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#### INTRODUCTION

In this video, you will be introduced to innovation management, the role it has in the development of circular economy businesses, and the benefits of managing innovation. You will also learn about different types of innovation, strategies you can use to implement them in your business, and about the PDCA cycle.





### **EXPECTED LEARNING OUTCOMES**

KNOWLEDGE	<ul> <li>Knowledge of the role of innovation management in setting up/developing a circular economy business</li> <li>Knowledge of different types of innovation</li> <li>Knowledge of the PDCA cycle and iterative models in a circular economy context</li> </ul>
SKILLS	<ul> <li>Discuss the importance of managing innovation to achieve closed loop businesses</li> <li>Define and discuss the different types of innovation and identify the most appropriate to your own business or business idea</li> <li>Describe the principles, steps and application of the PDCA process to life cycle management for sustainable circular businesses</li> </ul>
ATTITUDES	<ul> <li>Recognise the role of innovative management in achieving change and responding to the green economy</li> <li>Open to undertaking different types of innovation</li> <li>Willingness to implement a continuous improvement cycle to improve their management of innovation</li> </ul>

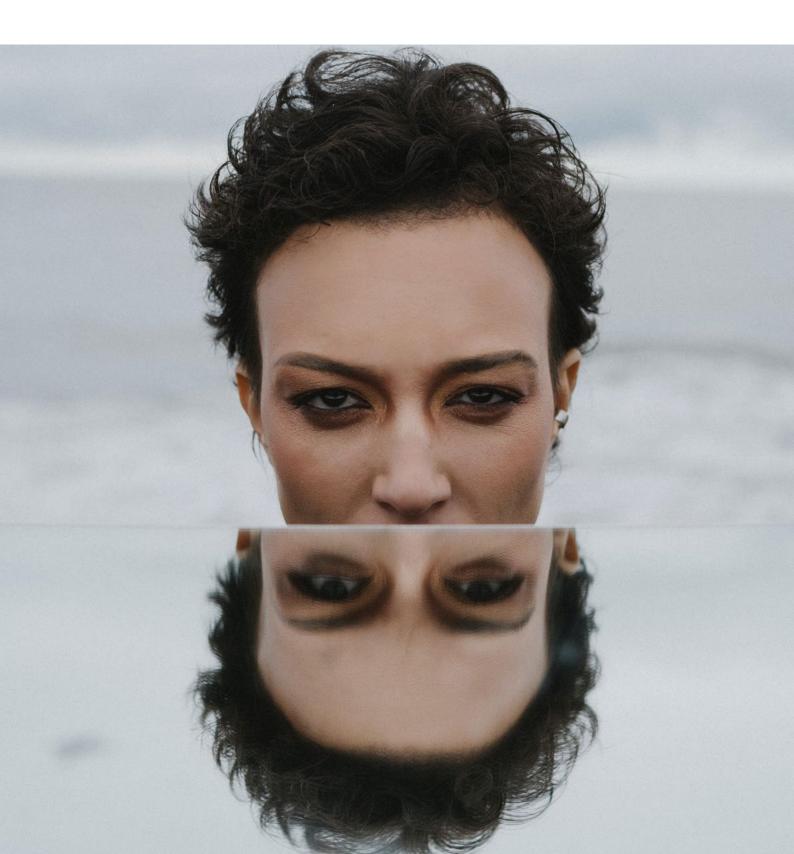




#### **SELF-REFLECTION EXERCISE**

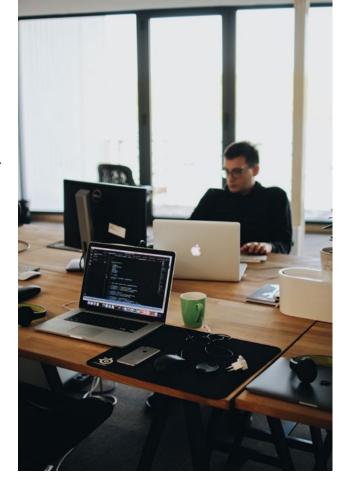
This self-assessment exercise will help you reflect on what your current knowledge about innovation management is.

Click here to be taken to the quiz.



# WHAT IS INNOVATION MANAGEMENT?

Innovation - something indispensable to maintain business competitiveness and sustainability - is one of the most relevant aspects in the corporate world today. But innovating is not enough to have good results. It is also necessary to carry out innovation management, which transforms the innovative potential of your company into a concrete and profitable reality.



Basically, to innovate is to create something unusual from something pre-existing, which can be a technology, a process, a product, a service, or a business model, generating value from creativity, opening new markets and business opportunities.

The innovation process takes advantage of something that already has viability and demand and makes it even more viable and interesting for its consumers, maximising profit.



Innovation management is the planning and structuring of an innovation process, with a beginning (inputs), middle (processing) and end (outputs and generation of results). In short, innovation management consists of establishing means and methods to generate value and to make ideas concrete.

Innovation management emerged to allow companies to innovate in a systematic way, instead of leaving it to chance. Only by being consistent and somewhat predictable can innovation actually become a tool to obtain a more advantageous position in the market.

Systematic innovation, in turn, is a response to growing competition. It enables a business to win more customers, exploit new niches, and reduce costs. Companies that do not innovate are eventually overtaken, such examples are the replacement of taxi by Uber, or traditional hotels by Airbnb.

In practice, innovation management goes through the following steps:

- Opportunity identification
- Idea development
- Effective and efficient implementation
- · Generation of value





# INNOVATION MANAGEMENT IN CIRCULAR ECONOMY BUSINESSES

The role of innovation management in companies that adopt circular economy models is strategic, as it is linked to business sustainability issues. Therefore, the management of said companies needs to be directly involved with innovation practices.

Innovation management is important to avoid systemic stagnation of organisations and to turn the focus towards business sustainability.

The more your company demonstrates that it innovates, valuing the economic, social and environmental aspects in the management of the business, the more it will be able to stand out in the market and achieve greater visibility and prestige among clients, investors and business partners.



### Benefits of innovation management for circular economy businesses.

It's not difficult to understand what innovation management is and how important it is within an organisation. Innovation management brings many benefits for circular economy businesses:

- Creation of a culture of innovation By fostering a culture that allows every employee to contribute to innovation, management opens doors for the company to find more solutions.
- Employee motivation Motivation happens when they feel they can help the company to grow and, at the same time, move up the career ladder. Working with innovation management shows that the company is focused on long-term growth, which is controlled and planned and will benefit employees.
- Idea generation The application of innovation management can facilitate and accelerate the ideation process. This advantage alone can ensure that innovation reaches its beneficiaries quickly, filling the existing gaps.
- Adds value to the product or service Innovative products have added value. Therefore, they also have a higher profitability margin.



### Examples of circular economy innovation

- **BIOHM** is a biotechnology company that is revolutionising the circular construction industry by creating building materials and manufacturing methods from natural and sustainable materials. The company's goal is to enable healthy and ecofriendly circular materials and to build solutions in the design and construction industries. By doing this, BIOHM hopes to eliminate the concept of waste.
- Wasteless helps food retailers reduce food waste and increase their income by selling perishable products with shorter shelf life and at their optimum price.







# TYPES OF INNOVATION

There are three types of innovation: radical, incremental, and disruptive. They can vary according to the niche, market, brand essence, services and products offered.

#### **Radical Innovation**

As the name suggests, **radical innovation** is something that makes a significant change, whether on the market or on a business.

It can occur through a complete change in the structure of a company, the way it works, its processes, services or products offered, or the way it engages with the client.

Example: Apple's iPhone



When it appeared, smartphones already existed, but Apple included features that changed and popularised the market.



#### **Incremental innovation**

Incremental innovation adds new features, whether in the product, the brand or the production methods, without a very abrupt change.

Generally, it is an evolution of an innovation already made by the business, so that it will complement and offer improvements, whether for employees, customers, or the

business.

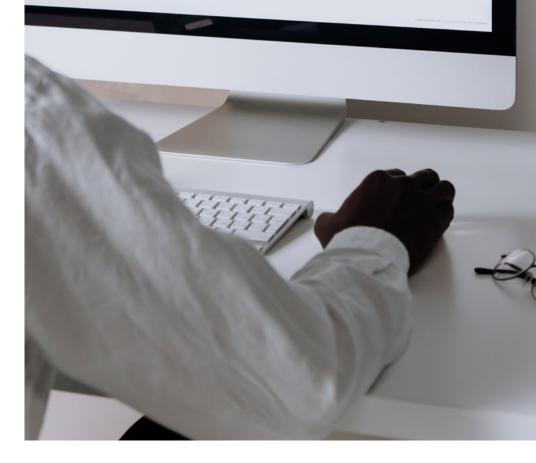
Example: Gmail





It emerged with the purpose of delivering emails quickly and, over time, various features were added to it to improve the user experience and also make it more useful and

competitive.



#### **Disruptive innovation**

Disruptive innovation is a process in which a technology, product or service is transformed or replaced by a new innovative solution.

The new solution is perceived by consumers as more accessible, simple or convenient, resulting in a change in the consumption behaviour of the general public. The result is that the previous solution becomes obsolete and disappears.

Example: Netflix



In the past, the market was based on renting or buying movies or series to watch. Netflix then decided to innovate and started offering streaming video service through a monthly subscription, and by doing so, drove Blockbuster out of the market.

#### Where can you apply the types of innovation?

Innovation can be applied to different aspects of a business.

#### Product innovation

Product innovation brings something new to the market. The television, for example, was something innovative, bringing image, sound and entertainment into people's homes.

It was a radical innovation, which later became disruptive and over time turned to incremental innovation.





Service innovation

An example of service innovation is food delivery. For a long time consumers would only eat something from an establishment if they went there or if they had takeaway. Then, the market innovated and offered delivery, so that through a phone call, an app, or a website, the customer can place order and have it delivered anywhere.

Innovation in the production processes
 This type of innovation is special relevant for circular economy business models.

When innovating production processes, it's common to adopt more sustainable and environmental-friendly processes. Many cosmetic brands, for example, innovate in cruelty-free processes, without animal testing.

Business model innovation

Innovation in business models is very common in start-ups. A very good example is the case of marketplaces - online shops such as Amazon or Etsy that mediate between buyers and sellers.

**Technological, logistic, marketing, and organisational innovation** are other aspects that can contribute for the development of a business.



# IMPLEMENTING INNOVATION

#### **Innovation strategies**

An innovation strategy involves systematising resources, designating responsible people, and organising processes. It is a set of internal activities and assignments, carried out by different people and departments, with the aim of developing innovative ideas for specific improvements in the business.

Whether aiming at launching new products or services, or optimising procedures, the strategy aims at modelling the idea and putting it into practice. However, for it to work, it is necessary to organise everything that stimulates innovation actions in the short, medium, and long-term in order to achieve the established goals.

Another very important aspect to consider when developing an innovation strategy is the company's innovation culture. When developed together with the action plan, the results are enhanced. Thus, the stimulation of ideas becomes part of the routine of employees and does not happen only during the period foreseen for the planned innovation activities.

There are different types of innovation strategies.

#### **Proactive strategy**

The organisations that use the proactive strategy have constant innovation processes. Also called early adopters, tend to invest heavily in new solutions and are generally pioneers in their field.

They assume high risks and make big investments. They use the knowledge they acquire from various sources over the years to increasingly improve their products, processes, and services.





#### **Reactive strategy**

This strategy is aligned with companies that have a prompt response to innovation in their industry. As soon as a new idea is validated by the market, the company acts quickly to adapt, implement, and reap the rewards.

It is an example of innovation with medium to low risk, with less aggressive and more conservative investments.



#### **Passive strategy**

Businesses that use this strategy only implement innovations when their consumers demand it. The automotive parts industry, for example, is known for meeting public expectations only when there is a pressing consumer need, without venturing too much.





## THE PDCA CYCLE AND ITERATIVE MODELS

#### What is the PDCA Cycle?

PDCA (Plan, Do, Check, Act) is a methodology that promotes a culture of continuous improvement in a business. It is a type of iterative management method, used both for control and for the constant improvement of products, services, and processes.

PDCA is an example of an iterative model composed of 4 steps, meaning that these steps are continuously repeated, leading to constant refinement and improvement, which can be extremely beneficial for any business.





#### 1. Plan

- Research
- · Analysis of data
- Establishment of objectives

#### 2. **Do**

- Preparation and training of employees and managers involved
- Execution of all the plans established in phase 1
- Data collection for later evaluation

#### 3. Check

- Compare the planned goals with the results achieved
- Identify gaps to be filled and opportunities for improvement
- Evaluate the work methodology adopted

#### 4. Act

- Update and correct actions on the planning, execution, and auditing processes
- Review of activities and planning



# FINAL ASSESSMENT TASK

#### TITLE OF THE TASK:

**Business Innovation** 

#### **AIM OF THE ACTIVITY:**

With this activity, you will reflect on the innovation of your business, the innovations you have already implemented and the ones you can add.

#### **TIME REQUIRED:**

90 minutes

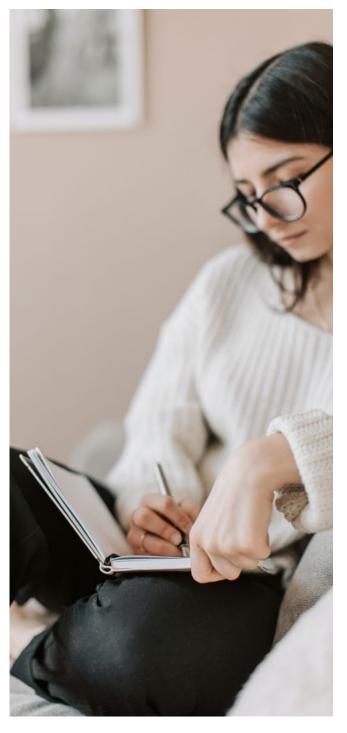
#### **MATERIALS REQUIRED:**

Device with Internet access for research

Innovation matrix (Annex 1) printed or in digital format

#### FORMAT FOR THE PRESENTATION:

Printed or digital innovation matrix. Alternatively, you can also create a slide presentation.







#### STEPS TO COMPLETE THE TASK:

Reflect on which innovations you have implemented so far in your business and which innovations you can add to develop your business.

Fill in the innovation matrix available in annex I, with the architectural, radical, incremental, disruptive innovations for your business.

L	Existing	New
Existing	Incremental Innovation	Disruptive Innovation
New	Architectural Innovation	Radical Innovation



### FINAL TEST

This quiz aims to assess your knowledge about Innovation Management upon the completion of the EduZine. Check out how much you have learned since the self-assessment exercise at the start.

https://forms.gle/D17gb55PBwh4bhvX7



## FURTHER READING AND RESOURCES

#### Innovation management

https://innovationmanagement.se/

#### Types of innovation

https://www.visualcapitalist.com/10-types-of-innovation-the-art-of-discovering-a-breakthrough-product/

#### Types of innovation

https://theworldwecreate.net/insights/four-types-of-innovation-in-business

You need an innovation strategy – Harvard Business Review

https://hbr.org/2015/06/you-need-an-innovation-strategy

Leveraging innovation for the circular economy <a href="https://unece.org/circular-economy/news/leveraging-innovation-circular-economy">https://unece.org/circular-economy/news/leveraging-innovation-circular-economy</a>

Knowledge of the PDCA cycle and iterative models in a circular economy context

https://www.youtube.com/watch?v=qz-XdI89vUM

Innovation matrix: how to elevate product development within your company

https://miro.com/blog/innovation-matrix/





#### **ANNEX 1 - INNOVATION MATRIX**

