

PR3

Curriculum & Methodologies

Knowledge and Skills of Circular Economy
and Green Entrepreneurship for the Future

Version 1.0

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PR3

Curriculum and Methodologies



Knowledge and Skills Development on
Innovative Green Entrepreneurship Models for
NEETs to Build Circular Economy (OMNIA Project)

Version 1.0
February, 2023

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Introduction

OMNIA project is a project funded by the Erasmus+ Programme of the European Union which focuses on youth NEETs development through the lens of a green and circular economy model. The knowledge and skills development about that topic is a necessity to be developed among young people to support them in tackling unemployment and low skilled employment rate which can weaken the human capital of the country.

The OMNIA project's Curriculum and Methodologies is a document which explains summary, highlights and structure of the educational contents of Green Entrepreneurship and Circular Economy for NEETs (not engaged in education, employment and training activities). This document is available in English, Portuguese, French, Spanish, Turkish and Romanian.

ACKNOWLEDGEMENT

The Curriculum and Methodologies document was developed 6 months by the OMNIA Project consortium. This document was developed through a scientific research and consultative process with related stakeholders to ensure the quality of contents able to support youth NEETs and related target groups in the skills and knowledge development of circular economy and green entrepreneurship based on labour market needs. This document was also independently reviewed at various stages by OMNIA project consortium staff. A special thank you goes to all those who supported this document development.



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Content Description Overview

The curriculum and methodologies document about the green entrepreneurship and circular economy topics in OMNIA project consist of contents which separated to 8 (eight) main chapters such as:

- **Chapter 1 – Introduction to Green Entrepreneurship**
This topic will provide general information and overview of the green entrepreneurship terms which can be a base knowledge of the youth NEETs to get better understanding.
- **Chapter 2 – Introduction to Circular Economy**
This topic will provide basic knowledge about the circular economy and its models. It will give better understanding to the youth NEETs the difference between circular circular economy and conventional linear economy models.
- **Chapter 3 – Green and Circular Economy Business Models**
This topic will give some understanding to the youth NEETs about the interconnection between circular economy and green entrepreneurship. It will provide better understanding on green and circular economy models implementation.
- **Chapter 4 – Introduction to Green Business Financing Management**
This topic will provide essential knowledge about financing management in the lens of green business design and implementation to plan, calculate and manage the financial aspect of the business.
- **Chapter 5 – Circular Design and Assessment**
This topic will provide more detail and deeper information about the circular design itself and how to assess it. It will be important for the youth NEETs to get better knowledge and foundation on how to design and assess the ideas in the view of circularity.
- **Chapter 6 – Sectors and Circular Economy**
This topic will be focusing on giving examples of some sectors, like plastic, fashion, etc in the lens of circular economy. This will provide practical understanding to the youth NEETs.
- **Chapter 7 – Green and Circular Economy Pitch**
This topic will provide information and tips on how to pitch ideas, concepts and showcasing the green business. This topic will also provide practical knowledge and skills which the youth NEETs can use in the future for their real work.
- **Chapter 8 – Creative and Innovative Management**
This topic will give some knowledge about how to think out of the box and manage it in terms of design and implementation. It will provide soft-skills for the youth NEETs from the view of creative and analytical thinking skills.

Each chapter consists of **summary, brief explanation and highlights to provide initial understanding** for learners and educators about the topics before going to learn deeper in the “Digital Handbook” and “Training Kit” documents.

Objectives

This curriculum and methodologies document created aims to reach OMNIA project’s main objectives such as:

- Create structured educational contents to support youth NEETs and related target groups in the knowledge and skills development of green entrepreneurship and circular economy topics.
- Provide summary and highlight of each chapter and contents about green entrepreneurship and circular economy to support various related target groups in the project - mainly youth NEETs, young professionals, trainers and educators who work in the NGOs, educational institutions and other related organisations to get initial understanding.
- Bring innovative learning and resource approaches to target groups in the learning and training process of green entrepreneurship and circular economy.
- Support various target groups in the project in the implementation of capacity building, knowledge and skills improvement.

Implementation Options

There are 2 (two) different implementation tools which will be recommended to use and implemented in the OMNIA project and by the OMNIA consortium such as:

- **Online Learning**
OMNIA project consortium will set up interactive online educational contents based on curriculum and methodologies, and digital handbook documents. This e-learning platform will consist of main contents with text and video formats, quizzes and fun facts. The e-learning platform which will be accessible and open for all learners with registration requirements (free paid) by the end of the project months (end of the 2023) through the OMNIA website (www.omniaproject.eu).
- **Learning, Teaching and Training (Offline Workshop and Training)**
OMNIA project consortium will upload all related educational documents such as curriculum and methodologies, digital handbook and training kit to the website to ensure open access for all (www.omniaproject.eu). Those materials can be used by everyone and as guides to develop personal study activities, offline workshops and training in their communities, organisations and/or companies. However, OMNIA project’s official Learning, Teaching and Training Activities will be implemented as a pilot test in the 19th month of the project (estimated in October 2023).

Educational Resources Types

There are some educational resources types which will be adapted from this curriculum and methodologies document such as:

- **Digital Handbook**

The digital handbook will be created in an easy-to-understand approach which will make all learners - specifically youth NEETs - understand the concept and objectives from each chapter adapted from the curriculum and methodologies document. The contents of each module will consist of the latest research and literature of the green entrepreneurship and circular economy models.

- **Training Kit**

The training kit will be created to help learners and educators to deliver effectively and efficiently the topic of green entrepreneurship and circular economy topics in the OMNIA project. This training kit will be adapted from Curriculum and Methodologies and Digital Handbook documents.

- **Digital Glossary**

The digital glossary will be created to support the youth NEETs and other target groups (all learners) to understand and remember the terminology and acronym that will be contained in all educational material (Digital Handbook) - as not all registered users, especially youth NEETs familiar with or remember all the terms and acronyms in the green and circular economy topics.

Educational Resources Formats

There are some educational materials resources formats which will be adapted from this curriculum and methodologies document such as:

- **PDF (Portable Document Format)**

PDF format for educational materials resources will be created for Digital Handbook and Training Kit documents. Those documents will be shared through OMNIA's website and e-learning platform to support educational activities for youth NEETs and other project target groups (all learners). Those documents will be adapted from the curriculum and methodologies document and translated into partner's languages such as English, Portuguese, French, Spanish, Turkish and Romanian.

- **Video Format**

Video format for educational material resources will be created based on the Digital Handbook document by summarising each chapter of created educational contents. This video format will complement the PDF format resource - Digital Handbook to accommodate the needs of learners' effective learning methodology. This video format will be shared through OMNIA's e-learning platform.

Instructional Strategies

There are recommended instructional strategies which can be delivered to and used by learners to support and sustain their educational activities implementation for this topic in the OMNIA project such as:

- **Active Learning:** Encouraging learners to be actively involved in their own learning by reading educational materials, and latest updates like news and policy, such as through OMNIA's project website to access educational resources, and the use of OMNIA's e-learning platform.
- **Differentiated Instruction:** Adapting methods and materials to meet the individual needs and abilities of each learner. OMNIA project will provide text and video formats of educational materials which are integrated with one another to support learners with different needs of learning methods.
- **Technology-enhanced Instruction:** Incorporating technology, such as digital devices, educational software, and online resources, into the learning process. Like online materials resources on OMNIA's website and OMNIA's e-learning platform which will remain accessible and free for all.
- **Collaborative Learning:** Encouraging learners to work together in groups to achieve a common goal in circular economy and green entrepreneurship topics. OMNIA is supporting this learning strategy by providing a partnership platform which will be accessible by learners, experts and related to stakeholders.

Support Learning Activities

The curriculum and methodologies document sets requirements to provide creative and innovative additional learning activities explained below for the Digital Handbook and Training Kit documents development to support learning processes of the learners about the topic:

- **Quiz Time** aims to provide mini question and answer sessions which can support interactive educational activities both online and offline (like training and workshop) implementation purposes. Template below can be used in the Digital Handbook and Training Kit documents development:

Quiz Time!

Here you can write a question related to the content you write in this chapter. Don't forget to write the answer as well - it will help to build digital training and educational materials on the platform.

- **Do you know?** aims to bring fun-facts about particular topics in each chapter. This support learning activities will be used for the online and offline (like training and

workshop) implementation purposes. Template below can be used in the Digital Handbook and Training Kit documents development:

Do you know?

You can share fun facts related to the content or sub-content topic.

- **Let's Discover!** aims to provide activities to support deeper understanding and improve practical knowledge and skills about each chapter. This support learning activities will be used for the offline (like training and workshop) implementation purposes. Template below can be used in the Digital Handbook and Training Kit documents development:

Let's Discover!

You can explain activities which are suitable to be delivered to the target group during the LTT programme related to the content or sub-content topic. It can be a discussion topic, presentation, etc.

Assessment and Evaluation Methodologies

There are some assessment and evaluation methodologies which recommended, and can be implemented and supported by organisers, educators and learners during learning activities of the topic of green entrepreneurship and circular economy topics such as:

- **Formative Assessments**
Ongoing evaluations of learners throughout the learning process, such as quizzes and education discussions through the OMNIA's e-learning and networking platform.
- **Self Assessment**
Encouraging learners to reflect on their own learning and assess their own progress, through self-reflection activities, journal writing, or metacognitive strategies which will be explained in the Training Kit document.
- **Performance Assessments**
Evaluating learners learning through demonstrations of skills and knowledge, such as oral presentations, role-playing activities, or demonstrations which will be explained in the Training Kit document.



CONTENT OUTLINE

Chapter 1

Introduction to Green Entrepreneurship

Summary

New economic and entrepreneurship focuses on the positive social impacts and environmental protection are important topics throughout the world. Green entrepreneurship is a business model which aims to create and implement solutions to environmental problems and promote social change. The word “green” usually understood as a business focuses on environmental factors only, however green here also refers to sustainability in business implementation which is concerned in 3 elements - environmental, social and economic.

Objectives

There are some objectives needed to be achieved in this chapter such as:

- Develop better understanding about green entrepreneurship in general and the importance of it to address future opportunities on solving challenges
- Create better understanding and develop ability to differentiate between green entrepreneurship and conventional entrepreneurship
- Increase awareness of the green entrepreneurship among young people especially youth NEETs and able to understand the implementation will give positive impacts to environment, social and economy
- Understand and aware with the important attitudes, skills and competences needed for being a good green entrepreneur
- Able to implement the principles of green entrepreneurship in the future work.

Time Allocation

Overall estimated time allocation for this chapter is 2–3 hours.

General Learning Outcomes

There are some general learning outcomes in this chapter as it follows:

- Understand how to explain green entrepreneurship
- Able to explain the difference between green entrepreneurship and conventional entrepreneurship models
- Have more awareness about green and sustainable entrepreneurship models
- Able to demonstrate characteristics of a good green entrepreneur.

Specific Learning Outcomes

There are some specific learning outcomes in this chapter as it follows:

- Able to explain how green entrepreneurship can give positive impacts on environmental, social and economic
- Able to elaborate green entrepreneurship principles in easy-to-understand ways especially to other fellow youth and communities
- Understand and be able to practise important attitudes, skills and competences needed for being a good green entrepreneur to real implementation.

Background

Green entrepreneurship is a paradigm shifting concept from everyday entrepreneurship. It inculcates values of business and enterprise in harmony with equity of social and economic and the environment. Green entrepreneurship is important for establishing business support and laying a structure for entrepreneurs who desire to manage sound businesses with a special focus on environmental and social impact while still supporting economic growth in local, regional and global levels. In this chapter, you will learn what are the principles of green entrepreneurship itself and skills needed to design and plan ideas that are economically viable, environmentally supportive and socially inclusive. This chapter will provide some examples from green city to agricultural fields. You will also learn what are challenges on the implementation of a green business which can give impact on overall business performances.

1.1. What is Green Entrepreneurship

This section we will learn more and deeper about the definition and principles of green entrepreneurship. This section will provide a new paradigm in a business which can support environmental protection and sustainability in general. Also explain basis theories regarding green entrepreneurship, environmental and welfare economics as a subset of sustainable entrepreneurship.

1.2. Comparison Between Green Entrepreneurship and Conventional Entrepreneurship

Difference principles between green entrepreneurship and conventional entrepreneurship will be explained in this section. This section will provide better understanding about the benefits and best practices of green entrepreneurship which can be implemented by the learners in their real work.

1.3. Green Entrepreneur and Principles

Principles of green entrepreneurs in the environmental, economic and social axes in core businesses which can provide innovative solutions and green economy

contribution will be explained in this section. Also, added value of green business activity implementation by good green entrepreneurs will be shared in this section to provide better understanding to learners about green entrepreneurship and good green entrepreneurs itself.

1.4. Benefits of Green Entrepreneurship

This section will explain the benefits which we can achieve from the implementation of an effective green entrepreneurship such as awareness, legislation, green investments and acquisition of loans with better terms, new trade opportunities, operational costs, healthier work environment, and reduce its impact on the planet.

1.5. Skills Needed in the Green Entrepreneurship

This section will share some skills needed to develop a good green entrepreneurship practice. It aims to help and support learners to understand better about the skills needed in the market and support them to map their interest in the skill development. This section will explain hard skills and soft skills needed in the green entrepreneurship implementation.

1.6. Examples of Green Businesses and Products

There are some examples of green business and products will be explained in this section. Best practices, examples and principles of green businesses and products such as car sharing, local organic food businesses, urban gardening or micro garden businesses, used bookstores, renewable energy, green clothing business, green clothing, green transportation businesses will be explained in detail in this section.

1.7. Challenges of Green Entrepreneurship

Green entrepreneurship definitely has challenges like any other business. However, this section will explain and provide deeper analysis about the challenges and solution options in the green business. This section aims to support learners to get better understanding and get ready to face challenges during the practice of green entrepreneurship.

1.7.1. Promoting Green Business

This section will explain some challenges and solution options that will be explored in the promotion of green business.

1.7.2. Financing

Green entrepreneurs may need to struggle more than conventional entrepreneurs to get investors to finance them in the early phases of their start-up business. This section will explain about financing challenges and solutions to develop a sustainable economy by creating sustainable and eco-friendly innovation.

1.7.3. Greenwashing

One aspect of green entrepreneurship is the negative phenomena of greenwashing. This section will explain about this phenomena and actions which can be implemented to solve this issue.

References

- Gupta, M., & Dharwal, M, 2021. Green entrepreneurship and sustainable development: A conceptual framework.
<https://doi.org/10.1016/j.matpr.2021.08.148>
- Piirman, Marit., & Tooman, Heli, 2018. Skills needed in green entrepreneurship and business development for microentrepreneurs.
http://database.centralbaltic.eu/sites/default/files/NatureBizz-reports-Estonia_2018_0.pdf
- Saari, U. A., & Joensuu-Salo, S., 2019. Green Entrepreneurship.
https://doi.org/10.1007/978-3-319-71062-4_6-1
- Swiss Academy for Development, 2017. Skills for Green Entrepreneurship Manual.
https://sa4d.org/wp-content/uploads/2017/11/SAD_Skills-for-Green-Entrepreneurship_Manual.pdf
- SwitchMed, 2015. Create your green business! The Handbook for Green Entrepreneurs in the Mediterranean.
<https://www.learningfornature.org/wp-content/uploads/2019/08/Switchmed-handbook.pdf>

Chapter 2

Introduction to Circular Economy

Summary

The circular economy is a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible. Fundamentally, there are differences between circular economy and linear economy models. Linear or traditional economy models prioritise profit over sustainability, with products made to be thrown away once they've been used. While the circular economy designs the product as a good to be revalorised or rethought and to extend its useful service life by promoting a more intelligent and efficient use of raw materials, thus conserving the environment and natural resources. In the circular economy practice gains 2 benefits - socio-economic and environmental. Socio-economic benefits from circular economy implementation are economic growth, job creation, business resiliency, and increased customer loyalty. The environmental benefits from a circular economy are to reduce greenhouse gases (GHG) emission, reduce waste and reduce resource consumption.

Objectives

There are some objectives needed to be achieved in this chapter such as:

- Provide better understanding about circular economy and the benefits of it;
- Able to differentiate circular economy and conventional economy business models;
- Understand current situation of circular economy recommendations and status in the EU;
- Able to improve and develop a mindset to promote and create circular economy models in the future work.

Time Allocation

Overall estimated time allocation for this chapter is 3–4 hours.

General Learning Outcomes

There are some general learning outcomes in this chapter which can be achieved such as:

- Understand the overall concept of circular economy;
- Able to understand the difference between circular economy and conventional economy business models;
- Understand current policy in the EU about the circular economy topic;
- Aware of the needs of implementation and benefits of a circular economy.

Specific Learning Outcomes

There are some specific learning outcomes from this chapter such as:

- Able to explain the concept of circular economy and its components
- Able to implement circular economy principles into future work
- Able to promote and communicate the circular economy models to others

Background

Circular economy is a new production and consumption model that ensures sustainable growth over time. With the circular economy, we can drive the optimization of resources, reduce the consumption of raw materials, and recover waste by recycling or giving it a second life as a new product. This chapter will explain the principles of circular economy in general. This will give better understanding and be able to differentiate between circular economy and linear (traditional) economy business models. Different from the linear economy concept, circular economy gives benefits to the environment and also improvement of social factors. In this chapter, you will learn about the benefits of circular economy and also policy in Europe which supports circular economy implementation. Best practices of the circular economy in this chapter will provide some ideas about the impacts of circular economy implementation.

2.1. What is Circular Economy

This section will explain the principles of circular economy. It aims for learners to get a better understanding about its model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible.

2.2. The Difference between Circular Economy and Linear Economy Models

There are some fundamental differences between the traditional model or linear economy and circular economy. This section will explore in more detail about the principle differences between those two economic models.

2.3. Benefits of Circular Economy

There are some benefits in the implementation of a circular economy such as socio-economic and environmental benefits. This section will explain more about those benefits and why we have to implement circular economy practices for a better future.

2.3.1. Socio-Economic Benefits

The socio-economic benefits of the circular economy section will explain more about economic growth, job creation, business resiliency and increased customer loyalty. It aims to provide information to learners about the benefits which can be gained in circular economy implementation.

2.3.2. Environmental Benefits

This section will explain the benefits of a circular economy from the perspective of the environment. It aims to provide some knowledge about the benefits of circular economy implementation on how we can reduce greenhouse gases (GHG) emissions, waste and resource consumption reduction.

2.4. Policy and Circular Economy: EU Case

This section will explain about circular economy action plan initiatives from the European Union perspectives. The measures, related policy and regulation will be explained in this section.

2.5. Develop Mindset to Get Ready

The Circular Mindset is essential in the circular economy implementation which is rooted in an optimistic belief that the challenges of our time provide us with immense opportunities. This section will explain about this circular mindset principles and also circular economy six skills group which can support developing mindset to get ready for circular economy practice.

2.5.1. Best Practices of Circular Mindset

There are some best practices of the implementation of circular mindset. This section will provide information on those best practices which support learners understanding the principles and trigger innovation in the future.

2.6. Communicating the Circular Economy

Circular economy being a new paradigm, there is a need to change behaviours apart from creating infrastructure and economic instruments. This section will explain about communication examples and strategies that lead to change in consumer behaviours, inspire regulators and influence investors to implement a circular economy.

References

- Circle Economy, 2018. Circular Jobs & Skills. https://assets.website-files.com/5d26d80e8836af2d12ed1269/5dea741c0f2ed678476019c8_Final-Circular-Jobs-and-Skills-in-the-Amsterdam-Metropolitan-Area-min.pdf
- Di Maio, F., Rem, P. C., Baldé, K., & Polder, M., 2017. Measuring resource efficiency and circular economy: A market value approach. Resources, Conservation and Recycling, 122, 163–171. <https://doi.org/10.1016/j.resconrec.2017.009>
- Ellen MacArthur Foundation, 2022. The Circular Economy in Detail. <https://archive.ellenmacarthurfoundation.org/exploring-the-circular-economy-in-detail>
- European Parliament, 2020. A new Circular Economy Action Plan For a cleaner and more competitive Europe. https://eur-lex.europa.eu/resource.html?uri=cellar:9903b325-6388-11ea-b735-01aa75ed71a1.0017.02/DOC_1&format=PDF
- IFEMA, 2022. Differences between the circular economy and the linear economy. <https://www.ifema.es/en/global-mobility-call/sector-news/differences-between-the-circular-economy-and-the-linear-economy>
- Kaul, Mitresh and Nallasivam, K., 2022. Response of Elevated Water Tanks Subjected to Lateral Loads. <https://doi.org/10.2478/ceer-2022-0022>
- Kjaer, L. L., Pigosso, D. C. A., Niero, M., Bech, N. M., & McAloone, T. C. (2018). Product/Service-Systems for a Circular Economy: The Route to Decoupling Economic Growth from Resource Consumption. <https://doi.org/10.1111/jiec.12747>
- McKinsey, 2017. Mapping the benefits of a circular economy. <https://www.mckinsey.com/capabilities/sustainability/our-insights/mapping-the-benefits-of-a-circular-economy>

Chapter 3

Green and Circular Economy Business Models

Summary

A primary component of the business model is the value proposition. This is a description of the goods or services that a company offers and why they are desirable to customers or clients, ideally stated in a way that differentiates the product or service from its competitors. Green and circular business models are crucial for creating eco-friendly sustainable businesses. There are needs from people now and in the future for the implementation of circular economy models and green entrepreneurship which can develop a new global society and economy to be based on renewable/reproductive, biodiversity-based and biodiversity-benign processes, delivering material and immaterial benefits that fulfil the economic and social requirements. There are 10R key activities of the green and circular business models such as reduce, return, recycle, resell, reuse, redesign/repurpose, remanufacture, redeploy, repair/refurbish and renewable resources. In the circular economy business model concept, there is a term called circularity which describes economic, technical, and environmental systems that aim to eliminate waste and maximise the reuse of resources. Circularity principles provide an opportunity to reduce operational risk and increase the resilience of an enterprise through switching to renewable energy sources and recycled materials.

Objectives

There are some objectives needed to be achieved in this chapter such as:

- Provide information about business models in general point of views to help better understanding about the context
- Develop and improve knowledge and information about the Framework for Strategic Sustainable Developments (FSSD) to help create more sustainable ideas and implementation in the future
- Provide better understanding about overall green and circular business models.
- Provide better understanding about essential elements about green and circular business models which can be considered for future implementation by participants - especially youth NEETs.
- Bring knowledge and information about how to develop green businesses to ensure more effective plan and implementation practices.

Time Allocation

Overall estimated time allocation for this chapter is 3–4 hours.

General Learning Outcomes

There are some general learning outcomes which need to be delivered as it follows:

- Able to explain business models and differentiate each type of it easily.
- Understand overall objectives of green and circular business models and each component of it.
- Able to develop better knowledge and information about green business development for future implementation and practices.
- Understand the importance of green business models principles in the implementation.

Specific Learning Outcomes

Specific learning objectives of this chapter are:

- Able to implement and practise green and circular business models and its elements such as value proposition, customer relationship, etc
- Able to practise the principles of the green business development effectively
- Understand the challenges of green and circular business models and be able to develop a plan to overcome it.
- Able to follow and implement the Framework for Strategic Sustainable Developments (FSSD) in the future work implementation.

Background

There are needs of the implementation of green, sustainable and circular economy business models in the society now and in the future. For young entrepreneurs, there is a need to understand the overall business model concept and its types to help them map the business that needs to be developed. In this chapter, you will learn about the framework used in the green and sustainable business plan and implementation which is called Framework for Strategic Sustainable Development (FSSD). This framework is important to understand the integration between business types and sustainability levels. The plan and design stage of the development of green business will be included in this chapter to provide better understanding and improve effectiveness of implementation. As circular economy is related to circularity and its design, this chapter will provide basic information about innovation for circularity which can help in generating innovative ideas.

3.1. Overview of Business Model

A business model is a high-level plan for profitably operating a business in a specific marketplace which will be explained in this section. This section will explain about the types, advantages and disadvantages of business models itself in general and more business perspectives.

3.1.1. Types of Business Models

This section will provide general information and knowledge about different types of business models such as Business -To- Business Models (B2B), Business -To-Consumer Models (B2C), Subscription Based Models and On-Demand Business Models. This will support learners to understand basic business models which need to be understood in the business world.

3.1.2. Advantages and Disadvantages of Business Models

There are some advantages and disadvantages about general business models that we have to know. This section will explain thoroughly about the advantages and disadvantages of Business Models.

3.2. Circular Economy, Green Economy and Bio-Economy

There are three different economic models such as green economy (GE), circular economy (CE) and bio-economy (BE). This section will provide information and knowledge about those 3 sustainability based economic models.

3.2.1. Framework for Strategic Sustainable Development (FSSD)

The FSSD (Broman and Robèrt, 2016) is a science-based, structured approach to working systematically and strategically with the complex sustainability challenge society faces. It is designed to facilitate analysis, planning, decision-making and strategic collaborative action towards sustainability across disciplines and sectors at any scale, in any context which will be explained in this section.

3.3. Green and Circular Business Models

Green and circular business models are crucial for creating eco-friendly sustainable businesses. This section will share to learners about the principles, essential elements and 10R key activities of the green and circular business models which can support future development and implementation.

3.4. Develop Green Business Models (GBMs)

Learners aim to gain better understanding about the development of green business modes (GBMs) from this section. This section will provide present guiding questions and provide practical information about the importance of responses and their assessment in the development of GBMs.

3.5. What is Circularity Concept

Circularity describes economic, technical, and environmental systems that aim to eliminate waste and maximise the reuse of resources. This section will explain to learners about general circular systems on making use of design, recycling, reuse, remanufacturing and refurbishment to create a closed loop system, based on the ideal of preserving 'virgin' materials, reducing waste creation and maximising waste reuse.

3.6. Innovation for Circularity

This section will explain to learners about five areas that can be a practical way to identify where a company and/or organisation can have big impacts which are smarter, better, and more efficient – as well as more circular and more sustainable.

3.7. Challenges of Green and Circular Business Models

There are some challenges of green entrepreneurs in the implementation of green and circular business models which will be explained in this section. Those challenges such as meeting consumer expectations, incompetent supporting regulations, barriers within the organisation, considering the costs, keeping mutual benefits for all stakeholders, trust issues, viability issues and lack of knowledge.

References

- Bastianoni, S., Coscieme, L., Caro, D., Marchettini, N., & Pulselli, F. M. (2018). The needs of sustainability: The overarching contribution of systems approach. *Ecological Indicators*.
<https://doi.org/10.1016/j.ecolind.2018.08.024>
- D'Amato, D., & Korhonen, J., 2021. Integrating the green economy, circular economy and bioeconomy in a strategic sustainability framework.
<https://doi.org/10.1016/j.ecolecon.2021.107143>
- GreenWIN, 2018. A short guide to developing green business models – for entrepreneurs, researchers and organisations that support entrepreneurs.
<https://www.greengrowthknowledge.org/sites/default/files/learning-resources/action/GBM%20Development%20Guide%20for%20dissemination%2020180730.pdf>
- MSLS, 2022. The framework for strategic sustainable development.
<https://www.msls.se/fssd-work-in-progress.html>

Chapter 4

Introduction to Green Business and Financing Management

Summary

The definition of financial management is the strategic practice of establishing, controlling, and monitoring all financial resources to achieve your business goals. The concept of green and sustainable finance has evolved as part of the broader notion of business sustainability. The literature review showed that the main sources of funding for green businesses are entrepreneurs (self-financing), microfinance institutions, peer-to-peer lending, family offices, business angels, venture capital, private equity, banks (conventional banks, investment banks, public and private green banks), national and supranational initiatives (e.g. Multilateral Development Banks), grants, philanthropy, and crowd-funding. There are four typology aspects in green and sustainable finance such as the value created, ranking of the three factors, optimisation method and horizon. And it also includes three bottom lines such as people, planet and profit. If looking to linear or traditional finance methods, it is only focusing on maximising profit but not really considering sustainability part in the system - social and environmental factors.

Objectives

There are some objectives needed to be achieved in this chapter such as:

- Provide better understanding about financial management in general.
- Able to understand and differentiate between green economy and linear economy models
- Provide better understanding about overall financial management systems in green and sustainable business practices.
- Understand about the funding system and schemes in green and sustainable business development.
- Provide possible problems and its solutions and advice which can be faced in the implementation of green business development.

Time Allocation

Overall estimated time allocation for this chapter is 3–4 hours.

General Learning Outcomes

There are some general learning outcomes which need to be delivered as it follows:

- Have the ability to explain about the concept of general financial management and its elements.

- Have the ability to explain about green and sustainable financial management and its elements.
- Able to map the challenges which can appear in the implementation of green business and financial management.
- Understand the possible funding sources which can be used to finance the green businesses.

Specific Learning Outcomes

There are some specific learning outcomes which need to be delivered as it follows:

- Able to understand and explain the importance of financial management.
- Able to implement strategies of financial management.
- Able to explain the principles of green and sustainable financial management.
- Understand the needs of external financial support based on the green and sustainable business stages.
- Able to map suitable funding sources to support green businesses development.

Background

Green and sustainable financial management combines the economic benefits of enterprises with ecological and social benefits, considers environmental issues at all stages of business operations, and undertakes more social responsibilities. Understanding about financial management overall is important to ensure the needs and status of the business itself. This chapter will provide an overview about financial management - especially in the perspective of funding resource management which can be useful for youth who want to start green and sustainable businesses. There are 11 different types of funding resources which will be explained in this chapter. This chapter will provide questions which the green and sustainable entrepreneur needs to be prepared to answer. It will help the entrepreneurs to prepare the readiness of their business in the perspective of financial management.

4.1. What is Financing Management

Financial management is the business function that deals with investing the available financial resources in a way that greater business success and return-on-investment (ROI) is achieved. This section will explain the definition, objectives, the importance and form of management strategy of financial management.

4.2. Principles of Green and Sustainable Finance

This section will explain to learners about the concept of green and sustainable finance which has evolved as part of the broader notion of business sustainability over the last

decades. This section will provide better understanding to learners about typology for sustainable finance.

4.3. The Difference Between Green Financial Management and Traditional Financial Management

This section will share the differences between green and traditional financial management. The differences which will be explained to learners include principles, advantages and disadvantages of both financial management methodologies.

4.4. Green Business Development and Funding

Green business development and funding are essentials in the implementation of green business, it will help the business from start to future projection. This section will explain more about business development stages, funding sources, and investment readiness of the business itself which can support learners to reach sustainability in the implementation.

4.4.1. Business development stages and funding

Business development and maturity stages and also funding essentials schemes will be explained in this section. It aims to help learners understand and map their current stage of green business development.

4.4.2. Funding Sources

Funding sources are important in the business development process. This section will provide a summary and detailed explanation of green business funding sources which can be useful for the learners to request and receive funding for their business from.

4.4.3. Investment Readiness

This section will share the preparation every entrepreneur needs to have in order to raise funding. It will support learners to understand main questions and evaluation needed in the investment or funding stage.

4.5. Challenges in the Implementation of Green Financial Management

There are some challenges in the implementation of green financial management. However those challenges have some solution options which can be implemented to

reduce the risk of financial mismanagement. This section will explain those matters to support learners to face challenges and implement the solutions in real work cases.

4.5.1. Problems in the Implementation

This section will explain problems in the implementation of the green financial management.

4.5.2. Solution and Advices

This section will share solutions and advice options to overcome problem in the implementation of the green financial management.

References

- GreenWIN, 2018. A short guide to developing green business models – for entrepreneurs, researchers and organisations that support entrepreneurs. <https://www.greengrowthknowledge.org/sites/default/files/learning-resources/action/GBM%20Development%20Guide%20for%20dissemination%2020180730.pdf>
- Microsoft, 2022. What is financial management?. <https://dynamics.microsoft.com/en-us/finance/what-is-financial-management/>
- Phiri, Venon., 2022. Sustainable Finance. https://www.researchgate.net/publication/359270189_SUSTAINABLE_FINANCE
- Schoenmaker, D., 2019. A Framework for SustainableFinance. https://www.rsm.nl/fileadmin/Faculty-Research/Centres/EPSVC/A_Framework_for_Sustainable_Finance.pdf
- Schoenmaker, D. & Schramade, W., 2019. Principles of Sustainable Finance. https://www.researchgate.net/publication/330359025_Principles_of_Sustainable_Finance/refere nces

Chapter 5

Circular Design and Assessment

Summary

Circular design goes hand in hand with the circular economy, which is committed to reusing products and abandoning the paradigm of using and throwing away. Specifically, this form of design advocates rethinking the process of creating a product from the beginning and, to do so, designers must adopt sustainability and respect for the environment as a starting point. In relation to the previous chapters, circular design focuses on creating products and services for the circular economy.

Objectives

There are some objectives needed to be achieved in this chapter such as:

- Reflect about the incursion of circular design into design history
- Identify the characteristics of a systemic thinking
- Explain the meaning of circular design and its relation with the concept of “circular economy”.
- Identify the five principles of circular design and how they can be applied
- Know the main steps to start a process of designing
- Apply different methods to think and implement circular design steps
- Know different methods to assess the circular design of a product

Time Allocation

Overall estimated time allocation for this chapter is 6–7 hours.

General Learning Outcomes

There are some general learning outcomes in this chapter such as:

- Able to understand the concept of circular design
- Able to identify the characteristics of a systemic thinking
- Able to research and recognize the five principles of circular design in real initiatives implemented.
- Able to list the main steps to start a process of designing
- Able to explain the different elements of each of the 4 steps circular design implementation
- Able to apply different methods to think and implement circular design steps

Specific Learning Outcomes

There are some specific learning outcomes in this chapter such as:

- Have ability to explain the logic and philosophy of circular design related to the design history
- Able to explain the meaning of circular design and its relation with the concept of circular economy
- Able to explain how the five principles of circular economy can be applied
- Able to implement different methods to assess circularity of a product

Background

The concept of the circular economy was born in the 1980s as a counterpoint to the linear economy - that of the throwaway paradigm - when it began to be realised that this system of production and consumption based on the overexploitation of finite natural resources was increasingly unsustainable for the planet. Today, this form of economy is on the rise and can play a key role in the fight against climate change. The MacArthur Foundation (2022), one of the main promoters of the circular model, defines it as “an alternative that seeks to redefine what growth is, with benefits for society as a whole and, especially, for the environment”. It is based on several principles, but one of them emphasises the importance of reducing pollution levels and waste by design. This is where the concept of circular design comes in. Circular design is a relevant concept for those who want to start to study or work in the design sector, or are attracted to it, but not only. It’s relevant for all of us, because it helps us to think in a more sustainable world and the necessity to introduce a critical and systemic perspective in all areas of our lives.

5.1 Brief Story of Design: From Utility to Experience and Circular Thinking

This section will explain a brief history of design from the Montreal Design Declaration definition, Bauhaus history, and other related stories of design which can support learners to understand and implement circular thinking in the real work cases. In this section, a very brief story of design is presented, to understand the progress from linear thinking to system/circular thinking in industrial design.

5.2 Circular Design Concept and Principles

This section will explain to learners information and knowledge of the circular design concept, relationship with circular economy and five principles of circular design itself. It aims to provide learners with better understanding about circular design which can be implemented in their green business development.

5.2.1 Circular Design Concept

Circular design is design that integrates the principles of the circular economy. These principles are based on keeping materials and products in use for as long as possible through efficient use and optimising durability. The aim of circular design is to minimise the ecological footprint of our production and consumption system and to allow the regeneration of natural systems which will be explained in this chapter.

5.2.2 Circular Design and Circular Economy

Circular design goes hand in hand with the circular economy. Specifically, this section will explain how design advocates rethinking the process of creating a product from the beginning and, to this end, which designers must adopt sustainability and respect for the environment as a starting point.

5.2.3 The Five Principles of Circular Design

The five principles of circular design will be explained to learners in this section with more details. Those principles such as use of local resources, resource optimisation and energy savings, look for product durability, repairability or recyclability, zero waste design, and continuous improvement project.

5.2.3.1 Use of Local Resources

This section will explain the importance of use of local resources and how to minimise waste production and energy consumption in the process. It aims to provide knowledge to learners on how to do it sustainably.

5.2.3.2 Resource Optimisation and Energy Savings

Resource optimization is the process of allocating and managing resources in the most efficient way possible which will be explained in this section. It will explain to learners the possibility to increase the level of use of objects and also to decrease the number of objects circulating in the market.

5.2.3.3 Look for Product Durability, Repairability or Recyclability.

If the product can be dismantled or reused, other uses can be considered to create additional value. This section will explain and share examples to learners about the importance of product durability, repairability and/or recyclability in the circular economy and design development.

5.2.3.4 Aiming for Zero Waste Design

This section will explain that zero waste design is essential. It aims to make learners realise and understand better about waste that cannot be reused at the end of a life cycle is considered a design flaw and requires a design change or a better anticipation of what the component will become.

5.2.3.5 Circular Design Encompasses a Continuous Improvement Project

Raw material flows, product uses or user behaviours may change depending on design modifications, so it is important to integrate them to improve the user experience and create new continuous value loops. Beyond its practical aspects, circular design has become crucial for many companies. Plastic pollution in the oceans is a particularly vivid example. This principle will be explained deeply to learners in this section.

5.3 Getting Started Designing for the Circular Economy

This section will provide knowledge on examining each step in detail of design for the circular economy, learners will see that in each step we have to take into account many factors and make choices in order to design a product with the circular philosophy.

5.3.1 Main Steps: Understand, Define, Make, Launch

The circular design process comprises four main stages which will be explained in this section and is informed by approaches such as design thinking and human-centred design.

5.3.2 Circular design strategies

There are a variety of strategies that will be explained in this section to help learners to design with the circular design principles in mind.

5.4 Assessment of circular design

How can you determine if your product is "circular"? And how can you assess the potential of the various circular strategies such as Reuse, Repair, Remanufacture, Recycle for your product? This section includes two different procedures that has been created to examine a design process to evaluate if it is circular or not; and if so, to what degree.

5.4.1 Circular Design Metrics

The Circular Design Metrics are a revolutionary tool that allows you to see and compare the environmental efficiency of a packaging design. Those metrics will be explained in

this section to learners on understanding eight different indicators that provide a clear picture of packaging circularity performance and help identify areas for potential improvement: optimised for the supply chain, recyclable, safe for the planet, carbon footprint, renewable material source, recycled content, use of materials, and designed for reuse.

5.4.2 Circularity Calculator

The circularity calculator was developed by, with and for designers working on circular products. They needed an intuitive and visual way to grasp circularity, showing the flows of reuse, remanufacture and recycling. This circularity calculator concept will be explored in this section.

References

- Circulab, 2022. Circular Design Toolkit. <https://circulab.academy.com>
- Directorate General For Energy (European Commission); Directorate General For Enterprise and Industry, 2014. Eco-design your future. How ecodesign can help the environment by making products smarter. <https://op.europa.eu/en/publication-detail/-/publication/4d42d597-4f92-4498-8e1d-857cc157e6db>
- Ellen MacArthur Foundation, 2022. <https://archive.ellenmacarthurfoundation.org/>
- Fifield, Brett and Medkova, Katerina, 2016. Circular design - Design for Circular Economy. https://www.researchgate.net/publication/313771263_Circular_Design_-_Design_for_Circular_Economy
- IDEO and Ellen Macarthur Foundation, 2022. The circular design guide. <https://www.circulardesignguide.com/>

Chapter 6

Sectors and Circular Economy

Summary

Circular economy and green business are not only limited to environmental related business only like forest and agriculture, it includes all types of business. Sectors in the circular economy include food, built environment/infrastructure, energy, electronics and ICT, packaging and plastics, textiles and also water sectors. Those are sectors that need better development, effective improvement and major fixes in terms of circularity - as it's affecting day-to-day lives and quality of life.

Objectives

There are some objectives needed to be achieved in this chapter such as:

- Provide knowledge and information about sectors involved in the circular economy which can transform to green and sustainable businesses.
- Provide elements and principles of each sector and how it can be developed and improved.
- Provide better understanding about the current situation in the sector which can support better development in a circular economy.
- Provide ideas based on sectors which can be developed and implemented by target groups - especially youth NEETs for their future work opportunities.

Time Allocation

Overall estimated time allocation for this chapter is 2–3 hours.

General Learning Outcomes

There are some general learning outcomes in this chapter such as:

- Able to explain different types of sectors which can be developed and implemented in the circular economy models.
- Able to understand the principles of each sector in the perspective of circular economy and sustainable development.
- Able to understand the current status and situation of each sector in the implementation of a circular economy both at the European level and internationally.

Specific Learning Outcomes

There are some specific learning outcomes in this chapter such as:

- Able to generate innovative ideas based on the explained sectors in the chapter.

- Able to map resources needed in the development of sectors in a circular economy.
- Able to explain the advantages, disadvantages and opportunities in each sector.

Background

All business sectors are taking an important role in the development of a circular economy and sustainable business development. From environmental to social sectors are needed to develop well and take a step for major improvement for a sustainable and circular future. This chapter will provide some information and knowledge about sectors which are taking a big role in the circular economy development. The explanation in this chapter will be developed based on actual information and also implementation in the field. By understanding the advantages, disadvantages and opportunities from each sector will be useful to have for target groups particularly youth NEETs for their future green and sustainable business development.

6.1. Food Sector

This section learners will explore the food sector in circular economy implementation. It aims to provide better understanding to learners how to develop, design and market the food sector and products, and circular economy can be implemented effectively.

6.1.2. Making the Most of Food

Learners will explore how cities can make the most of food by redistributing surplus edible food, while turning the remaining inedible by-products into new products, ranging from organic fertilisers for regenerative peri-urban farming, to biomaterials, medicine, and bioenergy in this section. This section aims to share knowledge and information which can trigger creativity and innovation among learners.

6.1.3. Designing and Marketing Healthier Food Products

This section will explain how food designers and green entrepreneurs have the power to ensure their food products, recipes, menus and distribution are healthy and sustainable to both people and natural systems and marketing activities can then be shaped to make these products attractive to people.

6.2. Built Environment Sector

Extraction of resources for buildings and infrastructure – think about aggregates, cement, steel, aluminium, insulation products – all have a heavy toll on the planet. In this

section learners will explore numerous potential products and benefits to support the transition to a circular economy.

6.2.1. The ReSOLVE Framework

The ReSOLVE framework is a key output of the Ellen MacArthur Foundation's research which will be explained in detail in this section. Learners will understand better about the outlines of six actions to guide the transition towards a circular economy, such as regeneration, share, optimisation, loop, virtualisation and exchange.

6.3.2. Potential of Circular Economy Strategies

Fulfilling the commitment to a global, climate-neutral energy supply by 2050 is not feasible from a materials perspective, based on current mining production (supply) and sustainable energy technologies (demand). There are four circular strategies in the built environment and energy sector such as rethink, reduce, repair and recycle which will be explained in this section to raise awareness and create a positive outlook to make the circular economy feasible to achieve.

6.4 Electronics and ICT Sector

E-waste is referred to as almost any discarded household or business item with circuitry or electrical components with a power or battery supply. This section will explain to learners this sector integration to circular economy and business.

6.4.1. Strategy for Circular Economy

Learners will explore the strategy of a circular economy in the electronics and ICT sector in this section which can support better understanding on how to implement it in real work cases.

6.4.2. Opportunities

This section will explain to learners about greater collaboration, multinationals, small- and medium-sized enterprises (SMEs), entrepreneurs, academia, trade unions, civil society and associations could create a 'circular economy' for electronics where the waste is designed out, the environmental impact could be reduced and decent work created for millions.

6.5. Packaging and Plastics Sector

Our relationship with plastic needs rethinking. Plastics are versatile materials, but the way we use them is incredibly wasteful. This section learners will explore the vision for a circular economy for plastic and its sector.

6.5.2. Reuse Models

Innovative reuse models which will be explained to learners in this section can unlock significant benefits, enabled by digital technologies and shifting user preferences. Such models can help deliver a superior user experience, customise products to individual needs, gather user insights, build brand loyalty, optimise operations, and save costs.

6.6 Textiles Sector

Textile sector's significant use of toxic chemicals and finite resources, as well as issues such as inadequate protection of garment workers, are under increasing scrutiny. Trends such as fast fashion produce high volumes of low-quality fashion items that are often used for a short amount of time and are difficult to recycle. This section learners will explore the possibility of circular economy integration with textile sectors.

6.6.1. Circularity for Textiles

Circularity for textiles is important nowadays. In this section, learners will get a better understanding of how to develop circularity in this sector.

6.6.2. Action for a Transition to a Circular Economy

There are some actions for a transition to a circular economy in textile sectors which will be shared and explained in this section to learners. This aims to give learners information about the actions which can support future innovation in the green textile business.

6.6.3. Challenges and Solutions

There are some challenges and barriers for transition to a circular economy in the textile sector which will be explained in this section. However, learners also will explore some solutions to overcome challenges and barriers for transition to a circular economy in the textile sector.

6.7 Water Sector

The current water crisis is one of the greatest challenges of our time. This section learners will explore water challenges in urban areas, where, for the first time in history, more than half the global population lives. It aims to provide better understanding to learners on how to integrate the circular economy in the water sector.

6.7.1. Strategies for the Circular Economy of Water

Learners will be provided with strategies for the circular economy transition of water sector in this section.

References

- ARUP, 2016. The Circular Economy in the Built Environment.
<https://www.arup.com/perspectives/publications/research/section/circular-economy-in-the-built-environment>
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)., 2019. Circular Economy in the Textile Sector.
https://circulareconomy.europa.eu/platform/sites/default/files/giz_report_circular_economy_textile_sector_2019_final.pdf
- Encyclopedia, 2020. Circular-economy in the Built Environment. <https://encyclopedia.pub/entry/2319>
- ITU, 2020. Creating a circular economy for ICT equipment.
<https://www.itu.int/en/mediacentre/backgrounders/Pages/e-waste.aspx>
- Ledsham, Nicola., 2022. Creating a Circular Economy for Plastics.
<https://www.sustainability.com/thinking/creating-a-circular-economy-for-plastics/>
- Morseletto, P., Mooren, C.E. & Munaretto, S., 2022. Circular Economy of Water: Definition, Strategies and Challenges.
<https://doi.org/10.1007/s43615-022-00165-x>
- PWC, 2020. Taking on tomorrow: The rise of circularity in energy, utilities and resources.
<https://www.pwc.com/gx/en/energy-utilities-mining/assets/pwc-the-rise-of-circularity-report.pdf>
- USAID, 2021. Clean Energy and the Circular Economy.
<https://www.climatelinks.org/sites/default/files/asset/document/2022-04/2021-SURE-Circular-Economy-Fact-Sheet.pdf>
- WBCSD, 2023. Measuring circular buildings - key considerations.
<https://www.wbcsd.org/Pathways/Built-Environment/Resources/Measuring-circular-buildings-key-considerations>

Chapter 7

Green and Circular Economy Pitch

Summary

Communicating in the right way including green and circular economy ideas are some important aspects for entrepreneurs. Knowing how to *pitch* a business or product idea based on a green and sustainable business model is a useful skill today. This chapter includes guidelines for designing the structure of a *pitch* based on green and circular economy communication models and reiterates the importance of choosing an appropriate language and communication techniques according to the target audience. What should or should not be present in a pitch, are some essential information to make a successful pitch.

These guidelines can lead to pitch construction that can be applied to different types of organisations.

Objectives

There are some objectives needed to be achieved in this chapter such as:

- To develop practical knowledge and skills that young NEETs can use in the future for their real work, targeting mainly the necessary alignment between the objectives and characteristics of the project/business idea and the interests and concerns of the public.
- To raise awareness of the need to implement green and circular economy business models and concepts.

Time Allocation

A 3–4 hour work will be required for this chapter.

General Learning Outcomes

There are some general learning outcomes in this chapter such as:

- Understand the basic structure of a pitch
- Understand communication of the green and circular economy
- Provide knowledge about the audience in a pitch
- Understand what to do and what not to do on a *pitch*.

Specific Learning Outcomes

There are some specific learning outcomes in this chapter such as:

- Acquire the knowledge and skills that contribute to the success of the execution of the green and circular economy pitch
- Understand the communication methods according to the audience

- Able to practise and implement the communication methods of the green economy and circular in a pitch
- Understand and able to implement the communication and persuasion in a pitch

Background

The concepts of green and circular economy are associated with the theme of sustainability at the political, scientific research and business levels. Each of these concepts offers different views in addressing economic, social and ecological objectives. However, when considered jointly, the concepts of green and circular economy point to a society and economy based on renewable/reproductive processes, providing material and immaterial benefits that meet the economic and social requirements of all people, now and in the future. (D. D'Amato, J. Korhonen, 2021). It is also important, when developing a pitch, to realise that it should be seen as a tool to bring light to the projects / business ideas and products, business models and social projects, and that the language used and the approach to the themes should take into account the target audience and the importance of getting their attention and engaging them.

7.1. Structure of a Pitch

This section will explain about a pitch by definition, basic elements of structure, and problem identification which can support effective pitch structure implementation. Learners will explore some questions which can support the development of structure pitch in this section such as problem, solution, market and business model.

7.2. Green and Circular Economy Communication Models

This section will provide information and knowledge to learners on understanding the consumer market growth and awareness of the impact and benefits of green products. Also, understand that the organisations/companies should focus on developing this type of product as they respond to the needs of consumers and the environment. The communication models of the circular economy in a pitch will be explained in this section thoroughly.

7.2.1 Communication and Persuasion

Persuasive communication will be explained to learners in this section with aims to be used to convince a single person, or to move an entire audience towards a desired action like a pitch activity.

7.3. Knowledge about target audience

In the preparation of the *pitch* it is important to understand who it will be directed to, that is, which target audience will be influenced. This matter will be explained in this section to provide learners knowledge about the target audience.

7.3.1. The Pitch–Audience Fit

This section will explore how to map and analyse the pitch-audience fit. Learners will get better understanding about what are key questions which can help them to map the audience fit for a pitch activity.

7.4. What To Do and What Not To Do in a Pitch

When you want to define the specific objectives to present a business idea or planning the execution of a product, the SMART methodology can be applied. This SMART methodology will be explained to learners in this section. Also, this section will explore what to do and not to do in a pitch.

7.4.1. What To Do in a Pitch

This section will provide some information and knowledge to learners about what to do in a pitch, so learners will be able to do a pitch effectively in the future.

7.4.2. What Not To Do on a Pitch

This section will provide some information and knowledge to learners about what not to do in a pitch, so learners will be able to do a pitch effectively in the future.

References

- Bailey D. (2021) The structure of the perfect pitch. <https://www.dave-bailey.com/blog/the-structure-of-the-perfect-pitch>
- D. D'Amato, J. Korhonen (2021) . Integrating the green economy, circular economy and bioeconomy in a strategic sustainability framework. <https://www.sciencedirect.com/science/article/pii/S0921800921002019>
- Doran G. (1981) "There's a S.M.A.R.T. way to write management goals and objectives"
- F. Laura, Telg R., Irani T (2012), Persuasion as a Communication Tool. <https://edis.ifas.ufl.edu/pdf/WC/WC144/WC144-Dx6bx63md8.pdf>
- Mogaji, E., Adeola, O., Adisa, I., Hinson, R.E., Mukonza, C., KirGiz, A.C. (2022). Green Marketing in Emerging Economies: Communication and Brand Perspective; https://doi.org/10.1007/978-3-030-82572-0_1



<https://community.mis.temple.edu/mis0855002fall2015/files/2015/10/S.M.A.R.T-Way-Management-Review.pdf>

Ellen MacArthur Foundation (2022) Make a Circular economy pitch in your organisation.
<https://archive.ellenmacarthurfoundation.org/expl ore/make-a-circular-economy-pitch-in-your-organisation>

Trajkovska B. (2017). The do's and don'ts of a successful startup pitch.

<https://www.eu-startups.com/2017/12/the-dos-and-donts-of-a-successful-startup-pitch/>
<https://www.eu-startups.com/2017/12/the-dos-and-donts-of-a-successful-startup-pitch/>

Chapter 8

Creative and Innovative Management

Summary

Management of creativity and innovation can be defined as the process of striking a healthy balance between the two in the workplace. It's not always easy to keep the creative juices flowing, especially on the job. Staff members may experience periods of creative block when working under pressure to meet impending deadlines and other time constraints. It's not easy to both manage your creativity and solve problems by thinking of fresh ideas and approaches, which is what solution ideation is all about. It is where innovation management comes in.

With the right innovation management approaches, you may finally tackle those nagging issues you've been putting off for eons by making use of tools made specifically for inspiring original thinking and generating game-changing concepts.

Objectives

After studying this chapter, the young NEET will

- Develop a better understanding about management of creativity in general and at the workplace
- Create better understanding and develop ability to differentiate between innovation and creativity
- Increase awareness about what skills would one need to work on in order to increase his/her creativity
- Understand and be aware of the importance of attitudes, skills and competences needed for creativity to flourish at the workplace and in the personal life.

Time Allocation

Overall estimated time allocation for this chapter is 2–3 hours.

General Learning Outcomes

There are some general learning outcomes in this chapter as it follows:

- Understand the importance of creativity skills
- Able to understand the principles that apply when increasing one's own creativity
- Understand the relationship between creativity and the work environment.

Specific Learning Outcomes

There are some specific learning outcomes in this chapter, as the user will:

- Be able to explain what creativity skills are and how to assess one's own such skills

- Be able to elaborate distinguish between creativity and innovation
- Understand how to develop one's own creativity through changing one's habits or by using tools and techniques
- Understand in what way, the creativity skills are important in employment
- Gain knowledge on that is the synergy between the workplace environment and one's creativity
- Identify what are the attitudes and actions that increase or block creativity in the workplace.

Background

The ability to come up with a fresh and effective solution to an open-ended problem or activity is what we mean when we talk about creativity. Doing something in a novel method while still achieving the desired result is an example of creativity. Young NEET, who want to gain a foothold in the professional life, will benefit from reading this chapter by getting informed about how important are creativity skills that they own, learning how to define and detail them, how to amplify them and finally, how to use them in the workplace.

8.1. Introduction to Creativity

This section will aim to provide an introduction to creativity skills and what will youth NEETs and learners in general need to take into consideration in order to evaluate his/her creativity skills

8.1.1. What are Creativity Skills?

This section aims for learners to get better knowledge at identifying the most important creativity skills as well as ensuring their description, therefore setting a common vocabulary for use in this field.

8.1.2. Creativity and Innovation

This section will explain in detail the similarities and the differences between creativity and innovation. Two terms - creativity and innovation are similar but quite different concepts. Learners will explore those concepts in this section.

8.1.3. Why Do They Matter?

This section will describe the importance of creativity and innovation for a human being. Learners will get a better understanding of why creativity and innovation matter in life and specifically to support circularity.

8.2. How to Develop Creativity

8.2.1. Introduction

This section will emphasise the importance of ensuring a continuous stimulation of the brain and of creativity. It will also detail several thinking skills and identify some paths towards their stimulation as well the benefits that come with their stimulation.

8.2.2. Habits

This section will describe the importance of including creativity as a habit in your daily life. Also, it will enforce ideas about including in the young NEETs life some habits that facilitate the increase in creativity. Also, this section will describe several useful habits which can be adopted by the person who is creative in order to increase his/her brain power and creativity.

8.2.3. Tools and Techniques

This section will introduce to the learners about tools and techniques that will stimulate the creativity of the young NEET. There are a lot of tools available - digital or analogue - for any who wish to use them, for stimulating creativity in many fields, such as literature, music, drawing, problem solving, and life challenges. Techniques are usually sets of actions, which are done in sequence in order to obtain a clear result. Creativity techniques can be done in open air, on the computer or through analogue means.

This section will include several exercises and examples of tools which can be used for sparking creativity in specific fields as well as for sparking general inherent creativity in a person.

8.3. Using Creativity Professionally

8.3.1. Are Creative Skills Important for Employment?

In this section, we will discuss how creativity integrates with the economy and for employment. It will offer the young NEET an image about how much his/her creative skills are important in the employment process. Also, it will describe the way that the digital age influences their creativity.

Another aspect that the young NEET will obtain from this section is the characteristics that a workplace will require him to be as well as one exercise or practise for increasing each skill. In this section, learners will get an idea about what jobs they can occupy with

creative skills now and in the future as well as some pointers about the present and future global labour market.

8.3.2. The Relationship Between the Work Environment and Creativity

In this section, we will discuss the way creativity is used in the workplace and what is the role of the creatives in the industries. It will include a comparison between the role that the creatives had in the past and the role that is foreseen for them in the future.

8.3.3. Fomenting Creativity in the Workplace

In this section we will describe how to foment creativity in the workplace either as a team member or as a leader. It will describe the role of a manager and of a team mate in relation to the creativity process.

8.3.4. Creativity Blockers in the Workplace

This section will discuss the little or the big things that impede the creativity process when performing professional duties, either at home or at the workplace. It will analyse the way in which the creative mind works and what motivates or demotivates the creative mind to perform.

References

- Amabile, Theresa M., 2020. How Your Work Environment Influences Your Creativity. https://greatergood.berkeley.edu/article/item/how_your_work_environment_influences_your_creativity
- Beck, Tom., 2020. A List of Simple Daily Habits to Boost Your Creativity. <https://medium.com/mind-cafe/a-list-of-simple-daily-habits-to-boost-your-creativity-44fd1994f94b>
- Inspiring Interns and Graduates, 2020. How Your Work Environment Influences Your Creativity. <https://www.inspiringinterns.com/blog/2020/10/how-your-work-environment-influences-your-creativity/>
- Stanford Online., 2022. Creativity and innovation management: How to inspire original ideas. <https://online.stanford.edu/creativity-and-innovation-management>
- Wooll, Maggie., 2021. Why creativity isn't just for creatives and how to find it anywhere. <https://www.betterup.com/blog/creativity-in-the-workplace>
- National Improvement Hub, 2021. What are creativity skills?. <https://education.gov.scot/improvement/learning-resources/what-are-creativity-skills>