodology, Resources and Devices Frontal learning, discussion. Slides |
| Description of the activity and Key Concepts <p>The sub-module aims at delivering key competences needed to incorporate sustainability and innovate business processes.</p> <p>Process innovation: definition and examples</p> <p>Following up on 'Product Innovation' sub-module, the training contextualizes sustainability into business processes and practices through:</p> <p>Definitions of: process, business processes, process innovation.</p> <p>The innovation of processes have been historically linked to the need to increase efficiency in terms of process inputs to decrease costs of productions while increasing productivity (investments in equipment allowed to reduce the cost of human labor).</p> <p>New variables have recently emerged and are becoming more and more significant, thus creating the need to innovate processes in a sustainable manner, accounting also for material efficiency (waste reduction, byproduct valorization), energy efficiency and circularity.</p> <p>Sustainability: reflecting on the previous sub-module definition of sustainability as a buzz-word, needing contextualization, sustainability in relation to business processes is presented.</p> |

Example of process innovations, best practices for sustainability and lesson learnt: LCA (Life cycle assessment) is introduced as a methodology to ensure processes and products are conceived through the full consideration of the entire life-cycle.

Assessment

Google Form: closed option questionnaire

E.g.:

Q1: The insertion of GPS in the parcel delivery system can be considered as a process innovation? **Y/N**

Q2: Is Service as a Product a sustainable business model? **Y/N**

Q3: Is the sole objective of sustainable business modelling the creation of social value? **Y/N**

Skills/Abilities developed

- **Understand and define** core concepts: process, process innovation, and sustainability.
- **Analyze** how sustainability impacts business processes.
- **Identify opportunities** for sustainable process innovation.
- **Apply basic Life Cycle Assessment (LCA)** to evaluate process sustainability.
- **Propose improvements** to business processes with sustainability in mind.
- **Reflect critically** on efficiency vs. sustainability trade-offs.
- **Communicate and justify** sustainable process changes to stakeholders.

Further readings, activities, materials, best practices

Materials below: Presentation "Titleofthepresentation"



Co-funded by
the European Union



GSMESKILL

Developing VET Entrepreneurial Green
Mindset and skills for Small-Business
Development





PROCESS INNOVATION: IMPROVING BUSINESS PROCESSES FOR SUSTAINABILITY

Sub-module
7.2



7.1 Process Innovation

A **process innovation** is the implementation of a new or significantly improved production or delivery method. This includes significant changes in techniques, equipment and/or software.

Process innovations can be intended to decrease unit costs of production or delivery, to increase quality, or to produce or deliver new or significantly improved products.

Process innovations include new or significantly improved methods for the creation and provision of services. They can involve significant changes in the equipment and software used in services-oriented firms or in the procedures or techniques that are employed to deliver services.

Examples are the introduction of GPS tracking devices for transport services, the implementation of a new reservation system in a travel agency, and the development of new techniques for managing projects in a consultancy firm.

Process innovations also cover new or significantly improved techniques, equipment and software in ancillary support activities, such as purchasing, accounting, computing and maintenance. The implementation of new or significantly improved information and communication technology (ICT) is a process innovation if it is intended to improve the efficiency and/or quality of an ancillary support activity.



7.1 Process Innovation

Process innovations can be intended to decrease unit costs of production or delivery, to increase quality, or to produce or deliver new or significantly improved products.

Process innovations include new or significantly improved methods for the creation and provision of services. They can involve significant changes in the equipment and software used in services-oriented firms or in the procedures or techniques that are employed to deliver services. Examples are the introduction of GPS tracking devices for transport services, the implementation of a new reservation system in a travel agency, and the development of new techniques for managing projects in a consultancy firm.

Process innovations also cover new or significantly improved techniques, equipment and software in ancillary support activities, such as purchasing, accounting, computing and maintenance. The implementation of new or significantly improved information and communication technology (ICT) is a process innovation if it is intended to improve the efficiency and/or quality of an ancillary support activity.

Reference European Commission



7.2 Process Innovation

Sustainable Business Models

Sustainable business models seek to go beyond delivering economic value and include a consideration of other forms of value for a broader range of stakeholders. They have been defined as business models that create competitive advantage through superior customer value while contributing to sustainable development of the company and society (Lüdeke-Freund, 2010). Stubbs and Cocklin (2008) assert that sustainable business models use both a systems and firm-level perspective, build on the triple bottom line approach to define the firm's purpose and measure performance, and include a wide range of stakeholders – in particular environment and society.

Reference: A value mapping tool for sustainable business modelling
Corporate Governance, Vol. 13 Iss: 5, pp.482 – 497 DOI: <http://dx.doi.org/10.1108/CG-06-2013-0078>
Bocken, Short, Rana, Evans



7.2 Process Innovation

Sustainable Business Models

Schaltegger *et al.* (2011) the objective in sustainable business modelling is therefore to identify solutions that allow firms to capture economic value, whilst generating environmental and social value, thereby establishing the business case for Sustainability



7.2 Process Innovation

Sustainable Business Models

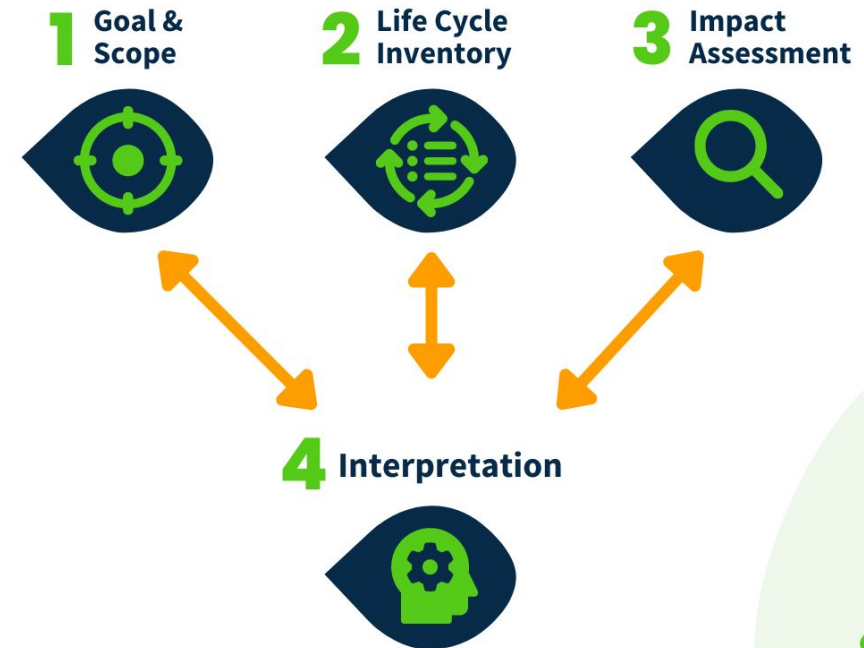
business model innovation offers a more holistic perspective that incorporates all three dimensions of sustainability (social, environmental and economic) within business planning.

7.2 Efficiency Improvement and Sustainability

Efficiency Improvement and Sustainability:
LCA Life Cycle Assessment

Life Cycle Assessment (LCA)
measures the environmental
impacts of a product or
service

- **4 phases of a Life Cycle Assessment (LCA)**



7.2 Efficiency Improvement and Sustainability

Efficiency Improvement: LCA

Life-cycle assessment (LCA) is a process of evaluating the effects that a product has on the environment over the entire period of its life thereby increasing resource-use efficiency and decreasing liabilities. It can be used to study the environmental impact of either a product or the function the product is designed to perform.

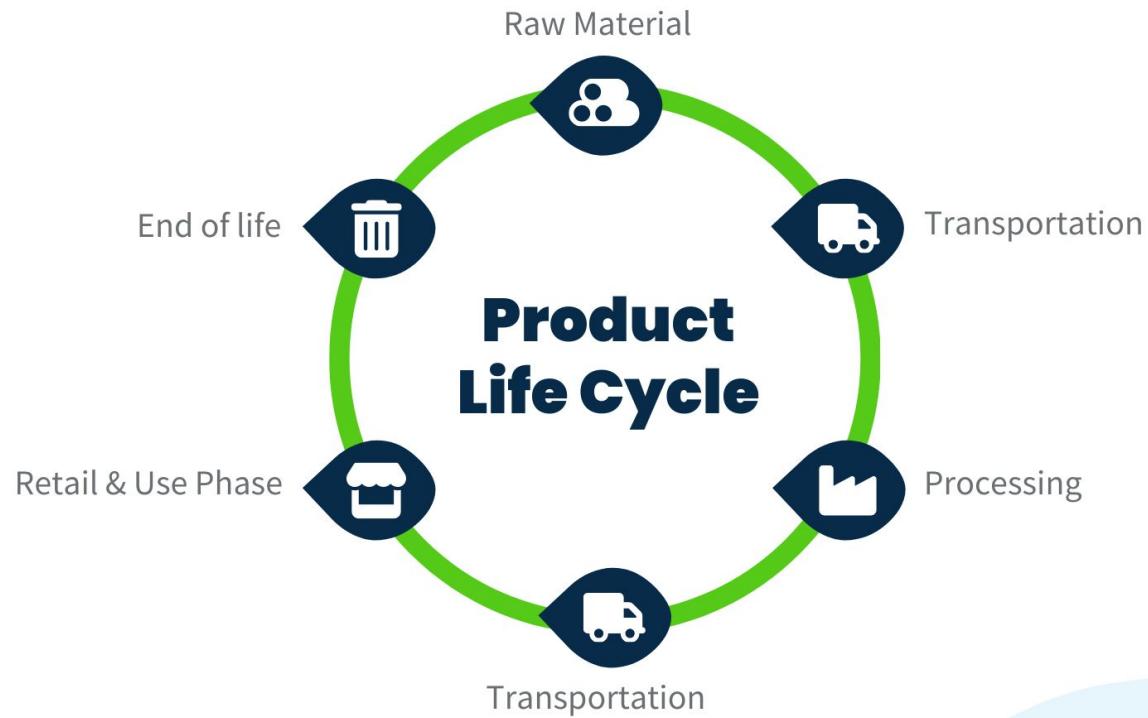
LCA is commonly referred to as a "cradle-to-grave" analysis.

LCA's key elements are:

- 1) identify and quantify the environmental loads involved; e.g. the energy and raw materials consumed, the emissions and wastes generated;
- 2) evaluate the potential environmental impacts of these loads;
- 3) assess the options available for reducing these environmental impacts

7.2 Efficiency Improvement and Sustainability

● Product Life Cycle





Co-funded by
the European Union



THANK YOU

DISCLAIMER:

GSMESKILL PROJECT N. 101091883 FUNDED BY THE EUROPEAN UNION. VIEWS AND OPINIONS EXPRESSED ARE HOWEVER THOSE OF THE AUTHOR(S) ONLY AND DO NOT NECESSARILY REFLECT THOSE OF THE EUROPEAN UNION OR THE EUROPEAN EDUCATION AND CULTURE EXECUTIVE AGENCY (EACEA). NEITHER THE EUROPEAN UNION NOR EACEA CAN BE HELD RESPONSIBLE FOR THEM.



Submodule 7.3

Business Model Innovation: Creating innovative and sustainable business models

→ **Skills:**

1. Business model innovation
2. Strategic thinking
3. Sustainability

| |
|---|
| Business Model Innovation: Creating innovative and sustainable business models |
| Activity 2 - Pathway to Business Model |
| Duration: 30' |
| Specific Learning Objectives <ol style="list-style-type: none">1. Understand the concept and importance of business model innovation in driving sustainability.2. Learn how to deconstruct and redesign business processes to align with eco-friendly and sustainable practices.3. Develop strategic thinking skills for integrating innovation into business operations.4. Explore how sustainability-focused innovation fosters competitiveness and profitability. |
| Methodology, Resources and Devices <p>Methodology: presentation, group discussions, case studies, and interactive brainstorming.</p> <p>Tools: power point presentation. Green Business Plan templates. Sustainable business case examples.</p> |
| Description of the activity and Key Concepts <ol style="list-style-type: none">1. Introduction to Business Model Innovation: begin with a brief presentation explaining what business model innovation is, focusing on its role in achieving sustainability and driving competitiveness in a rapidly changing market.2. Deconstruct and reimagine business models: use a collaborative exercise where learners analyze an example of a traditional business model and brainstorm ways to make it sustainable. Guide participants through steps to |

identify key opportunities for eco-innovation and improvements in processes, inputs, and value delivery.

3. **Interactive discussion:** facilitate a discussion on how sustainability-focused innovation can create new revenue streams, reduce environmental impact, and improve customer loyalty. Use real-world examples to illustrate concepts.
4. **Strategic application:** encourage learners to reflect on their own (or hypothetical) businesses, considering how they can integrate sustainable practices into their operations. Focus on eco-design, supply chain improvements, and customer engagement strategies.

Assessment

Multiple-choice quiz to evaluate understanding of business model innovation and its application.

Group presentation: each group presents their reimagined sustainable business model with actionable steps.

Skills/Abilities developed

- Learners gain the ability to analyse existing business models critically and identify areas for transformation through sustainable innovation.
- Participants build strategic planning skills by aligning environmental and social sustainability with long-term business goals.
- Learners deepen their understanding of sustainability principles and how they apply in business contexts, such as eco-design, circular economy, sustainable supply chains, and green marketing.

Further readings, activities, materials, best practices

European Commission. (n.d.). *Eco-innovation*. Green Business. Retrieved from https://green-business.ec.europa.eu/eco-innovation_en

Moncellato, A. (2015). *Tesla Motors: A business model innovation in the automotive industry*. LUISS Guido Carli University. Retrieved from <https://tesi.luiss.it/16605/1/659181.pdf>

<https://bigbangpartnership.co.uk/sustainable-business-model-innovation/#:~:text=The%20purpose%20of%20innovating%20a.and%20when%20making%20business%20decisions>



Co-funded by
the European Union

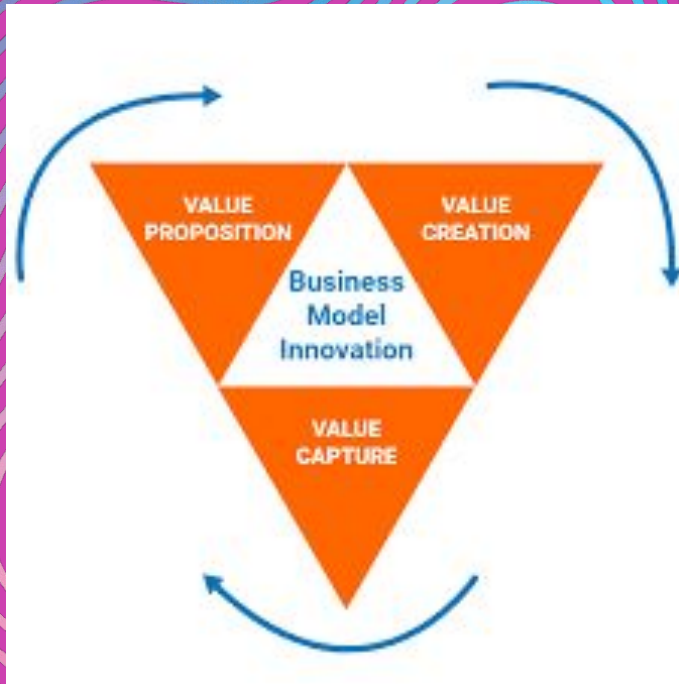


GSMESKILL

Developing VET Entrepreneurial Green
Mindset and skills for Small-Business
Development



BUSINESS MODEL INNOVATION




Business model innovation involves rethinking, adapting, or redefining the structure and essential components of a business model to offer new value propositions, capture emerging market opportunities, and achieve a competitive advantage. This process involves designing innovative approaches to generate revenue, deliver products or services, and maximize value creation and capture for customers.

Traditional business models are generally composed of several elements, including target customer segments, value propositions, distribution channels, revenue streams, key activities, resources, and cost structure. Business model innovation challenges the assumptions, norms, and established practices of the sector, opening up new opportunities to foster growth and enhance profitability.



INNOVATING FOR GROWTH & COMPETITIVENESS

Business model innovation is essential in today's dynamic and rapidly evolving business environment. It enables companies to adapt, remain relevant, and seize new opportunities, especially in the face of digital innovation, disruptive technologies, and changing customer expectations. A successful business model innovation can lead to improved competitiveness, increased market share, higher profitability, and sustainable growth. STEPS:

1. Introducing new methods of generating revenue, such as subscription-based models, freemium models, licensing, or pay-per-use.
 2. Developing innovative products, services, or features that offer unique benefits to customers and differentiate the company from competitors.
 3. Identifying opportunities for savings, optimizing resource allocation, or leveraging technological innovation to reduce costs and improve profitability.
 4. Discovering new channels or leveraging existing ones in innovative ways to reach customers more effectively and efficiently.
 5. Building platforms or ecosystems that connect various stakeholders and create value through network effects and collaborations.
 6. Completely reimagining the business model to adapt to changing market conditions, emerging trends, or disruptive innovation.
- 

IMPORTANCE OF BUSINESS MODEL INNOVATION

1/3



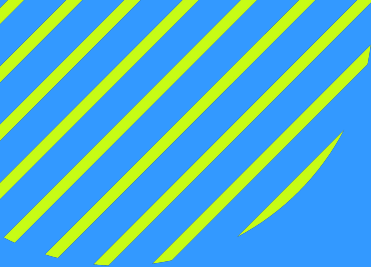


IMPORTANCE OF BUSINESS MODEL INNOVATION

2/3

Business model innovation drives competitiveness, adapts to market shifts, and fosters sustainable growth by enhancing customer value and optimizing operations.

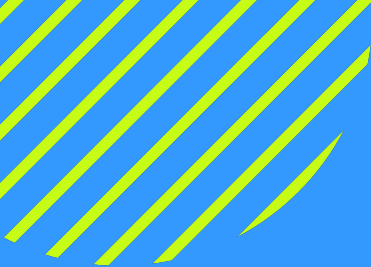
- **Competitive advantage:** it allows companies differentiate themselves, tap into new markets, and leverage emerging technologies to stay competitive.
- **Adaptation to Changing Environment:** business environments are subject to constant change. By innovating their business models, they can adapt to these changes, mitigate risks, and capitalize on emerging opportunities.
- **Revenue Growth:** effective business model innovation unlocks new revenue streams, expands markets, and captures greater customer value.
- **Operational Efficiency:** innovating business model components boosts efficiency by reducing costs, improving productivity, and enhancing performance through technology and optimized processes.



IMPORTANCE OF BUSINESS MODEL INNOVATION

3/3

- **Improved Customer Value:** through business model innovation, companies can elevate the value they deliver to customers. Understanding customer needs enables innovative solutions that drive loyalty.
- **Business Resilience:** innovative business models strengthen resilience against market disruptions and economic challenges by diversifying revenue streams, adopting alternative models, and creating robust ecosystems, ensuring long-term sustainability.
- **Organizational Renewal:** business model innovation cultivates a culture of creativity, adaptability, and continuous improvement, empowering employees to challenge norms and drive business evolution.
- **Attracting Investment and Partnerships:** innovative business models attract investors and partners by showcasing growth potential and a forward-thinking approach.



Business innovation isn't just about technology. It also includes new product development, service experience, employee culture, communications, business processes and much more.



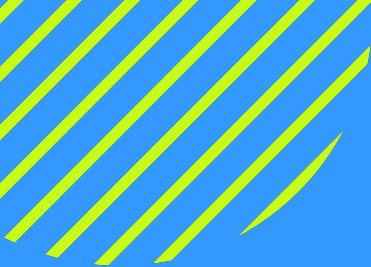
**SUSTAINABLE BUSINESS MODEL
INNOVATION**

SUSTAINABLE BUSINESS MODEL INNOVATION

Sustainable business model innovation means creating, or reimagining, a new and improved plan for making a profit whilst protecting people and the environment. It means challenging and innovating the products or services the business sells, its processes, collaborations and inputs such as energy, raw materials and supply chain set-up to achieve better, more sustainable outcomes, whilst making profit and delighting customers.

ECO-INNOVATION □ a business innovation that has the purpose of reducing or eliminating harm to the environment, or of helping to restore positive environmental conditions. Sustainable business model innovation includes using eco-innovation principles and protecting and supporting people.





HOW TO BUILD A SUSTAINABLE BUSINESS MODEL

STEP 1: DECONSTRUCT YOUR PRODUCTS AND SERVICES

- Deconstruct your products and services to spot ways in which you could improve them for better sustainability.
- Challenge yourself with the question: *“How might we redesign this product or service from scratch to achieve equal (or better) performance, and make it wholly sustainable?”*
- You might not achieve a solution that is 100% sustainable, but if the improvement is significant, it could still be worth making the changes.
- If you do make changes for improved sustainability, remember to test them and communicate them clearly to your target customers.
- Of course, you will also need to re-run your cost and pricing models, too, to make sure that you protect your profitability.

HOW TO BUILD A SUSTAINABLE BUSINESS MODEL

STEP 2: WALK THROUGH YOUR BUSINESS PROCESSES

- Focus on sustainable creation and distribution after optimizing products or services.
- Visualize business processes, identify inputs, and pinpoint unsustainable elements or waste generators for improvement.
- Tackle major inefficiencies while pursuing quick wins, such as reducing mileage, conserving water, or adopting green energy.
- Evaluate suppliers' sustainability practices, prioritize high-impact partnerships, and collaborate with or replace suppliers to align with sustainability goals.



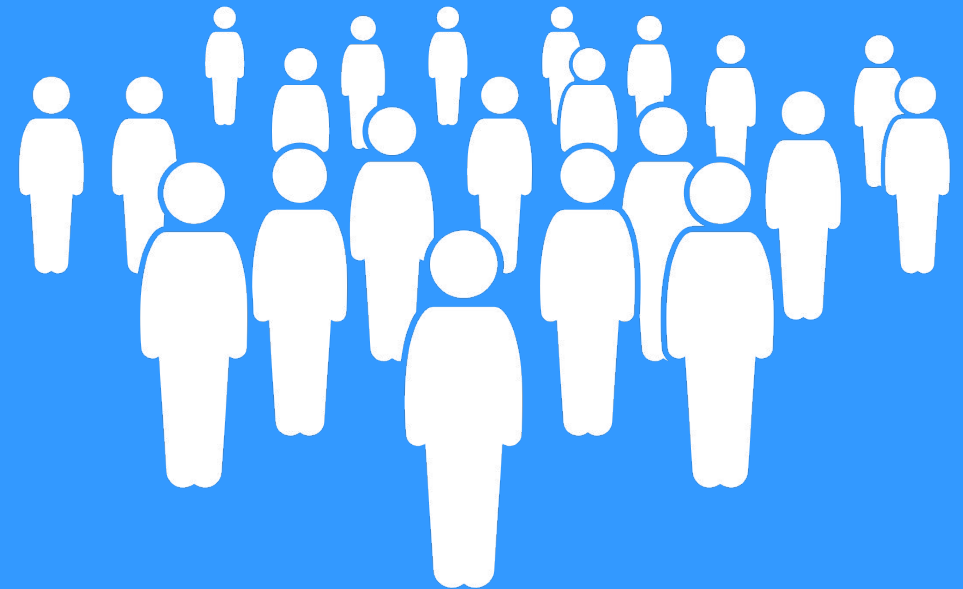
HOW TO BUILD A SUSTAINABLE BUSINESS MODEL

STEP 3: FOCUS ON PEOPLE

You've been involving your team throughout steps 1 and 2.

Step 3 shifts the focus directly to people—pinpointing the skills, resources, roles, training, and cultural elements essential to transforming your sustainable business model innovation into standard practice over time.

The transition requires individuals with the **right expertise** and **motivation** to drive change and establish new workflows. Providing **training** will be crucial to ensure they can effectively manage the new operational processes, leveraging their abilities while boosting their confidence and commitment to your updated business model.



HOW TO BUILD A SUSTAINABLE BUSINESS MODEL

STEP 4: USE DATA FOR CONTINUOUS IMPROVEMENT

Establish Key Performance Indicators (KPIs) upfront and use data to track your progress. Once you've embedded a layer of change, move to the next one. Adopt the mindset of achieving continuous sustainability improvement. Role model that mindset to your team.

- ❑ Set SMART KPIs and use tools to track progress effectively.
- ❑ Review and adjust KPIs regularly to align with evolving goals.
- ❑ Celebrate milestones to keep the team motivated.
- ❑ Lead by example to inspire commitment to sustainability.

| S Specific | M Measurable | A Attainable | R Realistic | T Time-bound |
|--|---|---|---|--|
| Do: Set real numbers with real deadlines. Don't: Say, "I want more visitors." | Do: Make sure your goal is trackable. Don't: Hide behind buzzwords like, "brand engagement," or, "social influence." | Do: Work towards a goal that is challenging, but possible. Don't: Try to take over the world in one night. | Do: Be honest with yourself- you know what you and your team are capable of. Don't: Forget any hurdles you may have to overcome. | Do: Give yourself a deadline. Don't: Keep pushing towards a goal you might hit, "some day." |



GREEN BUSINESS PLAN

Nowadays it is fundamental to include an environmental dimension to regular business plans scheme, in order to take into account and plan all those actions and characteristics that make a business environmentally-friendly and sustainable. That is why we want you to create a Green Business Plan (**GBP**), by adopting a necessary fresh new perspective on the traditional Business Plan model.

In contrast to a traditional plan, a GBP must take into account the social and environmental impact of the business, more specifically it must include:

1. considerations of the impact of the business on people;
2. considerations of the impact of the business on the planet;
3. how to make profit.

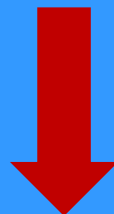
PREPARING THE CONTENTS OF THE GBP

Every section of the GBP should report the policies put in place to preserve, protect or improve the environment and to enhance social equity, in particular it becomes more and more valuable when it refers to the local environment and communities.

Be careful: while setting objectives and activities, you should also set methods and tools to register the progress you have decided to achieve. To do that, it's also important to define responsibilities, in order to guarantee an effective implementation.

Hereafter a description of the sections to be contained in your new GBP:

Deconstruct your products and services to spot ways in which you could improve them for better sustainability






1) EXECUTIVE SUMMARY – BUSINESS OVERVIEW

The executive summary of a business plan serves as a concise overview, capturing the essence of your business and its key attributes. It should introduce the business idea and concept in a way that piques interest, leaving room for further elaboration in subsequent sections. For a **green** business plan, particular emphasis should be placed on sustainability and the creation of social and environmental value.

Include a clear and impactful mission statement, followed by your main goals and objectives. The primary aim of this section is to grab the reader's attention. To achieve this, consider answering the following questions:

- ❑ What is fundamental to know about your business?
- ❑ What are your main strengths, skills and experience?
- ❑ What are your primary green concerns, and how do they shape your business vision?

 By addressing these questions, you create a strong foundation to captivate the audience and emphasize the unique value of your green business plan.

2) MISSION


It's important to clearly and consistently present the *core* idea of your business, emphasizing your commitment to environmental protection or the specific issue you aim to address. Consider using brainstorming sessions at this stage to generate and refine ideas. Organizing and clarifying the foundational aspects of your business not only strengthens your vision but also provides a solid framework to guide you through the implementation phase.



Mission Statement

[ˈmiːʃən ˈstɑːtmənt]

A description of a company's culture, values, or purpose for being.

 Investopedia

3) OBJECTIVES

1/2

The first major step in making your business more sustainable is to define SMART goals—**Specific, Measurable, Attainable, Relevant, and Time-bound**. These goals serve as a clear roadmap to align your vision with actionable steps. However, not all goals can be tackled simultaneously, so it's essential to select and prioritize the ones that are most realistic and impactful. Begin by listing at least three main objectives you aim to achieve within a specific timeframe.

Consider addressing the following key questions:

- ❑ What social and environmental changes do you hope to achieve?
- ❑ What challenges motivated you to pursue this direction, and how do you plan to solve them?
- ❑ Which urgent environmental issues can your business practically address?
- ❑ What environmental vulnerabilities can your business influence, and how will you minimize any potential negative impact?

Greening your business processes involves multiple dimensions—from ensuring the environmental sustainability of your raw materials to optimizing how your product reaches your customers. It also includes fostering decent work practices, creating healthy environments for staff, and building responsible relationships with partners. In this section, explain how these aspects align with your values and why they are critical for your business.

Finally, conduct a **green SWOT analysis**, identifying both conventional and sustainability-focused strengths, weaknesses, opportunities, and threats. This will provide a comprehensive view of how your business can maximize its positive impact while addressing potential risks.

Example □

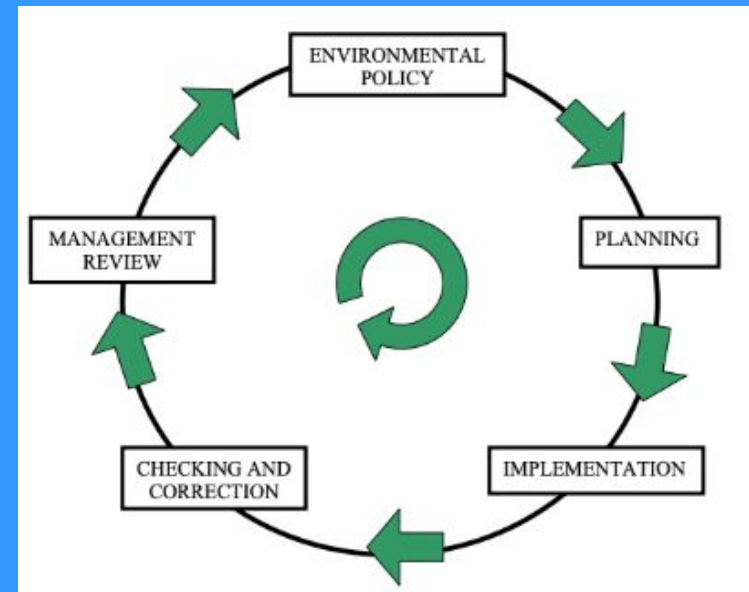
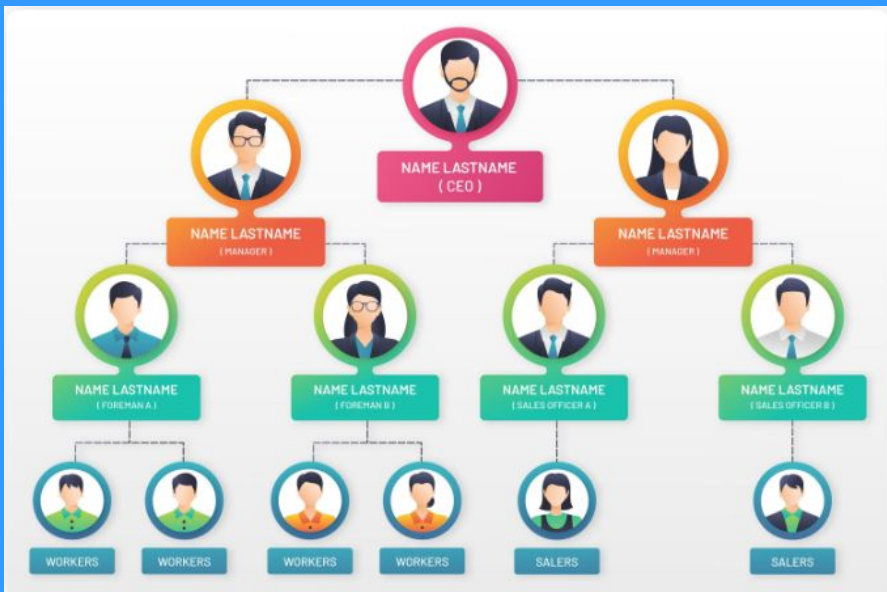
| STRENGTHS | | WEAKNESSES | |
|--|---|--|---|
| Conventional <ul style="list-style-type: none"> › High profit product › Add text here | Green <ul style="list-style-type: none"> › Material and energy efficient production process › Add text here | Conventional <ul style="list-style-type: none"> › Lack of skilled manpower › Add text here | Green <ul style="list-style-type: none"> › Lack of technical knowhow for producing eco friendly products › Add text here |
| OPPORTUNITIES | | THREATS | |
| Conventional <ul style="list-style-type: none"> › New market for this product › Add text here | Green <ul style="list-style-type: none"> › Big customer base for healthy and eco friendly products › Add text here | Conventional <ul style="list-style-type: none"> › Economical products available in market › Add text here | Green <ul style="list-style-type: none"> › Government aid for competitive products › Add text here |

4) ENTERPRISE STRUCTURE DESCRIPTION, ORGANIZATION, MANAGEMENT

1/2

Start by defining the structure of your business using the framework of *Who, What, Where, Why, and How*. Clearly identify the roles and responsibilities within your organization, highlighting the environmentally friendly and socially conscious elements of your operations.

Create and present an organizational chart to provide a visual representation of your business structure. To reinforce your commitment to sustainability, establish an Environmental Management System (EMS). This system will help you monitor, measure, and improve your environmental performance over time.



Next, outline the legal structure of your business, the location of your headquarters, and the geographical areas where your business will operate. Specify any digital spaces, such as e-commerce platforms or social media channels, that will support your activities. Recognize that the placement of your business plays a crucial role in its environmental and social impact.

Consider the following questions to shape your strategy:

- ❑ Where will your business activities take place, and which territories will be impacted by production, transportation, and sales?
- ❑ Is your business location well-connected by public transport to minimize CO2 emissions from travel?
- ❑ Is your business located in a disadvantaged area to promote social impact by employing people in fragile conditions and stimulating local economic development?
- ❑ Is your location close to your suppliers to reduce transport costs and emissions while fostering stronger connections and innovation?



5) DETAILED DESCRIPTION OF GOODS/SERVICES

1/2

When crafting these descriptions, focus on the green features that set your product or service apart from competitors. Highlight the sustainable benefits your offerings provide, emphasizing the eco-friendly aspects of their production or key characteristics.

Describe the Eco-Design process that underpins your products, explaining how sustainability is integrated into their lifecycle.

This could include:

- The potential for reusability or extended product life.
- Use of recycled or recyclable materials in production and packaging.
- Adoption of biodegradable or compostable materials to minimize waste.
- Emphasis on local distribution to reduce transportation emissions.
- Implementation of a cradle-to-cradle approach, ensuring products can be reused or safely returned to the environment after use.

Whenever possible, consider presenting this information numerically to demonstrate measurable impact, such as the percentage of recycled content, reduction in emissions, or energy savings achieved.



Craft a clear and compelling message for your customers that explains how their purchase supports the planet's wellness.

Address why your product or service is more sustainable compared to competitors, and how choosing your business contributes to a greener future.

By connecting your product's features to its environmental and social benefits, you can build trust and loyalty among eco-conscious consumers.





6) TARGET MARKET & MARKET ANALYSIS

1/2

To effectively position your business, start by conducting thorough research into the performance and trends of your industry. Examine the traditional benchmarks within your sector, the innovations that new enterprises are introducing, and the impact of relevant local, national, and international policies.

Understanding your target customers is crucial. Gather detailed demographic and psychographic data, such as gender, age, hobbies, education level, and whether they live in urban or rural areas. Consider their attitudes, values, and purchasing priorities.

Questions to guide your research include:

- ❑ What is the size of your target customer group?
- ❑ How much does this group typically spend on goods or services similar to yours?

Both quantitative and qualitative market research are essential to understanding the market you're entering. Analyze your competitors by studying market trends and the performance of products similar to yours. For example, determine how many units have been sold in a specific period within national or international markets to set realistic expectations for your business.

Complement this with qualitative research, focusing on the state of the green economy within your sector. Explore questions such as:

- Why do enterprises choose to enter or exit this market?
- What percentage of businesses in your sector are green enterprises?





7) MARKETING STRATEGY

1/2

Customers are increasingly conscious of the environmental and social impact of their purchases. Offering sustainable products or services not only aligns with their values but also enhances their buying experience, often making them willing to pay a premium for authentic green efforts.

To capitalize on this, businesses must genuinely embrace sustainability and develop a clear marketing strategy. This involves transparently communicating green initiatives, such as reducing waste, recycling, using eco-friendly suppliers, and investing in sustainability policies. Additionally, emphasize your ethical commitment to both the environment and the well-being of workers and communities affected by your operations.

Your marketing approach should go beyond traditional advertising. Focus on creating campaigns that double as environmental awareness initiatives, educating customers and adding value to their experience. Demonstrating your commitment to sustainability can foster trust, loyalty, and engagement.

In your **Green** Business Plan, explain how you will reach your target customers through innovative and diverse methods:

- Join green networks to connect with like-minded businesses and consumers.
- Build a compelling, user-friendly website offering “green promotions” or eco-friendly incentives.
- Launch targeted marketing campaigns and sponsor sustainability events to enhance visibility.
- Actively participate in local markets, fairs, or exhibitions, showcasing your products directly to customers.
- Partner with environmental and social associations in your area to strengthen your credibility and impact.
- Support green initiatives by making donations, organizing fundraising efforts, or collaborating on community-based projects.



8) SUPPLIERS

Staying true to your environmental ethics is essential, and consistency with your mission should guide every aspect of your business—including the selection of suppliers. Green procurement is key: prioritize fairtrade partners who uphold ethical practices, such as paying fair and livable wages to their employees. Your suppliers should align with your mission by being environmentally and socially responsible.

To ensure this alignment, establish clear criteria for evaluating suppliers:

- Prefer local suppliers to support your community and minimize transportation emissions.
- Choose suppliers actively and transparently working to reduce their environmental impact, such as lowering waste, CO₂, and GHG emissions, and preserving natural resources.
- Opt for bio-certified suppliers and products whenever possible.

Analyze your entire supply chain and partnerships to identify areas for improvement, whether in efficiency or carbon emissions, and take actionable steps to enhance sustainability across your operations.



9) FINANCIAL ANALYSIS

1/2

This section is crucial in any Business Plan and serves as a key reference for both founders and potential investors. It outlines the financial aspects of your business, including sales, revenues, costs, and expenses, while demonstrating how your business can achieve profitability in an economically and environmentally sustainable way.

Identify the key resources and most expensive activities for your business, showing how you can balance costs and profits. In a Green Business Plan (GBP), account for the unique costs and revenues associated with sustainability, such as initial investments in equipment, premises, or skills. While these green choices may increase upfront costs, they also open access to new markets and justify premium pricing for sustainable and ethical products or services.

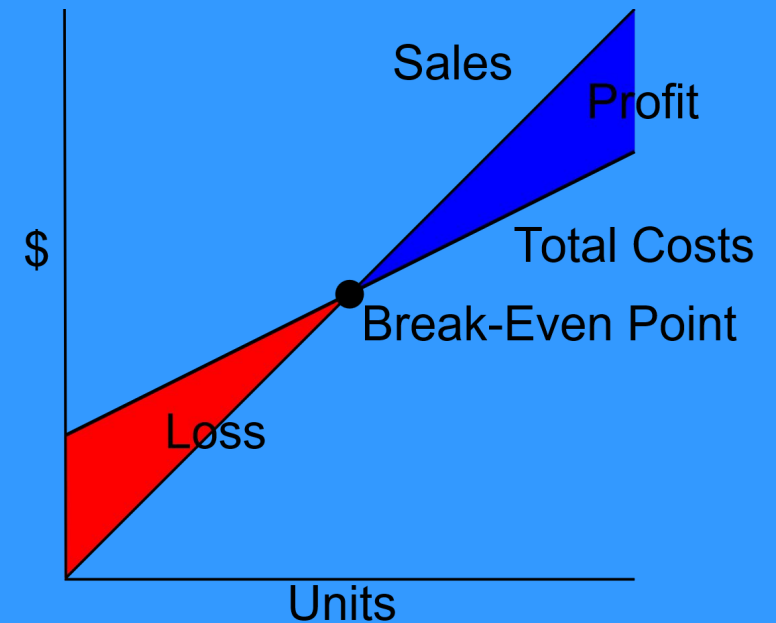
When planning for revenue, research clean energy tax credits and green incentives available locally, regionally, nationally, or through EU programs that support green and digital transitions. *Don't forget to include the costs of compensation measures for environmental impacts, if applicable.*

Your financial plan should project the future financial health of your venture. Start with a sales forecast for the next three years and create an expenses budget to determine what your sales will cost.

Support this with visual data, such as:

- Growth projection graphs.
- Cash flow, income, and balance sheet statements.
- BEP analysis* to show when your business will become profitable.

These elements will provide a clear, compelling picture of your business's financial viability and commitment to sustainability.



*BEP = Break Even Point

- Business model innovation is the foundation for integrating sustainability into your business, enabling adaptation to market demands and aligning with environmental and social values.
- A **Green** Business Plan extends this innovation by embedding eco-design, green procurement, and ethical practices into every aspect of your operations.
- Through strategic market research, clear financial planning, and impactful communication of your green values, you can balance profitability with sustainability.
- Your business becomes a driver of change—meeting customer demands for green solutions, contributing to environmental goals, and building a resilient, future-ready enterprise.
- This plan is more than a document; it's your pathway to sustainable success through innovative and responsible business practices.

KEY TAKEAWAYS



Co-funded by
the European Union



THANK YOU

DISCLAIMER:

GSMESKILL PROJECT N. 101091883 FUNDED BY THE EUROPEAN UNION. VIEWS AND OPINIONS EXPRESSED ARE HOWEVER THOSE OF THE AUTHOR(S) ONLY AND DO NOT NECESSARILY REFLECT THOSE OF THE EUROPEAN UNION OR THE EUROPEAN EDUCATION AND CULTURE EXECUTIVE AGENCY (EACEA). NEITHER THE EUROPEAN UNION NOR EACEA CAN BE HELD RESPONSIBLE FOR THEM.



Submodule 7.4

Green Design: Principles of eco-design for products and services

→ **Skills:**

1. Eco-design
2. Environmental impact assessment
3. Sustainable design

| |
|--|
| GREEN DESIGN: Principles of eco-design for products and services |
| Activity 1 - Sustainable by Design: Tools and Principles for Green Innovation |
| Duration: 1.5 hour |
| Specific Learning Objectives <ol style="list-style-type: none">1. Define green design and sustainable design principles.2. Explain the relevance of green design in the context of environmental and climate challenges.3. Understand how environmental impact assessment supports sustainable decision-making.4. Apply basic concepts of green design to innovate responsibly.5. Recognize the role of design in reducing environmental impacts across product lifecycles. |
| Methodology, Resources and Devices Frontal learning, discussion. Slides |
| Description of the activity and Key Concepts <p>The sub-module aims at delivering key competences to innovate via green design; as society gets more and more concerned with adverse climate phenomena, green design is gaining traction to mend the relationship between consumption and environment; Green Design is introduced with its principles. Environmental impact assessment is presented as a decision-making tool. Sustainable design is described and defined.</p> |
| Assessment <p>Google Form: closed option questionnaire Q1: The 3 R stem for Reflect + Reuse + Remanufacture? Y/N Q2: Is LCA in line with Green Design? Y/N Q3: Does Environmental Impact Assessment involve the process of identifying, predicting and evaluating potential environmental impacts of development proposals.? Y/N</p> |

Q4: Does sustainable design minimize negative impact on environment, society and economy? Y/N

Skills/Abilities developed

- Conceptual clarity on green and sustainable design.
- Ability to assess environmental impacts in design choices.
- Competence to integrate sustainability into innovation processes.
- Critical thinking about consumption, production, and environmental impact.
- Decision-making skills using environmental impact assessment as a tool.

Further readings, activities, materials, best practices

Paper: Green Innovation Design of Products under the Perspective of Sustainable Development - : Guo yi-fei 2017

<https://iopscience.iop.org/article/10.1088/1742-6596/51/1/012011/pdf>

Materials below: Presentation “..”



Co-funded by
the European Union



GSMESKILL

Developing VET Entrepreneurial Green
Mindset and skills for Small-Business
Development





GREEN DESIGN: Principles of eco-design for products and services

Sub-module
7.4



7.4 Innovation and Green Design

Growing societal concerns:

- pollution,
- environment degradation,
- over-exploitation of resources,
- unsustainable consumption and production patterns

Design and environmental protection: Green Design and innovation



7.4 Innovation and Green Design

Green design and innovation address the Growing societal concerns by connecting

ENVIRONMENTAL PROTECTION and DESIGN

Green Design: designing products that are environmentally friendly, ecologically friendly and have no social or moral issues



7.4 Green Design

GREEN PRODUCT DESIGN:

In terms of product design, green design is not only the principle of "3R" (reduce, recycle and reuse), but also to meet the green and healthy standards in many aspects of the product and prevent the environmental destruction and resource waste, such as product materials, functions, technology, quality, in addition to these aspects, the green design also pays more attention to the physical and psychological impacts of products on the users

Reference Guo yi-fei

7.4 Green Design

Green Design Objectives

- 1) increasing efficiency in the use of materials, energy and other resources
- 2) minimizing damage or pollution from the chosen materials
- 3) reducing to a minimum any long-term harm caused by use of the product
- 4) ensuring that the planned life of the product is most appropriate in environmental terms and that the product functions efficiently for its full life

12/08/09

Green Design

6



Green Design Principles

- Making full use of resources (renewable resource, avoid waste generation, think about end-of-life: apply LCA)
- Energy conservation (consume the fewest energy sources in the life-cycle and for the production process)
- Zero Pollution (consider how to avoid pollution, how to govern pollution: end of life and remedial measures)

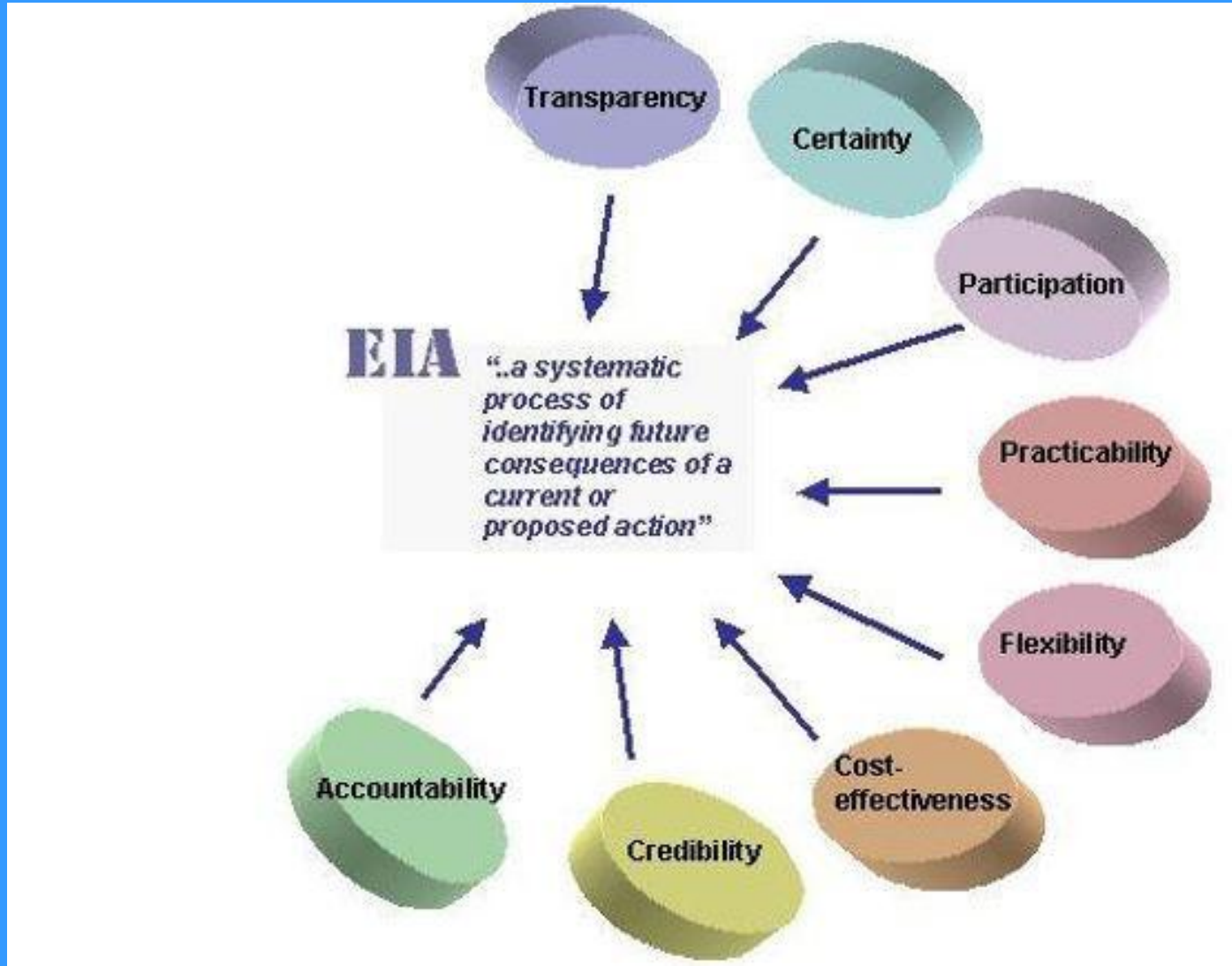


Green Design Principles

- Advanced Technology (exploit the best sustainable technology available)
- Best ecological and economic benefit (economic benefits created by the product, sustainable development and impact on environment, society and consumer behavior, assessing and accounting for benefit and costs for environment, ecology and society)

Reference Guo yi-fei

7.4 Environmental Impact Assessment





7.4 Environmental Impact Assessment

Environmental Impact Assessment

is a study of the effects (positive and negative) of a proposed action on the area in which the development is to be carried out. It also outlines mitigation measures necessary to reduce any negative impacts the activity may cause.



7.4 Environmental Impact Assessment

The environmental impact assessment (EIA) involves the process of identifying, predicting and evaluating potential environmental impacts of development proposals.

EIA is a technique and a process by which information about the interaction between a proposed development project and the environment is collected, analyzed, and interpreted to produce a report on potential impacts and to provide the basis for sound decision-making.

7.4 Environmental Impact Assessment

STAGES OF AN EIA

- 🔍 Screening
- 📏 Scoping
- 📊 Baseline Data
- 🎯 Impact Identification
- 📋 Assessment
- 🏗️ Mitigation
- 🔄 EIA Review

Are the assessment and the environmental statement

7.4 Environmental Impact Assessment



7.4 Sustainable Design



Sustainable Design

[sə-'stā-nə-bəl di-'zīn]

A design approach that seeks to minimize negative environmental, social, and economic impacts.

7.4 Sustainable Design





7.4 Sustainable Design

Sustainable design creates long-term solutions and helps societies ensure the well-being of their people and harmony with the environment.

A sustainably designed product or service is one that considers the entire lifecycle of the product during development, from manufacturing to disposal. A truly sustainable design is optimized for reuse.

Reference: Interaction Design Foundation - IxDF. (2023, March 16). What is Sustainable Design?. Interaction Design Foundation - IxDF.
<https://www.interaction-design.org/literature/topics/sustainable-design>



7.4 Sustainable Design

Sustainable design is the idea that sustainability should be built into the design phase of products, services and buildings. The objective is to reduce waste and improve the health and well-being of society.

Also called green design, environmentally conscious design or eco-design, sustainable design is intended to deliver long-term design solutions that reduce negative social and environmental impacts. A key driver of sustainable design is the sense of urgency in society to take action against accelerating climate change and protect the natural environment for future generations.

Reference: IBM



7.4 Sustainable Design

Sustainable design is the approach to creating products and services that have considered the environmental, social, and economic impacts from the initial phase through to the end of life

Reference: [MEDIUM.COM](https://medium.com)



Co-funded by
the European Union



THANK YOU

DISCLAIMER:

GSMESKILL PROJECT N. 101091883 FUNDED BY THE EUROPEAN UNION. VIEWS AND OPINIONS EXPRESSED ARE HOWEVER THOSE OF THE AUTHOR(S) ONLY AND DO NOT NECESSARILY REFLECT THOSE OF THE EUROPEAN UNION OR THE EUROPEAN EDUCATION AND CULTURE EXECUTIVE AGENCY (EACEA). NEITHER THE EUROPEAN UNION NOR EACEA CAN BE HELD RESPONSIBLE FOR THEM.

