



# Handbook to create green business ideas

## Module 2: Integration

A handbook for generating green business ideas  
is developed within the Young GREENTrepreneurs project

Project Reference : 2021-1-HU01-KA220-YOU-000029114  
Program Erasmus+ key action 2 Strategic Partnership



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# Integration

The development of a new product is the central driver of innovation in entrepreneurship. The development of a new product can be an independent and completely new venture, which is the central process of a start-up company or part of the development strategy of an existing company. In both cases, if we include the aspect of sustainability in the process, we will develop a green product.

This module is a part of an e-learning toolkit for green product development training. It is the second step in creating a so-called “green” product – the integration step. The goal of the whole toolkit is to formulate a green idea, develop a prototype and create a pitch deck. At the end of the toolkit you will have a product/service idea, some form of a prototype and a formulated pitch deck. This module is meant to be used as a part of the toolkit but can be used independently. The whole toolkit is meant to be used as a tool for organizing workshops, a supplementary teaching tool or for individual use. It is primarily meant for youth from 15 to 29 years old but can be used by anybody. It can be used for independent work or as a useful material for organizing workshops.

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<b>Lesson 1</b>	<b>Defining the value proposition for your idea</b>	<b>In lesson one we will take a look at the key elements of a business idea, introducing you to the most important concepts with the focus of the lesson being to develop the “Value proposition” of your idea</b>
<b>Lesson 2</b>	<b>Customers, Costs and Channels</b>	<b>We will explore three key questions: 1.) Who will buy your product or service? 2.) How much startup capital do you need? How will you reach customers? We will review several answers, e.g. customer profiling and lean manufacturing techniques etc.</b>
<b>Lesson 3</b>	<b>Realizing the idea</b>	<b>In lesson three the key activities and important resources required to bring a green business idea to fruition are defined.</b>
<b>Quiz</b>	<b>End of the module assessment.</b>	

# Introduction

In Module 1 the key learning outcome was to recognize that every product or service starts with an idea. The focus of module 2 is on taking that idea to the next level. There are 10 elements of a successful business idea which will be briefly introduced in the following three lessons. It is important to remember that a good business idea is constantly changing and evolving so each element is constantly updated and refined as you become more knowledgeable and confident in the feasibility of your idea.

## Lesson 1: Defining the “Value Proposition”

Perhaps the first thing that we need to be able to do with our idea is to be able to tell people what it is in a clear and simple way. This is known in marketing terms as “a value proposition”. In more technical terms as “a clear, simple statement of the benefits, both tangible and intangible, that the company will provide, along with the approximate price it will charge each customer segment for those benefits.”

There are several important things which we need to explore from this definition.

Firstly, there is the notion of “a clear simple statement” of the idea itself. In simple terms, can we describe the idea in a single paragraph? In Module 1 we used the example of the coffee pod.

Secondly, we need to identify the benefits which using the product will bring to the user. This is very important because it is the basis on which the idea will be adopted by its users (this is sometimes referred to as “Utility value”).

Thirdly, price is considered as a fundamental component of the product itself. We can produce the best product in the world but if it is not priced to meet the customers’ expectations then it will fail.

Lastly, the concept of customer segment is introduced. It is sometimes stated that no two customers are the same, it is generally accepted that we can group customers into distinct groups which share common characteristics. Doing this successfully can go a long way in determining the success of our venture.



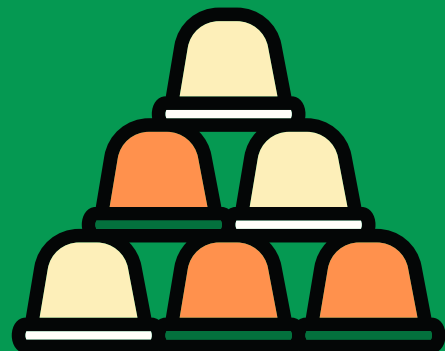
During the workshop, Nina and Tina came up with the solution of reusable coffee pods to address the waste that is generated from single-use coffee pods. The best way to start a green business is with an idea. Nina and Tina's next task was to figure out how to bring this idea to life. In other words, how could they make a feasible product and business. To do this they investigated the ten elements of a successful business idea.

So, what steps should Nina follow in creating her value proposition? She is full of drive, ideas, and the desire to create. At the same time, she also has considerable understanding of environmental issues and what we will do now is answer a series of simple but important questions which will clarify her idea into a more concrete proposal.

- 1. What is my product offering?**
- 2. What job does the customer buy my product to do?**
- 3. What companies and products compete with my product to do this job for the customer?**
- 4. What sets my product apart from those competitors?**

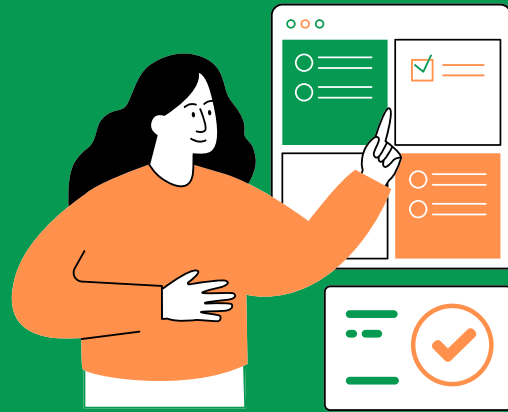
In the process of answering these 4 questions we will develop our knowledge of our idea, our knowledge of our competitors and our understanding of how the market into which we are entering actually functions.

The value of coffee pods is that they are a product of convenience for coffee drinkers. The value in Nina and Tina's idea is that their coffee pods would be reusable and therefore would reduce the amount of waste created from single-use coffee pods. By using reusable coffee pods, customers can significantly reduce their environmental impact and contribute to a more sustainable future.



Focusing on the idea of the coffee pod as a working example, their value to existing customers is the offering of convenience. The user simply inserts the plastic pod into a dispenser and presses a button and coffee appears. So, in answering question 1, we need to examine the notion of convenience and counter it with alternative “offers”. Two such offerings spring to mind, firstly the reusability of the coffee pods is front and center and secondly the offering of choice to the user is given as an additional incentive – why be constrained with the flavor of coffee determined by the producers of the coffee pods, why not use your own coffee?

Nina and Tina considered how the reusable coffee pods would be an initial investment but there is potential value in the long-term as the customer would only need to purchase coffee grounds. This also created additional value through how the customers could choose what blend and strength of coffee grounds to add to their reusable coffee pods.



Answering questions 2 and 3 “What job does the customer buy my product to do” and “What companies and products compete with my product to do this job for the customer? Need to be answered by undertaking some market and product research.

The market research that needs to be undertaken at this stage can be in the form of a simple questionnaire with a few simple questions; do you use coffee pods, which type, what do you consider the most attractive selling points and what price do you generally consider to be acceptable?

The product research on the other hand needs to be extensive. It would in the first instance involve an extensive internet search of coffee pod sellers followed by a trip to local supermarkets to document what types of pods are available for customers to buy. This research would also require the purchasing of at least one of each of the types of pods available.

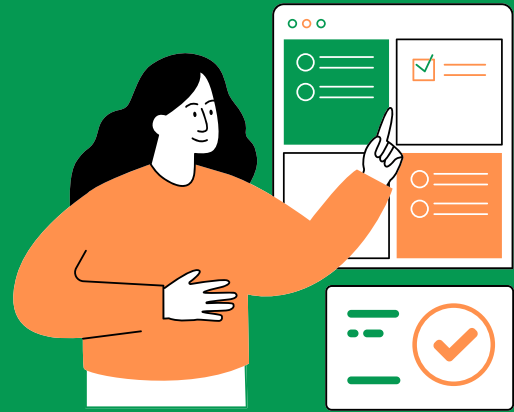
The final question is perhaps the hardest to answer and that is the “What sets my product apart from those competitors”? A good approach to this question is to compare our product with existing products and highlight any positive differences between them. These differences will take two forms: tangible and intangible.

Tangible differences are things which are physical and are part of the design and usage of the product.

Intangible differences are things which have to do with non-physical characteristics of the product. They relate to the way that the customer feels about the product and perceives its value. In our Coffee Pod example, the fact that the pod is being reused and not sent to landfill would be judged as a tangible benefit, we can count how many times the pod is reused and therefore judge that we saved that amount of coffee pods from being dumped. The good feeling that the customer gets from this fact would be classified as an intangible benefit.

In answering these questions, Nina found it valuable to use a Value Proposition Canvas. This is a great tool for keeping track of all of the ideas which kept flowing during her ongoing reading and research.

As a starting point, Nina kept reviewing the work that was completed during module one and made sure that the ideas and thoughts she had made during the completion of the empathy maps and the identification of pain points were not forgotten.



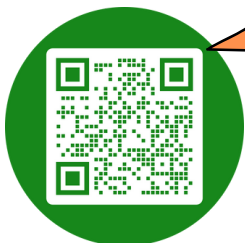
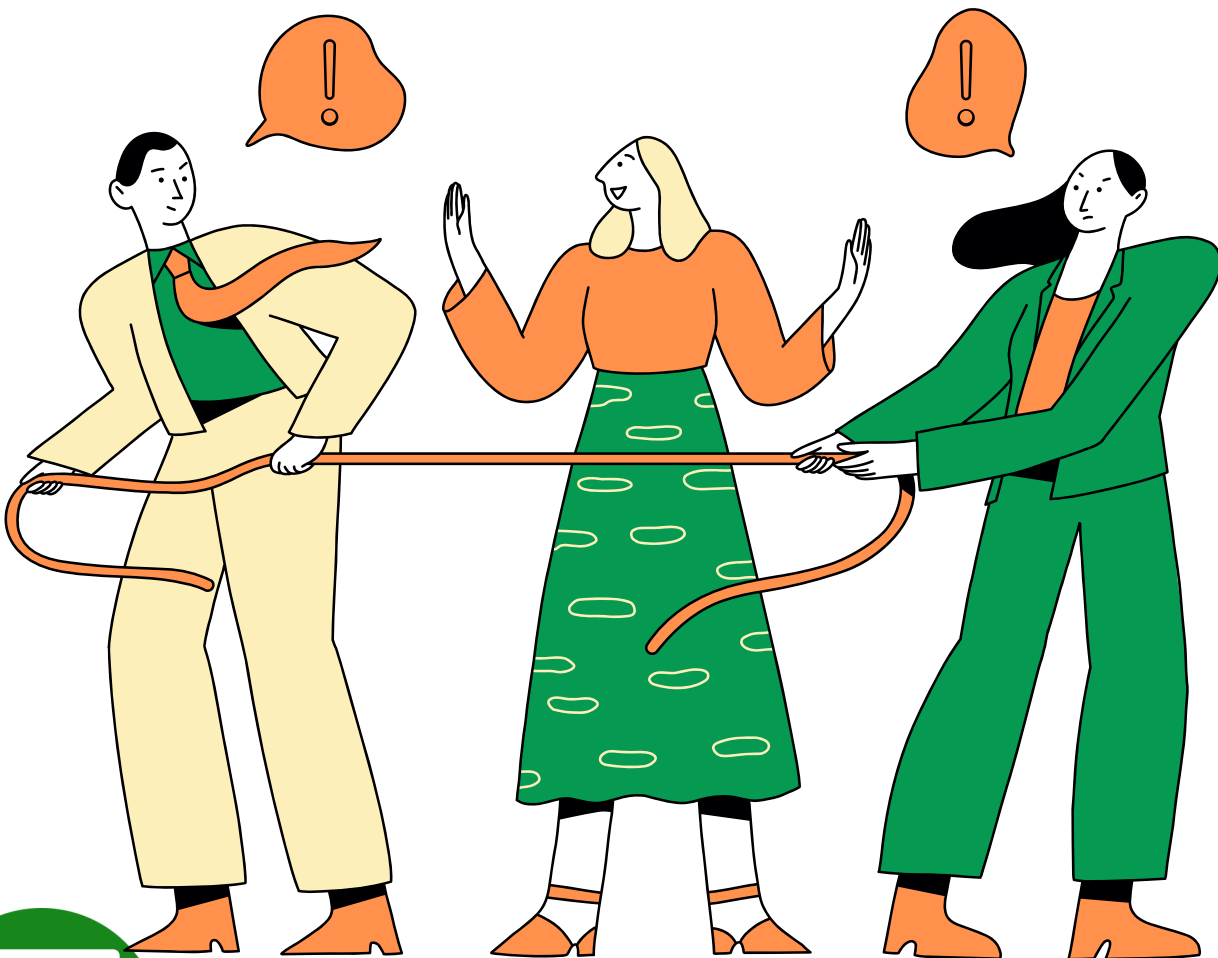
The last part of this lesson is perhaps the hardest. In answering the many small questions contained in this lesson we have made a great many small decisions which may have had a big impact on our mission. Therefore, it is important to take a little time to stand back from our work and review it with a critical eye. Are we staying true to our original vision? Have we drifted? If so, in what direction? Mission drift is not unusual but it can be detrimental to the success of a business. It is vitally important that we keep the idea small enough so that the burden of expectation doesn't make it seem overwhelming but big enough that we are excited to work on it and optimistic for its future.

## Lesson 2: Customers, Costs and Channels

A Lean Business Model is a simplified and streamlined approach to business planning that focuses on delivering value to customers while minimizing waste and maximizing efficiency. It is a framework for developing and testing business ideas quickly and iteratively.

The Lean Business Model is based on the Lean Startup methodology, which was popularized by **Eric Ries** in his book "**The Lean Startup**". It is designed to help entrepreneurs and businesses quickly test and validate their business ideas, gather customer feedback, and make adjustments as needed.

A lean business model has 9 points.



# The key components of a Lean Business Model include:

<b>1.) Value Proposition: The product or service that the business offers and the unique value it provides to customers.</b>	In the context of green business, a value proposition is a statement that explains the unique benefit that a company's products or services provide to customers, while also taking into consideration environmental sustainability. A strong green value proposition can help a company differentiate itself from its competitors and attract environmentally-conscious consumers.
<b>2.) Customer Segments: The target audience for the business and their specific needs and preferences.</b>	In green business, customer segments refer to specific groups of customers who share common characteristics and needs related to sustainability and environmental concerns. These customer segments are targeted by green businesses as potential consumers of environmentally-friendly products or services.
<b>3.) Channels: The methods the business will use to reach and engage with customers, such as social media, email marketing, or events.</b>	In a green business, channels might include online sales platforms, physical stores or markets, and partnerships with other sustainable businesses or organizations. It is important for a green business to carefully consider its channel strategy and choose channels that align with its values and mission.
<b>4.) Customer Relationships: The ways the business will interact with and serve its customers, such as through personalized service, self-service, or automation.</b>	In the context of a green business, customer relationship segments refer to the different ways in which a business can interact and build relationships with its customers in order to provide value and maintain their loyalty.

<p><b>5.) Revenue Streams: The ways the business will generate revenue, such as through product sales, subscription fees, or advertising.</b></p>	<p>In the context of green business, a value proposition is a statement that explains the unique benefit that a company offers through its products or services to customers, while also considering environmental sustainability. A strong green value proposition can help a company differentiate itself from the competition and attract environmentally conscious consumers.</p>
<p><b>6.) Key Activities: The most important tasks the business will need to perform to deliver value to customers, such as product development, marketing, or customer support.</b></p>	<p>Key activities in a green business refer to the essential tasks and operations that the business must undertake to create and deliver its products or services while maintaining its focus on sustainability and environmental impact.</p>
<p><b>7.) Key Resources: The resources, such as people, technology, or infrastructure, that the business will need to deliver its product or service.</b></p>	<p>In a green business, key resources are the assets that are necessary to create and deliver the product or service in a sustainable and environmentally responsible way. Overall, key resources for a green business are those that enable the business to operate sustainably and reduce its environmental impact, while also delivering value to customers and stakeholders.</p>
<p><b>8.) Key Partners: The other businesses or organizations the business will need to work with to deliver its product or service, such as suppliers, manufacturers, or distributors.</b></p>	<p>In a green business, key partners are those individuals or organizations that collaborate with the company to achieve its goals. These partners may be suppliers, manufacturers, distributors, or other businesses that share similar values and goals related to sustainability and environmental stewardship.</p>
<p><b>9.) Cost structure: CS refers to the types and relative proportions of fixed and variable costs incurred by a business.</b></p>	<p>Cost structure: CS refers to the types and relative proportions of fixed and variable costs incurred by a business. Overall, the cost structure of green businesses can be complex and require significant investment. However, adopting sustainable practices can also offer a range of benefits, including reduced operating costs, increased consumer loyalty, and improved environmental outcomes.</p>

# Additional examples

## 2. Customer Segments:

-Eco-conscious consumers: These are consumers who are highly aware of environmental issues and are willing to pay a premium for environmentally-friendly products. They may be interested in products that are made with sustainable materials, are energy-efficient, or have a low carbon footprint.

-Government agencies and municipalities: These are customers who are responsible for managing public infrastructure and services. They may be interested in products or services that help them reduce their carbon footprint, conserve energy, or promote sustainable practices.

-Businesses and corporations: These are customers who are interested in reducing their environmental impact and promoting sustainability within their organization. They may be interested in products or services that help them reduce their energy consumption, promote recycling, or reduce waste.

-Non-profit organizations: These are customers who are focused on environmental issues and may be interested in products or services that support their mission. They may be interested in products that are made with sustainable materials or services that help them reduce their carbon footprint.

-Education and research institutions: These are customers who are interested in promoting sustainability and environmental education. They may be interested in products or services that support their educational mission, such as energy-efficient equipment or sustainable building materials.

## 4. Customer Relationships:

-Personalized service: This involves tailoring products and services to meet the specific needs and preferences of individual customers.

-Education and communication: Green businesses often need to educate their customers about the environmental benefits of their products or services. This can be done through various channels, such as social media, email newsletters, or in-store signage.

-Community building: Creating a sense of community around a green business can be an effective way to build relationships with customers. This can be done through events, social media groups, or other initiatives that bring customers together around a shared interest in sustainability.

-Feedback and support: Providing customers with easy ways to give feedback and get support can help build trust and loyalty. This can be done through customer service channels such as email, chat, or phone, or through online forums or social media groups.

# Additional examples

## 5. Revenue Streams:

-Product sales: This includes revenue generated from the sale of sustainable products such as organic food, energy-efficient appliances, and eco-friendly clothing.

-Service sales: This includes revenue generated from the sale of sustainable services such as energy audits, green consulting, and sustainable design.

-Licensing or franchising: green businesses can generate revenue by licensing or franchising their sustainable products or services to other companies.

-Carbon offset sales: Companies can generate revenue by selling carbon credits to businesses or individuals who want to offset their carbon footprint.

-Green energy production: Companies that produce green energy, such as solar or wind power, can generate revenue by selling that energy to customers or utilities.

-Recycling or waste management: Companies that provide recycling or waste management services can generate revenue by charging fees for their services or by selling recycled materials.

-Grants or subsidies: green businesses can also generate revenue through grants or subsidies from government programs or foundations that support sustainable initiatives.

## 7. Key Resources:

-Renewable energy sources: Green businesses may rely on renewable energy sources such as solar, wind, or hydropower to power their operations.

-Sustainable materials: Green businesses may use sustainable materials in their products or packaging, such as recycled paper, bioplastics, or organic cotton.

-Eco-friendly technologies: Green businesses may invest in eco-friendly technologies such as electric vehicles or energy-efficient appliances to reduce their carbon footprint.

-Green certifications: Some green businesses may obtain green certifications such as LEED (Leadership in Energy and Environmental Design) or B Corp certification to demonstrate their commitment to sustainability.

-Skilled labor force: A green business may require a skilled labor force that is trained in sustainable practices and technologies.

-Strategic partnerships: Key resources for a green business may also include strategic partnerships with other businesses, organizations, or government agencies that share their environmental values and can provide resources or support for sustainability initiatives.

# Additional examples

## 9. Cost structure

*-Research and development:* Developing sustainable products and processes can require significant investment in research and development. This can involve conducting environmental impact assessments, testing new materials and technologies, and developing new production methods.

*-Upfront costs:* Many sustainability initiatives, such as installing renewable energy systems or upgrading to energy-efficient equipment, require significant upfront investment. While these investments can often pay off over the long-term through reduced operating costs, they can be a barrier for businesses with limited resources.

*-Operational costs:* Adopting sustainable practices often requires ongoing operational costs, such as investing in renewable energy sources, maintaining green infrastructure, and implementing waste reduction programs.

*-Regulatory compliance:* Many businesses need to comply with environmental regulations, which can require significant investment in monitoring, reporting, and mitigation measures. This can include costs associated with pollution control, waste management, and carbon emissions reporting.

*-Marketing and branding:* Promoting sustainable products and services can require investment in marketing and branding efforts to differentiate the business from competitors and appeal to eco-conscious consumers.

*-Employee training:* Implementing sustainability initiatives often requires employee training to ensure that staff are equipped with the knowledge and skills to operate new equipment and processes.

The Lean Business Model is a flexible and adaptable framework that can be modified and refined as the business grows and evolves. It encourages businesses to focus on delivering value to customers, while minimizing waste and maximizing efficiency, which can help them stay competitive and succeed in a rapidly changing market.



To include green business ideas in a Lean Business Model, consider how product or service can address environmental challenges, identify customers interested in sustainability, use digital channels to promote your ideas, build strong relationships with customers, explore new revenue streams aligned with sustainability, focus on sustainable activities and resources, and partner with environmentally responsible businesses. By doing this, you can create a sustainable and efficient business that meets the needs of customers while minimizing waste and maximizing efficiency.

Creating a Lean and Green Business System involves integrating lean manufacturing principles with sustainable practices to create a more efficient and environmentally friendly business. The goal is to reduce waste, minimize the use of natural resources, and minimize environmental impacts while maximizing profitability and customer value.

Luka-the mentor explains the lean model to Nina and Tina in a simple way: he has explained it is a method of running a business that focuses on efficiency and reducing waste. The goal is to deliver value to customers while minimizing costs and maximizing resources. This involves identifying the most important activities that contribute to the value of the product or service, eliminating activities that don't add value, and continuously improving the process. The lean model is about doing more with less, which allows the business to be more flexible, responsive to changes, and sustainable in the long run.

Nina and Tina created a lean business model to turn their reusable coffee pod idea into a profitable venture. They identified their target audience, primary and secondary markets, and value proposition. They also considered their key activities, resources, revenue streams, and partners. To keep costs low, they planned to streamline operations and minimize overheads. With their business model in place, they felt confident in their ability to succeed and bring their product to market.



# PDCA methodology

The PDCA methodology is a cyclical process, meaning that it is intended to repeat itself continuously, with each cycle building on the previous one. This helps organizations to continuously improve their processes, products and services and adapt to changing circumstances and customer needs.

By combining the Lean Business Concept and the PDCA method, companies can continuously improve their processes, reduce waste and increase efficiency. This can lead to cost savings, improved customer satisfaction and a more sustainable business model.

<b>Plan:</b>	<b>This stage involves identifying the problem or opportunity for improvement, setting goals and objectives, and developing a plan for how to achieve those goals. This may involve gathering data, conducting research, and identifying resources needed.</b>
<b>Do:</b>	<b>In this stage, the plan is put into action. This may involve implementing new processes, procedures, or systems, or testing a new product or service.</b>
<b>Check:</b>	<b>In this stage, the plan is put into action. This may involve implementing new processes, procedures, or systems, or testing a new product or service.</b>
<b>Act:</b>	<b>Based on the results of the "Check" stage, this stage involves making any necessary adjustments or improvements to the plan and the process, and implementing them. This may involve repeating the cycle with a new plan, or refining the existing plan and continuing with further improvements.</b>

The PDCA methodology is a cyclical process, meaning that it is meant to be repeated continuously, with each cycle building on the previous one. This helps organizations to continuously improve their processes, products, and services, and to adapt to changing circumstances and customer needs.

By combining Lean Business and PDCA, companies can continuously improve their processes, reduce waste, and increase efficiency. This can result in cost savings, improved customer satisfaction, and a more sustainable business model.



Nina and Tina can use the PDCA (Plan-Do-Check-Act) cycle to continuously improve their business operations. They can use Plan to identify goals, develop a plan, and create a marketing strategy. Do to put the plan into action, check to monitor progress and gather feedback, and Act to make necessary improvements. PDCA can help them stay ahead of the competition, identify new opportunities, and achieve continuous improvement and success in their business.



Luka-mentor can play a role in guiding Nina and Tina through the PDCA cycle and providing them with valuable advice and feedback on their business operations. As a mentor, Luka can help them identify areas for improvement, provide guidance on how to achieve their goals, and offer insights on new opportunities for their business. By working with Luka, Nina and Tina can gain the knowledge and expertise needed to succeed and continuously improve their business.



## Lesson 3: Realizing the idea

Implementing a lean business model is an effective way for green small businesses to improve their operations and increase efficiency while also reducing their environmental impact. After implementing a lean business model, small businesses can focus on several key activities to continuously improve their operations and increase efficiency.

Continuous improvement is a crucial activity for green small businesses as it helps them identify areas for improvement and test new ideas through small-scale experiments. By regularly reviewing and analyzing data, small businesses can identify areas for improvement in their processes, products, and services, and implement new improvements to address them.

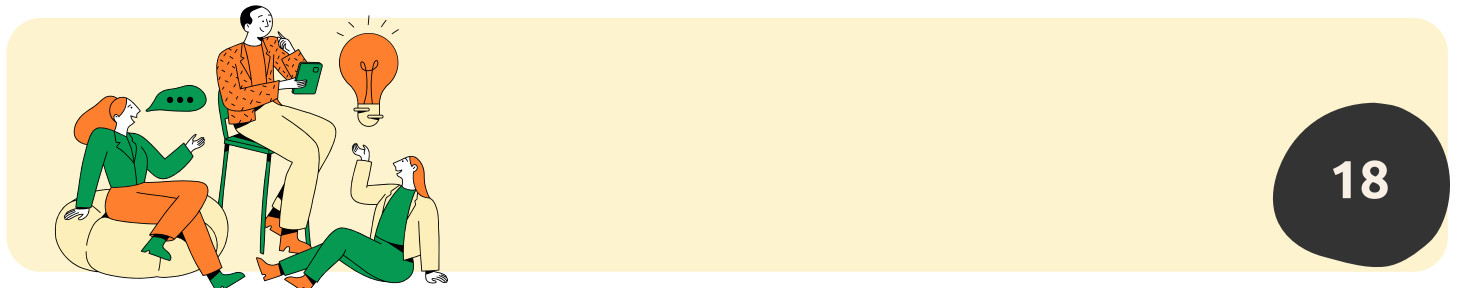
Training and development is another key activity that small businesses should invest in. By providing training in new technologies, problem-solving techniques, and teamwork skills, small businesses can improve the skills and knowledge of their employees, who are essential to the success of the business.

Standardization is also important for green small businesses, as lean business models rely on standardization of processes to eliminate waste and increase efficiency. Small businesses should focus on standardizing processes across different departments and locations to ensure consistent performance and quality.

Customer focus is another important activity for green small businesses, as lean business models prioritize the needs and preferences of the customer. Small businesses should continuously gather feedback from customers to improve their products and services. This can involve conducting surveys, focus groups, or one-on-one interviews to understand customer needs and preferences.

Finally, supplier relationships are crucial for green small businesses, as lean business models rely on strong relationships with suppliers to ensure a reliable supply chain. Small businesses should focus on building strong relationships with suppliers and working collaboratively to identify areas for improvement in the supply chain.

By focusing on these key activities, green small businesses can continue to improve their operations and increase efficiency while also delivering value to their customers and stakeholders.





# Quiz

## Elements of a good business idea.

Congratulations, you have reached the end of the second module and are once again one step closer to developing your own green product. Hopefully this module helped you to come up with and refine your idea. If you've asked yourself some tough questions and answered them honestly, there's a good chance you've successfully determined the value of your idea and identified actual customers, costs and channels. You have also identified the key activities needed to implement the green business idea. You are now ready to further validate your product, but before you continue, stay a little longer.

There is a 10-question quiz in front of you, which will allow you to check how much knowledge you have acquired.

### 1.) What does module 2 focus on in creating a "green" product?

- a) Idea generation.
- b) Prototype development.
- c) Integration.
- d) Creating a pitch deck.

### 2.) What is the value proposition?

- a) Description of the benefits to be provided by the company, as well as the approximate price to be charged for the benefits to each customer segment.
- b) The clear, simple formulation of the idea itself.
- c) Listing the characteristics of the product or service.
- d) Description of the company's vision and mission.

### 3.) What are the 4 questions Nina needs to answer when creating her value proposition?

- a) What product do I offer, what task does the customer buy my product for, what companies and products compete with my product to perform this task for the customer, and what differentiates my product from the competition?
- b) What is my target market, what is the price, what are the product features and what is the marketing strategy?
- c) What are the unique selling points of my product, what is the customer demand, what is the production cost, and what is the profit margin?
- d) What is the brand name, what is the product category, what is the distribution channel, and what is the sales forecast?

**4.) What is the main advantage of using coffee capsules?**

- a) Environmental sustainability.
- b) Affordability of the price.
- c) Convenience.
- d) Quality and taste.

**5.) What is the first thing we should do when creating a value proposition?**

- a) Identification of the target market.
- b) List the characteristics of the product.
- c) Write the idea in a clear and simple way.
- d) Determine the pricing strategy.

**6.) Why is it important to define the benefits of the product in the value proposition?**

- a) It helps to define the target market.
- b) Users accept the idea based on this.
- c) It helps in determining the pricing strategy.
- d) It helps to define the sales channel.

**7.) What is the definition of customer segment?**

- a) A group of customers who have common characteristics.
- b) An individual customer who purchases the product or service.
- c) The total number of customers who purchased the product or service.
- d) A group of customers who are loyal to the brand.

**8.) What type of research should be done to answer the question "What companies and products compete with my product to do this job for the customer?"**

- a) Market research.
- b) Product range analysis.
- c) Market research and product range analysis.
- d) Consumer habits research.



**9.) What are the tangible differences between the products?**

- a) Physical characteristics and design.
- b) Brand awareness and reputation.
- c) Emotional appeal and customer loyalty.
- d) Marketing strategy and sales channels.

**10.) What is the purpose of the green product development toolkit?**

- a) Prototype creation.
- b) Formulation of the pitch deck.
- c) Development of a green idea.
- d) All of the above.



Correct answers: c; 2.) a; 3.) a; 4.) c; 5.) c; 6.) b; 7.) a; 8.)c; 9.) a; 10.) d

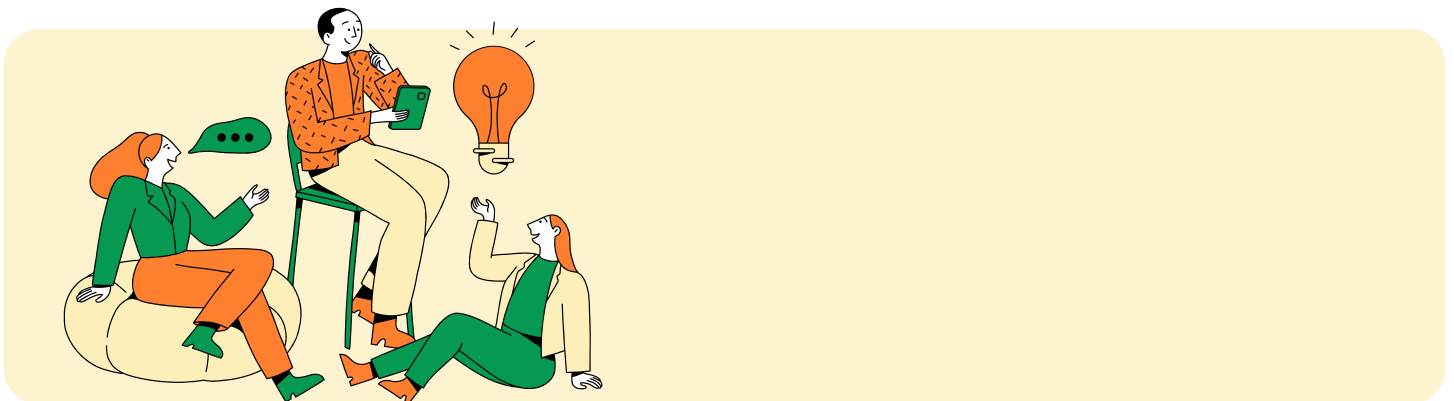
## Conclusion

It is important to approach the development of a business idea or product with a flexible mindset, as the process may not always be linear. Feedback from the environment or feasibility issues may require revisiting previous stages of development. Therefore, it is crucial to frequently test and iterate ideas to build upon them.

One approach to developing a successful business idea is to use a lean strategy. In module one, we conducted research and found an idea in the form of a product or service. In module two, we will take this idea and conduct a pre-test before creating a prototype.

Before investing resources in a prototype, it is necessary to research the market to ensure the idea is viable. This includes checking if similar products are available, conducting a small market research to gauge interest, and estimating costs and market value. This phase of the toolkit is known as integration, and it plays a critical role in determining the success of the business idea.

By utilizing a lean strategy and approaching the development process with flexibility, businesses can increase their chances of creating a viable product or service that meets the needs of their target market.



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