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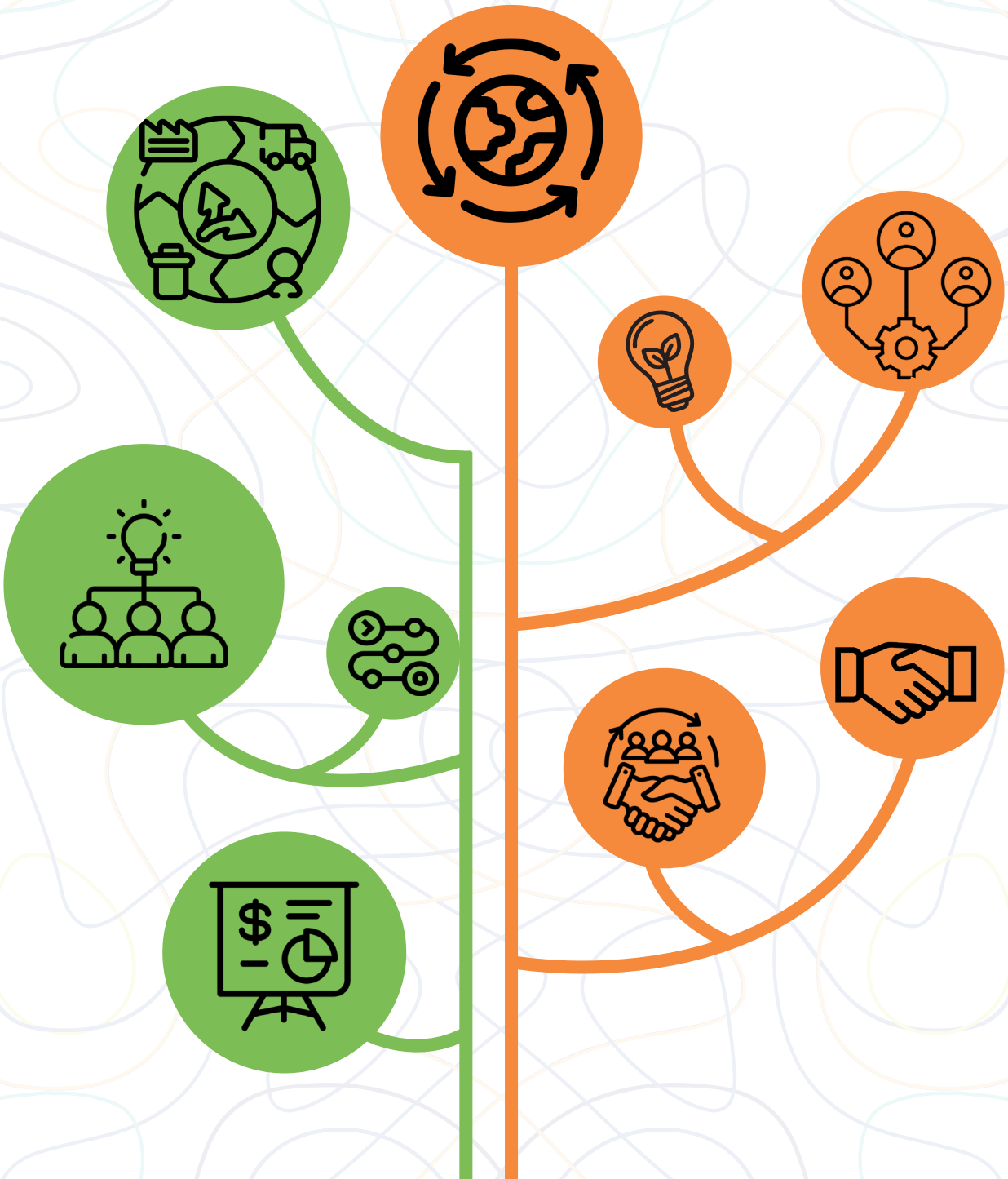
IMPACT HUB Kathmandu

Circular Economy Toolkit

for Lumbini and Bagmati Province



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Abbreviations

ADRA	-	Adventist Development and Relief Agency
AFOLU	-	Agriculture, Forestry and Other Land Use
API	-	Application Programming Interface
BFIs	-	Banks and Financial Institutions
BMC	-	Business Model Canvas
B2B	-	Business to Business
B2B2C	-	Business to Business to Consumer
B2C	-	Business to Consumer
CE	-	Circular Economy
CoGS	-	Cost of Goods Sold
CREASION	-	Center for Research and Sustainable Development Nepal
CSOs	-	Civil Society Organizations
DLOQ	-	Dimensions of learning Organizations Questionnaire
EMF	-	Ellen MacArthur Foundation
ESOs	-	Entrepreneur's Support Organizations
HCD	-	Human Centric Design
IHA	-	Impact Hub Association
IH KTM	-	Impact Hub Kathmandu
KPI	-	Key Principle Indicator
LGBTQIA+	-	Lesbian, Gay, Bisexual, Transgender, Intersex, Queer/Questioning, Asexual
MOA	-	Memorandum of Association
MSME	-	Micro, Small & Medium Enterprises
M&A	-	Merger and Acquisitions
NDCs	-	Nationally Determined Contributions
PPT	-	Power Point Presentation
QR	-	Quick Response
RoC	-	Roots of Circularity
ROI	-	Return of Investment
RESA	-	Renewable Energy Solution in Agriculture
RILEC	-	Relevance Inclusion Learning Effectiveness and Credibility
R&D	-	Research and Development
SGB	-	Small and Growing Businesses
SMEs	-	Small and Medium Scale Enterprises
WCN	-	Wildlife Conservation Nepal

Introduction

About this Toolkit :

We can mainstream circular design principles across small and growing businesses regardless of whether they are social, environmental or profit-driven.

This toolkit offers insights, tools and methodologies for Entrepreneur Support Organizations (ESOs) to take a Circular Economy lens to their entrepreneur support programs, particularly incubators and accelerators, in order to realize the statement above. Also this toolkit will act as a guiding manual for the incubatees, all the details for the six months long incubation period has been provided. Hence, this toolkit aims to function as a facilitation guide book along with program management for the incubatees throughout their incubation period.

Resources are brought together here to enable you to :

- Develop k nowledge of Circular Economy trends, frameworks, businesses and sectors.
- Build the capacity of your team, organization and ecosystem to catalyze action.
- Integrate circularity as a design principle into programmatic support for entrepreneurs.
- Plan work and deliverables moving forward for the incubatees.

This toolkit is designed for ESOs, Business Development Service Providers, entrepreneurs and any organization interested in integrating circular design principles into the support they currently offer to their entrepreneurial communities or would like to develop.

You can use this toolkit to develop a program explicitly focused on supporting ventures with Circular Economy solutions, or to embed circular design principles into other programs that aren't explicitly focused on the Circular Economy. The latter approach is particularly encouraged in order to embed circularity at scale.

Existing knowledge of program design, delivery and management is assumed. This toolkit does not dive into what makes for a successful entrepreneur support program more generally.

Rather, this toolkit highlights opportunities to integrate Circular Economy knowledge, approaches and activities into entrepreneur support program design and implementation. Rather than reinvent the wheel, in many cases this toolkit links to and spotlights the excellent resources and organizations that are already out there in the commons, curating them specifically for individuals and teams concerned with entrepreneur support. By implementing elements of this toolkit, you will be contributing to a nascent yet increasingly active discourse in the entrepreneur ecosystem regarding how ESOs, investors and others can collaborate to address climate change. Through your programs you will also be generating a pipeline of innovation for key industries and value chains that need to become more circular.

Background

All recommendations in this toolkit are based on tried and tested approaches piloted by the Impact Hub Network as part of a two year Circularity Program exploring how sustainability can be embedded as a design principle into the Small and Growing Businesses (SGB) sector, funded by MAVA Foundation and DOEN Foundation. Worksheets and facilitation guidelines which are provided in this toolkit have been extracted from IDEO and Impact Hub Kathmandu's (IH KTM) successfully designed, developed and implemented incubator programs such as the I 3 Incubation Program and Tourovation Hub / Renewable Energy Solution in Agriculture (RESA) .

Between 2020 and 2022, 12 Impact Hubs were supported to pilot incubation and acceleration programs integrating circular design principles in a variety of ways, prompting Circular Economy interventions, enterprise development and ecosystem building in Rwanda, Tanzania, Senegal, Zimbabwe, Nigeria, Greece, Spain, Turkey, Croatia, China and Colombia. Similarly, IH KTM implemented the I 3 and Tourovation Hub/ RESA programs in Bagmati and Gandaki Provinces of Nepal. All of the tools used globally (inclusive of Nepal) are compiled in this toolkit to provide holistic understanding and facilitation guidelines to the incubation ecosystem.

The locations of these pilots have led to more of a focus on Europe, Africa and Nepal in parts of this toolkit, but the majority of the resources are relevant regardless of ESO location.

Each pilot program focused on different industries based on the local context. From health to waste management, agriculture to education, or technology to transport and manufacturing, pilot programs supported enterprises to become more sustainable and to make their products and business models more circular.

This toolkit was provided as part of a broader package of capacity building services to support these Impact Hubs design and deliver their pilot programs. Thus the contents have been validated through practice and refined based on learnings emerging from the pilots.

The learning, stories and voices of pilot program practitioners and ventures are woven throughout this toolkit. Now, let's create an even greater shift towards circularity and a regenerative economy!

Brief on Roots of Circularity (RoC) in Nepal

Roots of Circularity (RoC) is a 4 year long project funded by the European Union and spearheaded by Impact Hub Association (IHA) in collaboration with Impact Hub Kathmandu (IH KTM) and Wildlife Conservation Nepal (WCN) that aims to cultivate a Circular Economy ecosystem in Nepal. Over the course of four years, RoC will focus its efforts on the Bagmati and Lumbini Provinces, with the primary goal of driving a fundamental shift in Nepali policies, engaging citizens, and nurturing the entrepreneurial landscape to embrace circular economy principles. The project will engage with civil society organizations, empower micro, small, and medium enterprises (MSMEs), collaborate with academic institutions, and establish a Nepal Circularity Alliance to promote multi-stakeholder collaboration for circular economy policy development.

Mission :

"To instigate a transformation in Nepali policies, engage citizens, and empower the entrepreneurial ecosystem to embrace circular economy. Through active engagement with civil society organizations, support for micro, small, and medium enterprises, collaboration with educational institutions, and the establishment of the Nepal Circularity Alliance, RoC is poised to foster a sustainable and circular future in Nepal, contributing to global sustainability objectives and the realization of the country's Nationally Determined Contributions (NDCs)."

Overall objective :

CSOs, MSMEs, private sector, academia and policymakers act together as drivers of change igniting a systemic shift in the Nepali society and entrepreneurial ecosystem towards circularity and the specific objective (SO) namely to empower CSOs, MSMEs, academic institutions, policymakers and media to promote circularity in Bagmati and Lumbini Provinces.

Consortium Backgrounds :

- Wildlife Conservation Nepal (WCN): Wildlife Conservation Nepal , WCN, a non-governmental organization registered with the Government of Nepal, is a not for profit organization. It was established in 2002 with a vision to protect and conserve natural heritage and disseminate information on environment and wildlife issues. WCN supports government agencies to protect wildlife beyond protected areas, help in the developmental aspect of conservation and through its professional team help the Government of Nepal to carry out different impact assessment studies on natural resources and ecological areas that are of importance.

- ADRA Nepal: Adventist Development and Relief Agency (ADRA) Nepal was founded in 1987 under the global brand of Adventist Development and Relief Agency (ADRA) - a humanitarian organization of the Seventh-day Adventist Church. ADRA's mission is to work with people in poverty and distress to create just and positive change through empowering partnerships and responsible action. ADRA Nepal is legally operational in Nepal by signing an agreement with the Social Welfare Council (SWC)- a regulatory body established by the government of Nepal. ADRA Nepal's history is closely attached to the health sector. For many years after its inception in Nepal, ADRA Nepal focused its services in the health services. Today, its services have been expanded to four core areas- Health, Livelihood, Disaster Risk Management and Education.

- Center for Research and Sustainable Development (CREASION) Nepal: Center for Research and Sustainable Development (CREASION) Nepal is a not for profit organization, dedicated to building economically empowered and resourceful communities that prioritize sustainable development and a healthy environment. By providing economic opportunities and empowering individuals, we can help create long-term, positive change in Nepal. CREASION envisions a future where communities are self-reliant and empowered to lead their own development initiatives and believes in focusing our efforts on creating a more sustainable future by prioritizing social welfare and community development.

Timeline of Master Classes

Program	Activity Title
IDEATION phase (Orientation, HCD)	Orientation
	Masterclass 1: Introduction to Circular Economy
	Human Centric Design Sprints (3-4 Days)
INCUBATION PHASE (Monthly asterclasses with business/financial coachings)	Masterclass 1.1: Developing a Circular mindset
	Masterclass 2: Circular Finance and pre-seed funding
	Masterclass 3: Circular Strategy
	Masterclass 3.1: Stakeholder/Ecosystem Mapping
	Masterclass 3.2: Visibility & Branding
	Masterclass 4.1: Environmental Practices
	Masterclass 4.2: GEDSI
	Masterclass 5: Circular Business Model Canvas
	Masterclass 6: Circular Business Plan Development
	Masterclass 7: Reflection & Planning (Circularity Roadmap)

Coaching Template (Business/Finance) :

1 -1 Coaching Session :

Company :

Session date (mm.dd.yy) :

Time (start):

Time (end) :

Attendees:

Business Coach :

Meeting called by :

Location :

Objective of the meeting :

Discussion Items :

Next steps & tools shared :

Follow Up :

Follow Up:	Time	Location

Contract Overview

The contract overview comprises eligibility criteria, documents and commitments of incubatees.

The eligibility criteria of the startups/MSME for the RoC Incubator program are as follows:

Registered startups and MSMEs in Bagmati and Lumbini province beyond the ideation phase and in operation are eligible to apply. Priorities will be given to

1. Enterprises :

Startups and MSMEs from all business sectors are eligible to apply (except for trading businesses).

2. Registration status :

Startups and MSMEs that are registered according to the laws of the Government of Nepal.

3. In operation :

Applications from the startups and MSMEs that are in operation for minimum six months to one year across the Bagmati and Lumbini Province.

4. Location :

The business must be located in Bagmati and Lumbini Province.

5. Application Form Completion :

The applicant needs to comply with the application process to be considered for selection. This includes the completed application form (address all questions) and provide all the required information.

6. Products & Services :

Applicants whose products and services are introduced in the market with basic features (minimal viable product i.e. the product must have undergone successfully the necessary quality testing confirming it can be commercialized 1) are encouraged to apply.

NOTE: We are pleased to announce the selection process for the 3rd Bagmati and Lumbini Cohort, where we aim to foster inclusivity and gender balance. Women, youth and marginalized groups-underrepresented communities and ethnicities such as Dalit, LGBTQIA+ are encouraged to apply and will be prioritized.

Out of the 10 available participant slots, at least 5 will be allocated to women owned enterprises. This decision reflects our commitment to ensuring equitable representation, recognizing that women constitute more than 50% of the population. The purpose of this intervention is to create more opportunities for women, and we believe this balanced approach will contribute to the overall success and impact of the cohort.

Out of the 10 available participant slots, at least 2 slots will be allocated to startups and MSMEs owned by persons from marginalized groups such as underrepresented communities and ethnicities (Dalit, LGBTQIA+ amongst others).

Once selected , companies shall provide

- Company registration documents
- Memorandum of Association (MOA)
- Articles of Association (AOA)
- PAN

Incubator program period: The incubator program will run for 7-8months.

Incubatee's roles and responsibilities :

- Incubatee shall attend all the masterclasses and HCD sprints that are developed for them with the objective of capacitating them on integrating circular economy practices and approaches in their business. (90% of attendance is mandatory)
- Two participants from each business must attend the masterclasses, and business and financial coaching. Based on the masterclass topics, incubatees are allowed to bring the concerned member from their team.
- One participant from each business must be fixed while the second participant can be optional (based on masterclass topics and coaching sessions)
- One blog post is to be submitted (500-1000 words). If the incubatee is not able to submit the blog post, the seed fund imbursement shall not be released.

- Sharing data collected with the support of RoC for mutual benefit with IH KTM.
- Incubatee shall focus on developing circular solutions supporting their business as the significant part of this incubator program.
- Incubatee shall be actively involved in the process of developing their circular business models and business development plan with the financial projection.

Liability :

In further consideration for being allowed to participate in the RoC incubator program, incubatees unconditionally agree that the RoC team shall not be liable for any advice or the depth, extent, quality and/or quantity of services provided under this program. incubatees unconditionally agree further that services provided under the RoC incubator program are merely advisory in nature, without any binding effect on incubatees.

Incubatees are free to accept and/or reject such advice offered, shall exercise due diligence and caution in receiving such advice, and will exercise informed and independent judgment in accepting and/or rejecting any such advice. The incubatees agree to duly and faithfully adhere to these said provisions while participating in the program in order to receive the benefits of the Project.

Impact Hub Kathmandu and the RoC Incubator Program are not liable or responsible for loss, theft or damage to personal items and property including but not limited to laptop computers, mobile phones or merchandise.

[1] A minimum viable product is a version of a product with just enough/basic features to be usable by early customers who can then provide feedback for future product development.

Master Class 1:

Introduction to Circular Economy

Master Class 1:

Introduction to Circular Economy

What will you be informed about?

- Traveling back in time - Industrial Revolution
- What is a linear economy?
- Introduction to Circular Economy
- What is Circular Economy?
- How does the Circular Economy work?
- Benefits of Circular Economy
- What is the vision of the Circular Economy?
- Why Does Circular Economy Matter to Impact Hub?
- Circularity Tales

Facilitator Guidelines :

- **Objective of this session:** The main objective of this session is to create a strong foundation of understanding linear and circular economy. Through this session the facilitator will be able to connect with linear economy and then followed by circular economy.
- **Time:** Full day
- **Tools:**
  - Stop watch
  - Board markers
  - Flip charts
  - Duster
  - Meta cards
  - Pens
  - PPT
  - Pictures of Industrial Revolution
  - QR Codes print outs

Instructions :

- To go through this section and create your own PPT
- There are facilitator guideline pop up boxes with instructions
- You are more than welcome to change the instructions and use it to cater to your audience
- The instructions are just simple step by step process
- May sure to have all the logistics prepared

Traveling back in time - Industrial Revolution :

Before we begin with the first master class, we will be traveling back in time to the 18th Century's Industrial Revolution. The Industrial Revolution occurred from 1750 onwards for the next century or so. Started from Great Britain and dedicated the rhythm of progress to the rest of Europe and the United States as well (James, n.d.). The Industrial Revolution did not happen overnight but it spread over the continent very gradually. One of the biggest factors to attribute to the revolution was the high growth in the population, which led to production of a reservoir of workers. Also one of the by-products of the high population growth was there were higher demands of basic amenities such as food, clothes, shelter among others. There was a dire need for more efficient methods of production in order to supply the basic needs of so many people (James, n.d.).

Great Britain took the utmost advantage of the situation, there were three major advantages to be noted here:

- An extremely productive and profitable agricultural system.
- Large deposits of the key resources coal and iron ore.
- An astonishing number of creative inventors (James, n.d.).

Then the first spinning frames were created on the British Isles. Followed by weaving looms, and it was not long before textile factories were shooting out of the ground. At the same time a boom in the iron industry broke out, as soon as people discovered to turn coal to iron manufacturers had excellent, almost unlimited reserves of fuel at their disposal with which to process iron ore. Once steam engines were introduced to heat the furnace ovens more quickly and effectively, the skylines in the coal regions were quickly covered in colliery towers and the chimney stacks of iron works (James, n.d.).

Facilitator Guidelines : (Time 5 minutes)

Make the participants read the above paragraph.

- Then ask the participants to write down "From the above statement, list down the impacts created by the industrial revolution"
- Give them 2 minutes to list it down.
- Ask 3 of them to share their lists.

The main features involved in the Industrial Revolution were:

Technological developments :

- The use of new basic materials (iron, steel)
- The use of new energy sources (both fuels and motive power such as coal, steam engine, electricity, petroleum and the internal combustion engine)
- The invention of new machines, (spinning jenny, power loom) that permitted increased production with a smaller expenditure of human energy
- A new organization of work known as the factory system, which entailed increased division of labour and specialization of function
- Important developments in transportation and communication, including the steam locomotive, steamship, automobile, airplane, telegraph and radio
- The increasing application of science to industry.

Socioeconomic growth :

- Economic changes resulted in a wider distribution of wealth
- The decline of land as a source of wealth in the face of rising industrial production
- Increased international trade
- Agricultural improvements that made possible the provision of food for a larger nonagricultural population
- Political changes reflecting the shift in economic power, as well as new state policies corresponding to the needs of an industrialized society

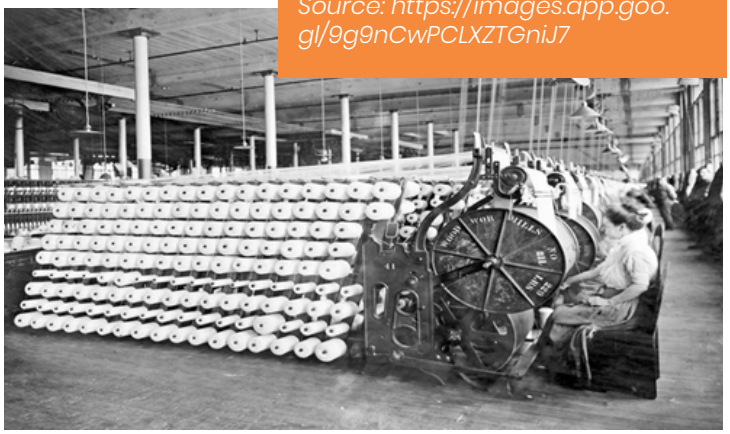
Shift in culture :

- Sweeping social changes, including the growth of cities
- The development of working-class movements
- The emergence of new patterns of authority
- Cultural transformations of a broad order
- Workers acquired new and distinctive skills, and their relation to their tasks shifted; instead of being craftsmen working with hand tools, they became machine operators, subject to factory discipline
- There was a psychological change: confidence in the ability to use resources and to master nature was heightened

Facilitator Guidelines : (Time 15 Mins)

1. Ask the participants "Why do you think it is important to learn about the industrial revolution?"
2. Divide them into 3 groups (Provide them with flip chart and markers)
3. Give each group 1 picture (below provided for reference)
4. Give them 5 minutes to think and list down
5. Then take answers from 1 participant from each group (make sure to provide chance to the ones who has not spoken)
6. Then ask "what are the impacts of the industrial revolution that we even see today?"
7. Give them 2 minutes to think and list down
8. Then take answers from 3 participants (make sure to provide chance to the ones who has not spoken)
9. Write down the list on the board/flip chart

Source: https://images.app.goo.gl/L88axhh2znULc3TY7



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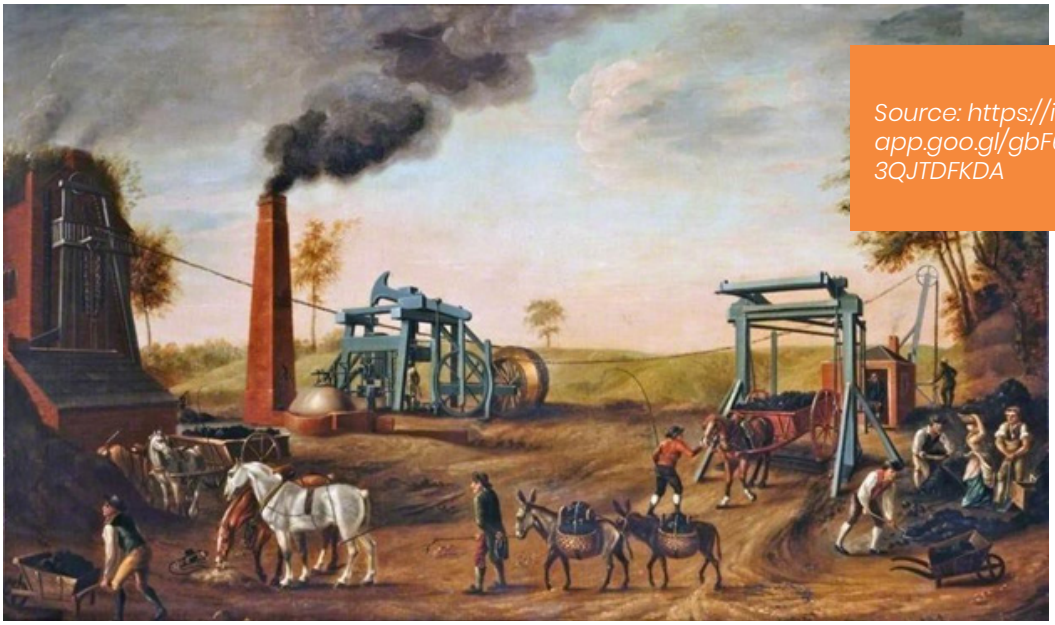


Source: https://images.app.goo.gl/gbF68poN-3QJTDFKDA

Source: (Industrial Revolution | Definition, History, Dates, Summary, & Facts , 2024)

More Reading Materials :

- https://www.history.com/topics/industrial-revolution/industrial-revolution
- https://www.britannica.com/event/Industrial-Revolution
- https://www.erih.net/how-it-started/the-industrial-revolution-in-europe
- https://www.erih.net/how-it-started/the-industrial-revolution-in-europe

Facilitator Guidelines : (Time 7 Minutes)

- Ask the participants " Before we start with linear economy, can you tell me what is your linear economy?"
- Further tell them "Write down the examples from Industrial Revolution"
- Give them meta cards and ask them to write it. (Give 5 minutes)
- Ask them to hand them down to you and read it out loud
- Then show the definitions in the PPT

What is a linear economy ?

The industrial revolution laid the framework for this linear economy and it has brought many benefits. For the first time, goods were able to be mass produced. It seemed as though raw materials and energy were effectively infinite, and on the back of this economic transformation industrialized countries became societies of abundance, the world population soared, and many millions were pulled out of poverty (Ellen Macarthur Foundation, n.d.).

This global development was only possible by extracting finite resources and degrading natural capital to generate economic value. Over time we have learned to do this in more and more ways to create ever more advanced products. But the presiding model has not changed (Ellen Macarthur Foundation, n.d.).

The negative effects of this approach, in the form of environmental damage and the loss of valuable materials, are clear. They are driven by the mismanagement of resources and land in industries across the economy, including agriculture, construction, and transport.

The way our economy functions is destroying the natural capital on which it depends. This is seen in the soils that are being degraded, the ocean that is

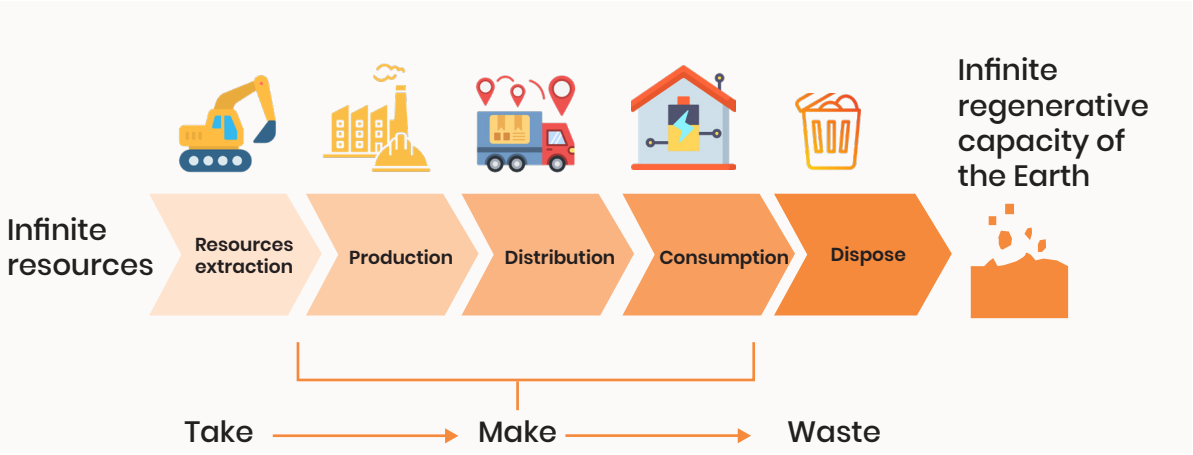
being polluted, the biodiversity that is being lost, the freshwater that is drying up, and the forests that are being felled. There are various definitions of linear economy adopted, below are few definitions of linear economy:

Linear economy is a system in which people buy a product, use it, and then throw it away. The term linear refers to the straight progression that a product can follow, with a beginning, a middle and an end. There is no thought along the line regarding recycling or reuse. This model is characterized by a high volume of new manufacturing.
What is the linear economy?

The linear economy, sometimes referred to as the take-make-waste economy, is a system where resources are extracted to make products that eventually end up as waste and are thrown away. Products and materials are generally not used to their full potential in a linear economy and, as the name suggests, always move in one direction – from raw material to waste.
What is the linear economy?

A linear economy traditionally follows the "take-make-dispose" step-by-step plan. This means that raw materials are collected, and then transformed into products that are used until they are finally discarded as waste. Value is created in this economic system by producing and selling as many products as possible.
What is Linear Economy | IGI Global

As the above definitions have stated, the linear economy follows the "take- make-waste" principles, so when a company/entrepreneur is using this module within their businesses the products and materials are generally not used to their full potential. As the name suggests, always move in one direction – from raw material to waste. It is a polluting system that degrades natural systems and is the driver of global challenges, including climate change and biodiversity loss (Ellen Macarthur Foundation, n.d.).



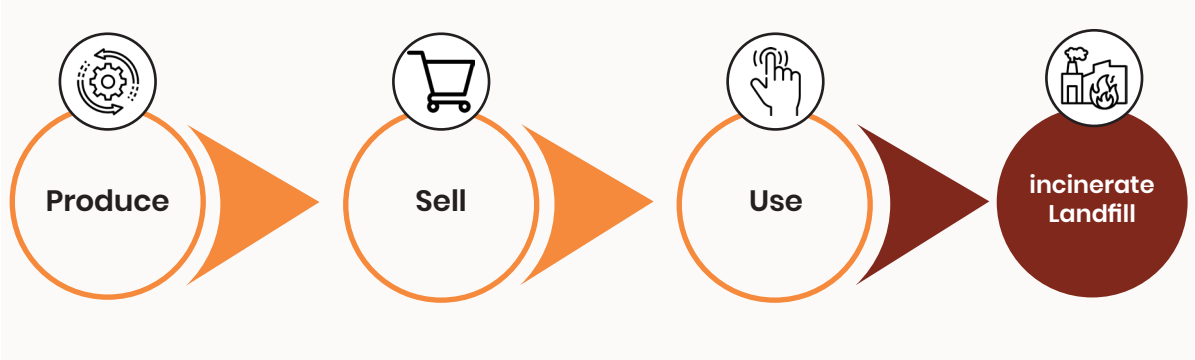
Source: The linear economy-The 'take, make and waste' approach of production | Download Scientific Diagram

The linear economy is a polluting system that can hurt nature and the climate. It causes loss of biodiversity. Linear economic thinking has been around for centuries. It was the dominant economic model for most of the 20th century. It is based on the desire to make products and offer services for the lowest price. Raw materials are extracted from nature at the lowest cost, turned into products with the least amount of labour, and sold at the highest price.

This linear "take-make-use-dispose" economy is not working. We are extracting virgin raw materials at a pace so fast that they cannot be replenished. We are already having problems extracting some critical raw materials that are in constant demand. At the same time, the amount of waste keeps growing. Global waste generation is expected to increase by 70% by 2050.

The current system is not sustainable for business, people or the planet. A part of the solution is the Circular Economy. We take resources from the ground to make products, which we use, and when we no longer want them throw them away: take-make-waste. We call this a linear economy. We need to change from this linear model into a Circular Economy.

To better understand the circular economy we can compare it to our current industrial economy, which is dominated by linear processes. Imagine a massive network of conveyor belts where goods are produced, used and ultimately discarded. This one-way flow has a clear beginning and end.



A transition to a circular economy will be crucial to allow us to thrive in the future.

More Reading Materials :

- https://www.researchgate.net/figure/The-linear-economy-The-take-make-and-waste- approach-of-production_fig2_323809440
- https://www.igi-global.com/dictionary/operationalization-of-circular-economy/75076
- https://www.ellenmacarthurfoundation.org/what-is-the-linear-economy
- https://www.eib.org/en/stories/linear-economy- recycling#:~:text=Linear%20economy%20is%20a%20system,line%20regarding%20recycling%20or%20reuse.

Introduction to Circular Economy :

Facilitators Guidelines : (Time 5 Minutes)

- Now ask the participants "So why is the circular economy important?"
- Divide them again in 3 groups
- Then give them flip chart and markers
- Ask them to write them down (5 minutes)
- Each group will present within 2 minutes each
- Then go back to the presentation

Roots of circular economy?

With deep-rooted historical and philosophical origins, the notion of circularity can't be attributed to a single person or place. Over time, circular economy has been developed and refined by a small group of academics, thought leaders and businesses, including:

Walter Stahel and Genevieve Reday *The Potential for Substituting Manpower for Energy*

Janine Benyus Biomimicry: *Innovation Inspired by Nature*

Paul Hawken, Amory Lovins and L. Hunter Lovins
Natural Capitalism: Creating the Next Industrial Revolution

Kenneth Boulding *The Economics of the Coming Spaceship Earth*

Gunter Pauli *The Blue Economy*

German chemist Michael Braungart and American architect William McDonough (often referred to as the "father of circular economy") pushed the concept from academic theory to mainstream movement with "Cradle to Cradle: Remaking the Way We Make Things," a 2002 book that envisioned products being designed to regenerate ecosystems instead of harm them.

What is Circular Economy?

Facilitators Guidelines : (Time 5 Minutes)

- Ask the participants "Now what is a circular economy?"
- Give them 2 minutes to write then down in a meta card
- Ask 2 participants to read what they wrote
- The move towards the PPT

According to the World Economic Forum, a circular economy is "an industrial system that is restorative or regenerative by intention and design." The concept of a circular economy has gained traction in recent years, inspiring environmentalists, governments and businesses alike. Once a fringe topic, circularity is now acknowledged globally as the most promising solution to our planet's looming sustainability issues. However, many diverging definitions and understandings of circular economy exist. Below are various definitions of circular economy used by various organizations and institutions:

> 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. In this way, the life cycle of products is extended. In practice, it implies reducing waste to a minimum. When a product reaches the end of its life, its materials are kept within the economy wherever possible thanks to recycling. These can be productively used again and again, thereby creating further value.
>
> *- Circular economy: definition, importance and benefits | Topics | European Parliament*

> The circular economy is a system where materials never become waste and nature is regenerated. In a circular economy, products and materials are kept in circulation through processes like maintenance, reuse, refurbishment, remanufacture, recycling, and composting. The circular economy tackles climate change and other global challenges, like biodiversity loss, waste, and pollution, by decoupling economic activity from the consumption of finite resources.
>
> *- What is a circular economy? | Ellen MacArthur Foundation*

Circular economy aims to minimize waste and promote a sustainable use of natural resources, through smarter product design, longer use, recycling and more, as well as regenerate nature. Besides helping tackle the problem of pollution, the circular economy can play a critical role in solving other complex challenges such as climate change and biodiversity loss.

- What is circular economy and why does it matter? | Climate Promise

A common misunderstanding minimizes the definition of circular economy to the familiar Reduce-Reuse-Recycle approach. Ellen MacArthur Foundation CEO, Andrew Morlet explained during a Leading Disruption Panel in 2020: "Recycling alone will not save us." Circular economy is a "bigger idea" — a significant restructuring that forces us to rethink how we've done things since the rise of the first steam engine. Circular economy is a powerful model consisting of principles and activities that aim to retain the value of resources, materials, components and products as long as possible in the economy. Similarly, CE is a powerful model consisting of principles and activities that aim to retain the value of resources, materials, components and products for as long as possible in the economy.

It takes a systematic approach to reducing consumption of natural resources and to contributing to sustainable development.

Our current industrial economy is dominated by linear processes.

How does the Circular Economy work ?

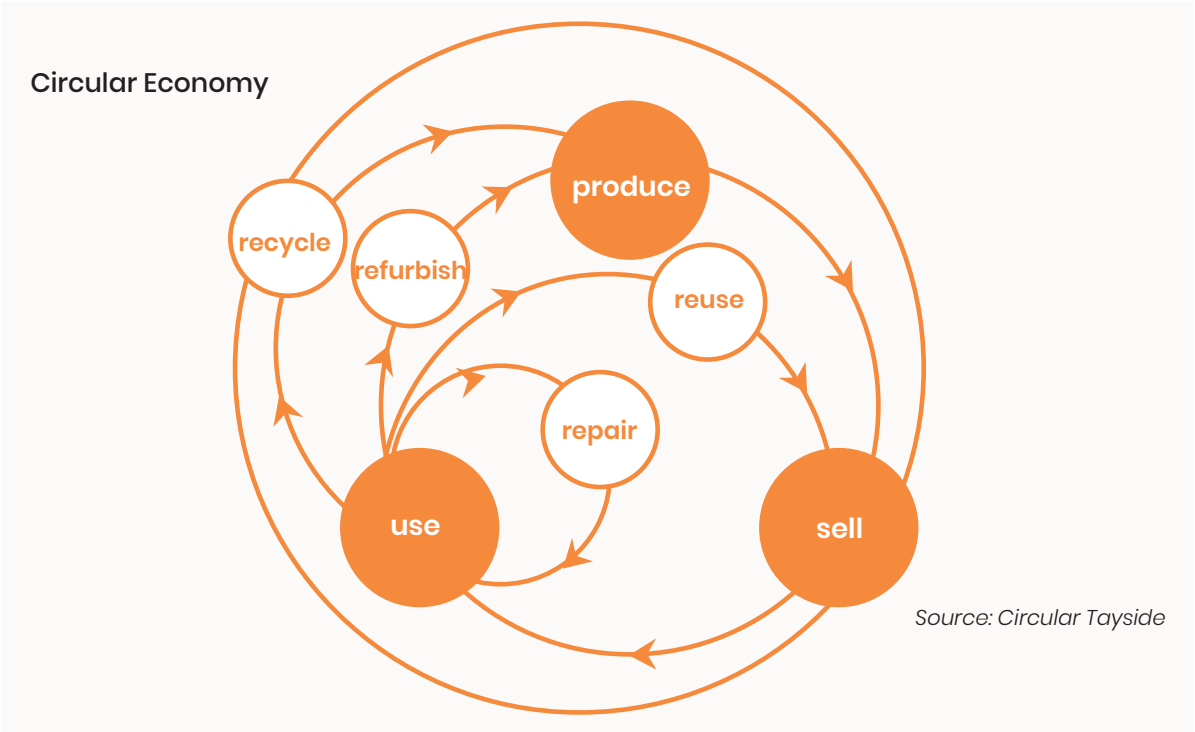
The Circular Economy is based on three principles:

- **Designs out waste and pollution:** Circular economy designs out economic activities that negatively impact human health and natural systems.This includes the release of greenhouse gasses, all types of pollution and traffic congestion.

- **Keeps products and materials in use:** Circular economy favors designing products for durability, reuse, remanufacturing, and recycling to keep materials circulating for as long as possible. It's an economy that encourages many different uses for materials instead of just using them up.

- **Regenerative living systems:** Circular economy avoids the use of fossil fuels and non-renewable energy. By preserving and enhancing renewable resources, it returns valuable nutrients to the soil to support regeneration and actively improve the environment.

A circular economy works quite differently. It closes the loop on the linear "take-make-consume-throw away" pattern by retaining the highest utility and value of products, components, and materials for as long as possible. With circular economic activity, waste is reduced to a minimum because everything produced is transferred and used somewhere else, continuously.



Source: Circular Tayside

Circular Economy is a powerful model consisting of principles and activities that aim to retain the value of resources, materials, components and products for as long as possible in the economy. It takes a systemic approach to reducing consumption of natural resources and to contributing to sustainable development.

Facilitators Guidelines : (Time 15 Minutes)

- Lay down the QR codes for the case studies on the tables
- Ask them to scan each QR code and write down in the each QR code sheet if it was linear or circular economy
- Give them 15 minutes to complete it
- Then collect the QR sheets and then ask them why is this circular or linear?
- Then share with them which one is linear and circular economy in PPT

Benefits of Circular Economy :

Facilitator Guidelines : (Time 10 Minutes)

- Ask the participants "But why do we need a circular economy?"
- Ask them to take a sticky note and write it in various sticky notes and stick them on the board

- Then ask one of the participant to read it out loud
- Ask if there is anything else missing, if there is then add them on the board
- Then move towards the PPT

Circular Economy offers opportunities not only for the environment, for example by reducing CO^2 emissions, but also for companies and households, for example by reducing costs, reducing health-related expenses and creating jobs. The World Resources Institute summarizes the five opportunities of a Circular Economy very simply, as follows:

1. Make better use of finite resources
2. Reduce emissions
3. Protect human health and biodiversity
4. Boost economies
5. Create more and better jobs

Circular economy aims to throw away nothing, thereby reducing the need to use more commodities. It offers a stark alternative to our linear "take-make-dispose" economy, an economy that runs on the assumption that there will always be virgin materials to turn into products, and always somewhere to put the waste.

lAs the world's population continues to grow, it's becoming increasingly clear that the assumptions of a linear economy aren't true or at the very least, sustainable. The model that has dominated manufacturing since the First Industrial Revolution has come under strain.

At that time less than 1 billion people inhabited the Earth. Today, the world's population is up to 8 billion, with a growing global middle class of consumers. Not only are we using the same resources, we're throwing them away at an alarming rate. According to a report from the United Nations, global resource extraction has more than tripled since 1970. Over 90% of raw materials are not reused.

A few more facts and figures :

- About one-third of the food produced for human consumption goes to rot or waste.
- Since the 1970s, humanity has been in ecological overshoot, with annual demand on resources exceeding Earth's biocapacity. Today humanity uses the equivalent of 1.6 Earths to provide the resources we use and absorb our waste. - Global Footprint Network
- Over the past 15 years, clothing production has doubled, but we wear our clothes for half as long.
- Since the economic downturn of 2007-2009, resource prices have

rebounded more quickly than global economic output.

- More than 80% of the world's population lives in a country running on an ecological deficit.
- Of the 100 billion tons of resources that flow into the economy every year, more than 60% end up as greenhouse gas emissions or waste.

Today humanity uses the equivalent of 1.6 Earths to provide the resources we use and absorb our waste. - Global Footprint Network

What is the vision of the Circular Economy?

To paraphrase French chemist Antoine-Laurent de Lavoisier: "Nothing is lost, everything is transformed." This adopted motto of the circular movement explains how a closed-loop approach doesn't aim to end growth. Rather, the circular economy aims to bend industry back into harmony with nature, so that we can continue to prosper.

In essence, a circular economy mimics Earth's naturally circular systems. Products and processes are designed so that all waste becomes fodder for something else. In "Cradle to Cradle," McDonough and Braungart frequently use the metaphor of a cherry tree:

> The tree makes copious blossoms and fruit without depleting its environment. Once they fall on the ground, their materials decompose and break down into nutrients that nourish microorganisms, insects, plants, animals and soil. Although the tree actually makes more of its 'product' than it needs for its own success in an ecosystem, this abundance has evolved (through millions of years of success and failure or, in business terms, R&D), to serve rich and varied purposes

Regeneration means products and services in a circular economy contribute to systems that renew or replenish themselves throughout various lifecycles and uses.

Why Does Circular Economy matter to Impact Hub?

Impact Hub's mission is to facilitate a just and sustainable world where business and profit are used in service of people and planet. Impact Hub works to shape the business of the future by pioneering impact at the intersection of entrepreneurship, environmental action and inclusion.

Accelerating the transition to a Circular Economy that respects planetary boundaries will help accomplish this mission. You can read more about how Impact Hub is taking environmental action as a global network here.

Startups have an important and disruptive role to play in accelerating the transition to sustainability by developing, testing and scaling sustainable solutions in the marketplace. We should empower entrepreneurs to build and grow their ventures with neutral or positive environmental impact.

Impact Hub wants to scale the impact of entrepreneurs with a focus on sustainable food and agriculture, net zero and circular models, faster.

There is a very strong connection to circularity as a key driver for change. This also relates to the goal of Net Zero, as one key element of this effort is the empowerment of entrepreneurs to understand and act on their environmental footprint. This report by Circle Economy highlights findings supporting this case (Hoogzaad et al., 2020, #).
We can make big inroads here by integrating circularity as a design principle directly into our entrepreneur support programs

If we as ESOs educate ventures on circularity in an early stage of product or service development, we can provoke early adoption of the approach.

At Impact Hub we have found that offering programs with a Circular Economy focus or integration is also beneficial for Entrepreneur Support Organizations. This approach has positioned local Impact Hubs as the actors bringing different stakeholders together and galvanizing action as the Circular Economy Ecosystem Builder. The development and delivery of such programs has helped build relationships with government, policy makers, like minded organizations, strategically important associations and an emerging global community of impact oriented entrepreneurs ready to build better business and reimagine the future.

More Reading Materials :

- https://www.europarl.europa.eu/topics/en/article/20151201STO05603/circular- economy-definition-importance-and-benefits
- https://www.ellenmacarthurfoundation.org/topics/circular-economy-introduction/overview
- https://climatepromise.undp.org/news-and-stories/what-is-circular-economy-and- how-it-helps-fight-climate-change

Circularity Tales :

Impact Hub's Circularity Tales showcase stories of action from entrepreneurs in our network that have participated in our Circular Economy pilot programs and are leading the way by implementing the principles in their businesses.

Most of these case studies are of ventures that participated in the program related to this toolkit. A sample of our Circularity Tales are listed below.

- from organic waste to alternative proteins
- a holistic approach to sustainability in Greece
- A new life to plastic waste in Tanzania

We hope that these stories provide you with inspiration and insights regarding the profiles of the entrepreneurs you could support through your circularity- infused/ focused programs.

Take Away :

Facilitator Guidelines : (Time 15 Minutes)

- Ask the participants to join you outside
- Form a circle
- Then ask the participants to share what they liked, did not like and what needs to be changed
- Brief them about the next masterclass (date, time and locations)

Master Class 1.1:

Developing A Circular Mindset

Master Class 1.1

Developing A Circular Mindset

What will you be informed about?

- Shifting from linear to circular economy
- Regenerative thinking
- Embedding feedback mechanism Key trends, concepts and players
- Learn about Butterfly Model
- Working on Butterfly thinking of your business
- Technical cycle of Butterfly diagram
- Biological cycle of the Butterfly diagram
- Take away

Facilitator Guidelines :

- **Objective of this session:** The main objective of this session is to learn how to shift one's business from linear to circular economy. One of the major objectives is to introduce circular modules and concepts, as well as equip the participants to have hands-on experience on developing individual circular business models and learning to build in a feedback mechanism.
- **Time:** Full day
- **Tools:**
  - Stop watch
  - Board markers

- Flip charts
- Duster
- Meta cards
- Pens
- PPT
- Worksheet on embedding feedback mechanism
- Worksheet on technical and biological cycle of butterfly diagram

Instructions :

- To go through this section and create your own PPT.
- There are facilitator guideline pop up boxes with instructions
- You are more than welcome to change the instructions and use it to cater to your audience
- The instructions are just simple step by step process
- May sure to have all the logistics prepared

Facilitator Guidelines : (Time 10 Minutes)

- Start the session with reflection
- Ask the participants with " Do you think now, it is important to shift from linear to circular economy ?"
- Ask each participant to share one or two points
- Then kick start with the PPT

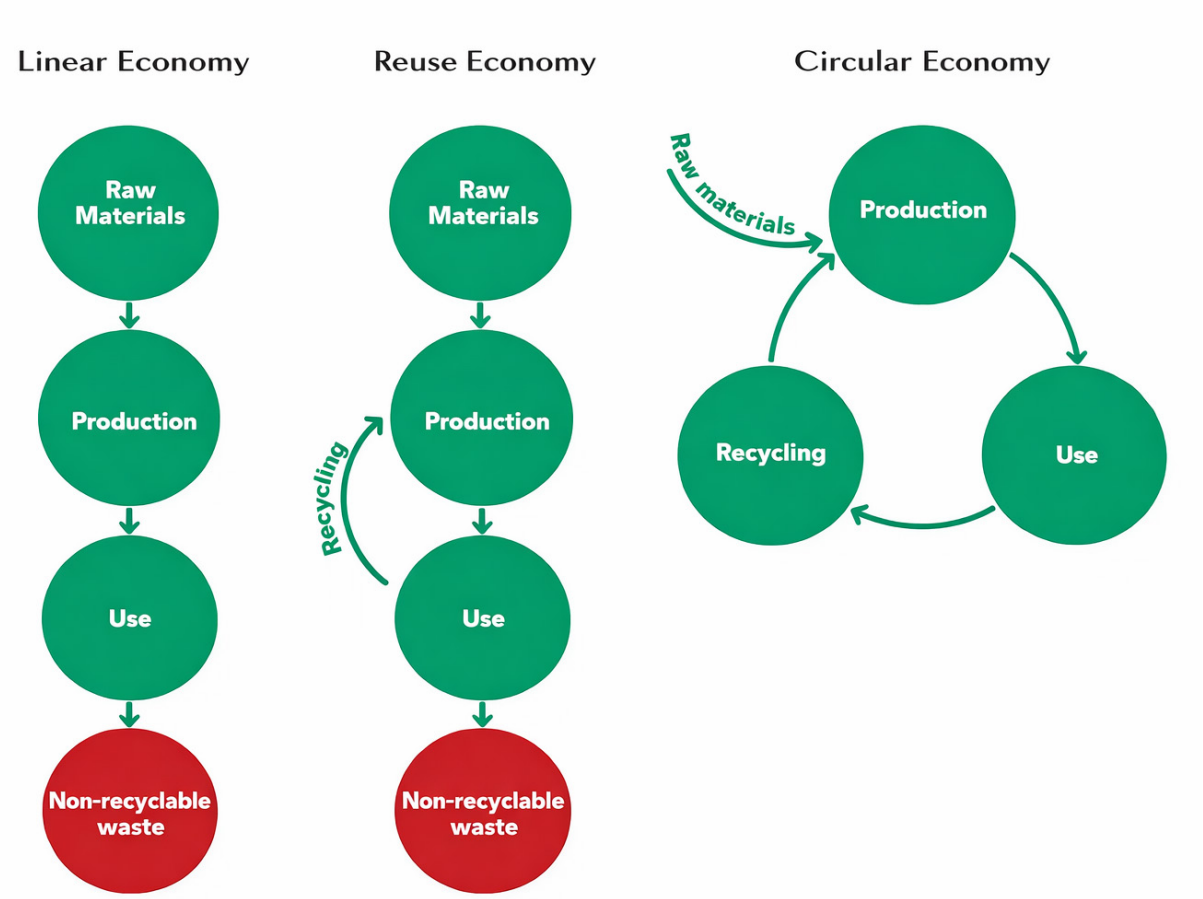
Shifting from a linear to circular economy :

The shift to a circular economy goes beyond recycling and reusing materials (i.e., using waste paper to make new paper). It's a call to evaluate the environmental impact of products and their components from the initial concept stage through to end-use. In a circular economy, waste streams are eradicated with true, regenerative design.

Regenerative Thinking :

A regenerative system, the circular economy can have many positive consequences that enhance quality of life, community, and environment. As the system diagram of circular economy illustrated, regeneration means products and services in a circular economy contribute to systems that renew or replenish themselves throughout various lifecycles and uses.

By applying the principles of regeneration, circular economy decouples growth and stability from the consumption of scarce natural resources. Instead, it focuses on maximizing the value of products and materials, particularly those that typically end up in our waterways and landfills.



Facilitator Guidelines : (Time 60 Minutes)

- Consider supporting the circularity of both your organization and its marketplace by nurturing the wellbeing, education or prosperity of your employees, users, and their communities.
- Ask the participants "What if you invested in employee ownership, education or wellbeing in all locations where you operate? How might you be able to do this?"
- Ask them to list as many options as possible. (Give 15 minutes)
- Then ask the participants "If you implemented some of these ideas, how might that improve productivity?" (Give 5 minute)
- Then ask the participants to prepare a presentation where they will prepare on "How might a healthier, well-educated, prosperous community, which is connected to nature, better support your organization in both the short and long term? What benefits could this bring in terms of retaining and attracting talent? Or increasing trust and loyalty in the local community? How could this in turn enhance the prosperity of your organization?" (Give 15 minutes)
- Each group will present their poster in 3 minutes (30 minutes)

Embedding Feedback Mechanisms :

Embedding mechanisms to gather feedback before you release your product or service will allow you to gain insight after it has left your immediate control, enabling continuous and agile learning. This will be valuable both to your end users, other users in the chain, and the strategy of your businesses

Why do we need a feedback mechanism?

- One of the most important principles within the circular economy is feedback.
- If there is no feedback mechanism then the system/business is not circular in nature.
- Feedback mechanism makes business more feasible. Example, we can track data of each product, how much energy/water it has consumed, the process, resources data etc.
- Feedback mechanism is like building a relationship. Each system talks back to the other. This supports learning and making changes in the process/ product moving forward.

Facilitator Guidelines : (Time 30 Minutes)

- Ask each one to open the worksheet provided to them in the tool kit.
- Using this worksheet, list out all of your hypotheses for your prototype (the expectations you have for your product, but ultimately still need to test and learn about). (Give 10 minutes)
- Then ask the participants to add in the evidence you need to validate these learnings. What type of feedback will help you uncover what you set out to learn? (Give 10 minutes)
- Then next ask the participants "how do you plan to gather this data? How will you "instrument" your design to capture the information you need? (Give 5 minutes)
- Then lastly ask the participants "how do you think the things you have written will change over time or shift?" (Give 5 Minutes)

Tips as you go :

- Try to create as real as testing scenario as possible
- Evaluate to learn and improve and not just validate. The goal is to shape the design, not simply confirm our assumptions.
- Consider what mechanism is needed to produce the data you need.
- Stay focused on the critical learning needs.
- You may surface unexpected insights along the way, which may take you off course and that is ok. Document your experiments as you go.

Feedback Worksheet :

Hypothesis/ Question (What I want to learn?)	**Evidence** (What I need to know and how I plan to use it?)	**Data Collection** (How do I plan to collect evidence and store this?)	**Action** (How do I plan to use the evidence?)
Eg. "Our customers will find our new product more easy to use and accessible"	Eg. "We need to observe customers having an easier time engaging"	Eg. "We will collect data through surveys/ in person test-ing"	Eg. "I plan to use it to develop new ways to engage with my customers"

Key trends, concepts and players :

To get you, your team and your partners started, immerse yourself in the ideas, conversations and actors shaping the Circular Economy.

It is important to understand the concepts and terminology in order to facilitate a precise conversation with stakeholders. As facilitators of Circular Economy ecosystems, ESOs have a responsibility to avoid dilution of the concepts. We facilitate initiatives that may be early stage and under development, but we are also mindful of the actual impact of the initiatives. For example, working with recycled materials is not always a perfect solution. Sometimes in creating a solution for one problem, we unintentionally create a new problem elsewhere, as this blogpost from World Resources Institute illustrates. It can be more energy intensive to recycle materials, and mixing natural materials with plastics creates a future waste problem. This is why it is important to understand the concepts and keep an open and critical mind when assessing ventures or partners.

What follows overleaf is an overview of key concepts and perspectives relating to Circular Economy. The definitions, approach and resources of Ellen MacArthur Foundation (EMF) are at the center of this chapter, but other relevant frameworks are also presented, because these are important too.

Take a look and find what resonates the most with your context. Don't get lost in complexity and give yourself permission to go slow - this toolkit will help you be pragmatic in how you apply everything to your work.

- The EMF butterfly model of the Circular Economy - separating the biological and technological spheres. Here is a quick summary about how materials circulate.

- The Value Hill proposes a categorization based on the lifecycle phases of a product: pre-, in- and post- use. This allows businesses to position themselves on the Value Hill and understand possible circular strategies they can implement as well as identify missing partners in their circular network. Also refer to the R-ladder below.

- Doughnut Economics by Kate Raworth is about meeting our needs within planetary boundaries.

- The Disrupt Framework is a comprehensive list of circular strategies for products. It includes 80 tangible strategies that provide guidance and inspiration for you to render your product circular. These are wide-ranging: design guidance, decisions concerning inputs, use, and end-of-life, business models and collaboration in the supply chain and in the use of digital technologies to support circularity.

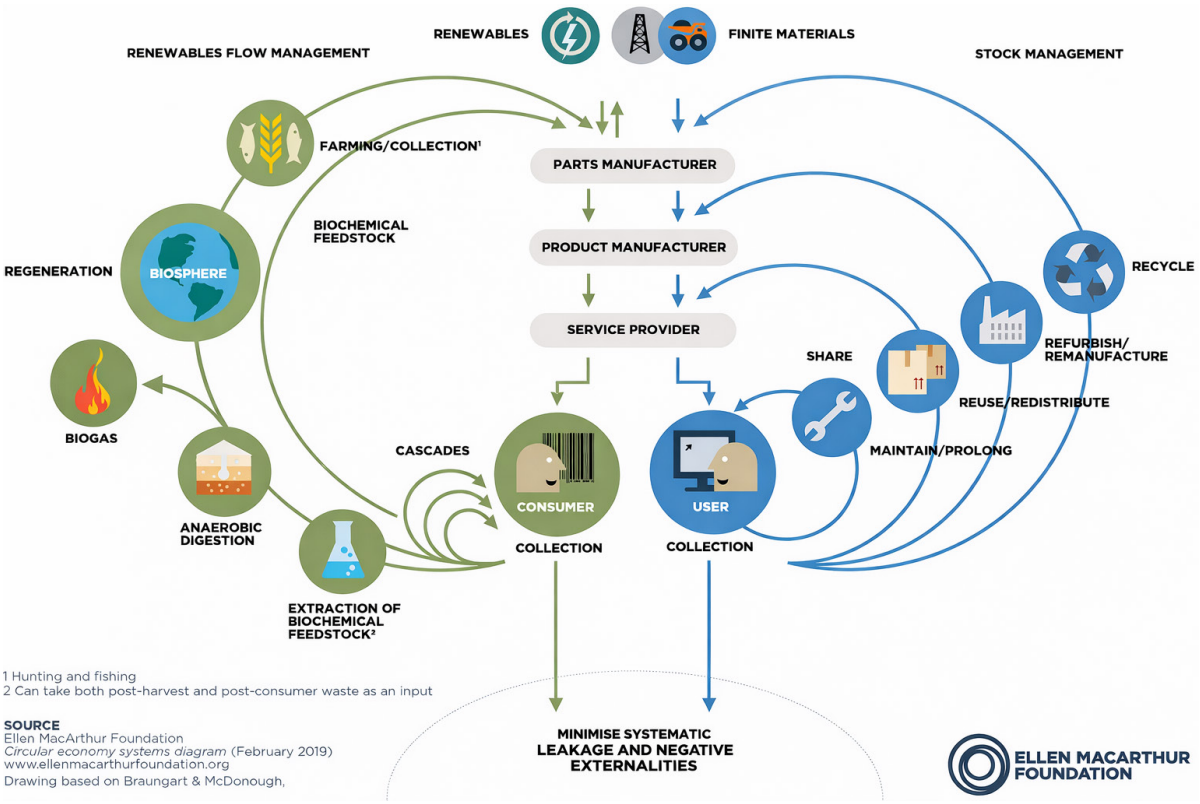
- Circular strategies are for companies willing to be more resource efficient by narrowing, slowing, closing and regenerating materials and energy loops. The Circularity Deck is a playful and accessible method to explore potential circular strategies and select the most appropriate ones. In this WWF white paper you can see how they understood various sectors in Switzerland and how these circular strategies can be applied.

- In the Resolve Framework the three principles of the Circular Economy are translated into six concrete business actions: Regenerate, Share, Optimize, Loop, Virtualize and Exchange. The framework also proposes three principles to guide action: 1) Preserve and enhance natural capital by controlling

finite stocks and balancing renewable resource flows; 2) Optimize resource yields by circulating products, components and materials; 3) Foster system effectiveness by revealing and designing out negative externalities.

Learn about Butterfly Model :

The circular economy system diagram, known as the butterfly diagram, illustrates the continuous flow of materials in a circular economy. There are two main cycles, the technical cycle and the biological cycle. In the technical cycle, products and materials are kept in circulation through processes such as reuse, repair, remanufacture and recycling. In the biological cycle, the nutrients from biodegradable materials are returned to the Earth to regenerate nature.



On the left-hand side of the butterfly diagram is the biological cycle, which is for materials that can biodegrade and safely return to the earth. This cycle mainly concerns products that are consumed, such as food. However some other biodegradable materials, such as cotton or wood, may eventually make their way from the technical cycle into the biological cycle once they have degraded to a point where they can no longer be used to make new products.

Working on Butterfly thinking of your business :

Facilitator Guidelines : (Time 45 Minutes)

- Show the butterfly diagram on the PPT
- Then ask the participants to go to the technical cycle worksheet in the toolkit

Technical cycle worksheet guidelines:

- Ask the participant "How does it get reused? How will you extend a product or materials stay in use? This might mean offering a product as a service, as in car sharing schemes." (Give 5 minutes)
- Ask the participant "How will you design a product that can be easily repaired or upgraded to prolonged use?" (Give 5 minutes)
- Ask the participant "How will the product return to the manufacturer after use to have any necessary components replaced before reentering the market?" (Give 5 minutes)
- Ask the participants "How will you design a product that is made from pure materials, standardized to be recycled and returned to a raw natural state?" (Give 5 minutes)
- Each of the questions within the worksheet, there are two columns "How might this be possible for my product?" and "What would be needed or is standing in my way?" for each question.

Biology cycle worksheet guidelines:

- Ask the participants " How will your product allow the biological materials to get cascaded through your applications - this means that more of the embedded value and energy can be extracted before the nutrients are going back to the soil?" (Give 5 minutes)
- Ask the participant " How your product allows for extraction of valuable biochemical nutrients in biorefineries. This applies to the biological components in your product. For eg. Orange peel can yield limonene which might be in your cosmetic product." (Giver 5 minutes)
- Ask the participant " How will your product return nutrients back to the earth after use? (by composting, biodegrading,etc.) (Give 5 minutes)
- Each of the questions within the worksheet, there are two columns "How might this be possible for my product?" and "What would be needed or is standing in my way?" for each question.

Technical Cycle Worksheet :

	How might this be possible for my product?	What would be needed or is standing in my way?
1. It gets reused (How does it get reused? How will you extend a product or materials stay in use? This might mean offering a product as a service, as in car sharing schemes.)		
2. It gets refurbished (How will you design a product that can be easily repaired or upgraded to prolonged use?)		
3. It gets remanufactured (How will the product return to the manufacturer after use to have any necessary components replaced before reentering the market?)		
4. It gets recycled (How will you design a product that is made from pure materials, standardized to be recycled and returned to a raw natural state?)		

The technical cycle of the butterfly diagram :

The diagram shows that smaller inner loops are surrounded by the larger outer loops. These inner loops are where most value can be captured because they retain more of the embedded value of a product by keeping it whole. Take a smartphone, for example: a working phone is worth more than the sum of its parts because the time and energy that went into making it is not lost. Therefore, inner loops like sharing, maintaining, and reusing should be prioritized above the outer loops that see the product broken down and remade. These loops also represent a cost saving to customers and businesses as they make use of products and materials already in circulation, rather than investing in making them new.

The outermost loop, recycling, is therefore the stage of last resort in a circular economy, because it means losing the embedded value of a product by reducing it to its basic materials. Working from the innermost loop, this page goes through the basics on each step. It is important to bear in mind from the outset that each of these steps will work best if the products are designed for that step. That may mean making items intended for sharing or reuse more durable so they withstand intensive use, it may mean designing products so that they can easily be repaired, designing them to be modular so components can be replaced and remanufactured, or designing products with materials that can easily be separated for recycling. It is also important to design for multiple loops, for example making a repairable product from recyclable materials.

Sharing :

Sharing is the first port of call in the technical cycle and, while not appropriate for all products in the economy, it has the power to dramatically increase the utilization of many products. A great example of this is tools. You may have heard the stat: the average power drill is used for just 13 minutes in its entire life. That is shocking underutilisation – and yet still many of us own one. Why not share? Community tool libraries, like this one in Toronto , are a great way to facilitate this. Users pay by subscription, gain access to higher quality tools than they would buy for themselves, and declutter their home at the same time. Libraries like this are popping up in communities all over the world and not only for tools.

Sharing can be applied to a variety of product types. There are a growing number of platforms that allow users to wear clothes from shared wardrobes . There are car-sharing systems in cities all over the world. There are platforms like Airbnb that allow people to share spaces. And there are insurance companies that provide micro-insurance for those looking to earn extra money by listing their items on peer-to-peer platforms but are worried about potential damage. There are also platforms designed to enable businesses to reap the rewards of the sharing economy, such as Rheaply , a B2B service that allows organizations to make the most of equipment that would otherwise remain idle.

Maintaining :

If sharing is a way to increase the intensity of product use, another way to maximize the value of a product is by prolonging its usable life. Maintenance is an important way of keeping products at a high quality and guards against failure or decline. When you think about maintenance, you might think about taking a car for a service, or shoring up your home against the elements, but maintenance can be applied to most products that suffer wear and tear. For example, a Clothes Doctor empowers people to look after their clothing by sharing knowledge about care and maintenance.

Reusing :

The next loop in the technical cycle of the butterfly diagram is reuse. Like sharing and maintaining, this step keeps products in use in their original form and for their original purpose. Reuse business models are cropping up all over the economy, notably in packaging. Reusable packaging is one of the most effective ways of tackling packaging waste, particularly plastic, and is being adopted by businesses across industries, from food and drink to cosmetics and home cleaning .

Another booming reuse industry is in clothing. More and more people are selling their unwanted clothing and buying clothes from resale platforms, often at a fraction of the cost of buying new. This displaces the need for a new item to be made and stops an unwanted item going to waste.

Redistributing :

Redistribution is another way to keep products in use and stop them becoming waste. By diverting products from their intended market to another customer, the product is put to valuable use. For example, a fashion brand could redistribute unsold clothing from one store to another.

Refurbishing :

Returning products to good working order is a way to restore their value. This could include repairing or replacing components, updating specifications, and improving cosmetic appearance. Refurbishing can be carried out by individuals on their own products, or by specialists. The Right to Repair movement aims to make changes to regulations so that products are designed in a way that makes it possible for users to repair them by themselves. There are countless examples of companies working to keep products in use through refurbishment. A good example is in the tech industry, where there are many companies buying up used items such as mobile phones , refurbishing them, and selling them at a fraction of their original price.

Remanufacturing :

The next stage of the technical cycle is remanufacturing. This is done when products cannot remain in circulation in their current state and need more intensive work to be used again. Remanufacturing involves re-engineering products and components to as-new condition with the same, or improved, level of performance as a newly manufactured one. Remanufactured products or components are typically provided with a warranty that is equivalent to, or better than, that of the newly manufactured product. It may require more investment in plant and machinery than do the inner loops of the technical cycle, but it means that products and components do not become waste and can remain in the economy, representing a cost saving to businesses and customers. China has adopted the circular economy as a national priority since the late 2000s and has defined vehicle remanufacturing as a strategic sector.

Recycling :

The final step in the technical cycle is recycling. This is for when a product can no longer be used and is beyond refurbishment or remanufacture, or isn't suitable for those steps. It is the final way of keeping in use the materials from which the product is made so they don't become waste. With recycling, the embedded value of a product, the time and energy invested in making it, is lost, but the value of

the materials is retained. Recycling means transforming a product or component into its basic materials or substances and reprocessing them into new materials. Designing for recycling is important for all products in the technical cycle, but especially for items that are not suitable for the other steps in the cycle. These items include single-use packaging, which is itself only appropriate when it cannot be designed out and reusable alternatives are not possible.

Biology cycle worksheet :

	How might this be possible for my product?	What would be needed or is standing in my way?
Materials get cascaded through other applications How will your product allow the biological materials to get cascaded through your applications - this means that more of the embedded value and energy can be extracted before the nutrients are going back to the soil?		
Valuable feedstocks gets extracted How your product allows for extraction of valuable biochemical nutrients in biorefineries. This applies to the biological components in your product. For eg. Orange peel can yield limonene which might be in your cosmetic product.		
It returns to the biosphere How will your product return nutrients back to the earth after use? (by composting, biodegrading,etc.)		

The biological cycle of the butterfly diagram :

The biological cycle describes the processes that return nutrients to the soil and help regenerate nature. This page will explain some of the concepts described in the biological cycle of the butterfly diagram.

Regeneration :

At the heart of the biological cycle is the concept of regeneration. It is the third principle of the circular economy. Instead of continuously degrading nature, as we do in the linear economy, in the circular economy we build natural capital. We employ farming practices that allow nature to rebuild soils and increase biodiversity. Our wider food system returns biological materials to the earth rather than wasting them. No longer should our focus be simply on doing less harm to the environment, but on how we can actively improve it.

Farming :

We can manage farms, and other sources of biological resources such as forests and fisheries, in ways that create positive outcomes for nature. These outcomes include, but are not limited to, healthy and stable soils, improved local biodiversity, improved air and water quality, and storing more carbon in the soil. They can be achieved through a variety of practices and can together help regenerate degraded ecosystems and build biodiversity and resilience on farms and in surrounding landscapes.

To achieve these ends farmers may draw on several different schools of thought, such as regenerative agriculture, restorative aquaculture, agroecology, agroforestry, and conservation agriculture, to help them apply the most appropriate set of practices to drive regenerative outcomes on their farms. Once food is harvested and consumed, the nutrients in organic waste streams can be collected, and returned to the soil via processes like composting and anaerobic digestion. If nutrients are not returned, soil becomes depleted, meaning farmers are forced to rely increasingly on chemical fertilisers to keep farmland productive.

Composting and anaerobic digestion :

Composting is the microbial breakdown of organic matter in the presence of oxygen. It can be used to turn food by-products and other biodegradable materials into compost, which can be used as a soil enhancer, returning valuable materials to farmland in place of artificial fertilizers. The process is biological and involves naturally occurring microorganisms, such as bacteria and fungi.

Anaerobic digestion is another way of recovering the materials embedded in organic waste. As with composting, the process involves microorganisms, but in this case in the absence of oxygen. Anaerobic digestion produces biogas and a solid residual or ‘digestate’. This digestate can be applied directly to the land or composted and used as a soil amendment. Biogas, made primarily of methane and carbon dioxide, can be produced from both composting and anaerobic digestion and used as a source of energy similar to natural gas. This type of energy recovery is part of a circular economy since it is a byproduct of the process of returning organic material to the soil.

Cascades :

These loops of the biological cycle make use of products and materials already in the economy. This could mean, for example, using food by-products to make other materials, such as textiles made from orange peel, or designing new food products using ingredients usually considered waste, like ketchup made from banana peel. It could also mean using the material for applications such as animal feed. When products or materials can no longer be used , they move to the outer loops of the biological cycle where they are returned to the soil.

Extraction of biochemical feedstock :

Taking both post-harvest and post-consumer biological materials as feedstock, this step involves the use of biorefineries to produce low volume but high value chemical products. On top of this, biorefineries can produce a range of other valuable products from organic materials through a series of steps. These processes could consecutively produce, for example, high value biochemicals and nutraceuticals followed by bulk biochemicals .

Take Away :

Facilitator Guidelines : (Time 15 Minutes)

- Ask the participants to join you outside
- Form a circle
- Then ask the participants to share what they liked, did not like and what needs to be changed
- Brief them about the next masterclass (date, time and locations)

More Reading Materials :

- https://www.ellenmacarthurfoundation.org/circular-economy-diagram
- https://www.ellenmacarthurfoundation.org/topics/circular-economy-introduction/exam ples
- https://www.ellenmacarthurfoundation.org/articles/the-technical-cycle-of-the-butterfly- diagram
- https://www.ellenmacarthurfoundation.org/articles/the-biological-cycle-of-the-butterfly -diagram

Master Class 2 :

Circular Finance and Pre-Seed Funding

Master Class 2.1

Circular Finance and Pre-Seed Funding

What will you be informed about ?

- What is Circular Finance?
- What are the different circular models?
- Overview of circular solutions.
- Pre-seed fund guidelines.
    - Fund reporting guidelines.

Facilitator Guidelines :

- **Objective of this session:** The main objective of this session is to provide an understanding on circular economy and circular finance. Through this session the facilitator will be able to explain how the seed fund will be disbursed, permissible and impermissible expenses and how reporting will be carried out.
- **Time: Full day**
- **Tools:**
    - Stop watch
    - Board markers
    - Flip charts
    - Duster
    - Meta cards
    - Pens - PPT
    - Pictures of Industrial Revolution
    - QR Codes print outs

Instructions :

- To go through this section and create your own PPT.
- There are facilitator guideline pop up boxes with instructions
- You are more than welcome to change the instructions and use it to cater to your audience
- The instructions are just simple step by step process
- May sure to have all the logistics prepared

Facilitator Guidelines : (Time 15 Minutes)

- Make the participants stand in a circle,
- circles one small and then one big outside the small.
- Then provide instructions to the participants to take one step forward if the answer is yes and one step behind if the answer is No.
- The participants will continue to take steps till the activity is over.
- Once the activity is completed ask 3 of them to share how they feel about the activity.

The following are the questions :

1. I know the meaning of sustainability?
2. Do you think that goods of today could become the resources of tomorrow?
3. Would you opt for a recycled product or prefer a brand new product?
4. My washing machine stopped working. I would look for a new washing machine.
5. Have you ever thought about where all the non-functional assets go including your toothbrush from the age of 5?
6. Do you think about product packaging while purchasing a product?
7. Are you happy to throw away stuff?
8. Does the energy word make you conscious?
9. Do you get affected by the word climate change?
10. Do you think our waste can build capital rather than reduce it?
11. Maximize use and minimize waste, are you someone who thinks about this?
12. Have you given a thought to renting a product that purchasing a product?
13. Do you know that razor blades were the one of the first products that was thrown away? Circular Economy: What, Why and How. | Jan Jonker | TEDxParcDuCinquantenaire (youtube.com)
14. Have you ever heard the term product as a service (PaaS)?
15. Did you know that 80% of the sustainability of the product is determined at the design stage? How to build the circular economy of the future | Marlene Johler | TEDxTUWien (youtube.com)
16. When you purchase something do you preserve the value of the product?
17. Do you repair any product if there is a problem?
18. Would you purchase a refurbished product?
19. Do you know products that would help your business to use resources efficiently?
20. Do you think that Kathmandu is embracing circular principles to reduce waste and promote sustainability?

Facilitator Guidelines : (Time 15 Minutes)

1. Ask the participants "What do they understand when they hear the word finance with Circular economy?"
2. Provide meta cards to each team member to put down their thoughts (5 minutes).
3. Take answers from each participant of an enterprise (make sure to provide opportunity to the ones who have not spoken).
4. One of the co-facilitators to write down the answers on the board/flip chart.

Session 1 : What is Circular Finance?

Circular finance focuses on the financial mechanisms and strategies that support circular economy initiatives. It involves investment in companies and projects that promote circularity. Together, circular economy and circular finance approaches offer a pathway towards a more sustainable and resilient economy, where resources are used efficiently, waste is minimized, and economic growth is decoupled from environmental degradation.

Session 2 : Group discussion on circular business models

Facilitator Guidelines : (Time 75 Minutes)

- Divide the teams into 3 groups for group discussion on the various topics.
- Provide flip charts to write on. (5 minutes) ⊠ Present to the group.
- Then show the definitions in the PPT.

The topic would be as follows :

1. Why do you think it is difficult to finance a circular business? (IHG toolkit)

- Difficult as they are often innovative companies.
- Since it is new, it has no track record and no history about the market.
- Banks look at history,hence banks and innovation are not a good match.
- Banks want to grant risk averse capital and not risk bearing capital
- Product as a service faces several challenges in terms of financing.
- How are responsibilities divided in the service contract with your customer?
- Investors want to yield a return.
- Crowd funding- you not only get the money that you need but also a group of ambassadors
- Brand awareness. Ambassadors will talk about your business and make awareness Circular entrepreneurs need patient capital

In finance we tend to devalue things to zero within a certain number of years which is totally contradictory to the circular economy because in a circular economy we want things to maintain their value. We want to call it harvest value and not residual value because it creates a more positive image on the product's value.

2. What do you think are the different circular business models? (IHG tool kit)

1. Circular supply models - replace traditional material inputs derived from virgin resources with bio-based, renewable, or recovered materials, reducing demand for virgin resource extraction in the long run.
2. Resource recovery models - recycle waste into secondary raw materials, thereby diverting waste from final disposal while also displacing the extraction and processing of virgin natural resources.
3. Product life extension models - extend the use period of existing products, slow the flow of constituent materials through the economy, and reduce the rate of resource extraction and waste generation.
4. Sharing models - facilitate the sharing of under-utilized products, and can therefore reduce demand for new products and their embedded raw materials.
5. Product Service System models - services rather than products are marketed, improve incentives for green product design and more efficient product use, thereby promoting a more sparing use of natural resources.

Through this discussion the companies can refer to the model that they belong to and find similar businesses. The companies will be able to understand the different models in their cohort and outside.

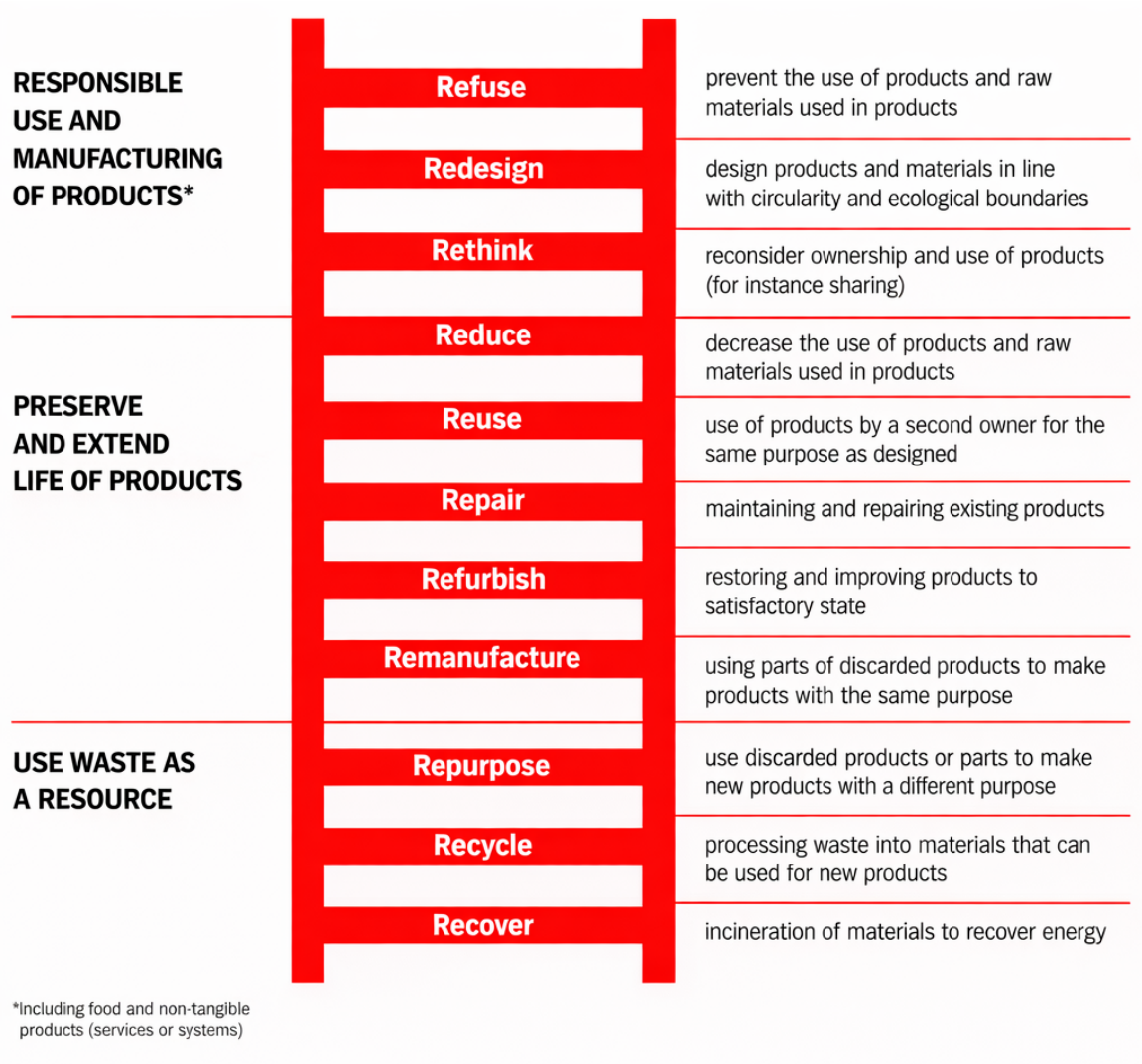
3. What are the circular solutions that you want to adopt or are suitable for circular businesses?

Through this discussion the teams will be able to come up with different circular solutions such as subscription, co-working, use of technology, use of biodegradable packaging etc. The discussion could be for different businesses and not just for the team. This would give them an idea about the different circular solutions that are existing and later support them to adopt if they need to adopt circular solutions.

Activity Post lunch :

Facilitator Guidelines : (Time 15 Minutes)

- This will be an individual activity.
- Provide meta cards to write down all the words starting with R (5 minutes).
- There are 11 words starting from R.
- Ask them to hand them down to you and read it out loud. ⊠ Then show the definitions in the PPT.



Session 3 : RoC Pre-Seed Funding (Financial Support to Third Parties) Expenditure Guideline

Facilitator Guidelines : (Time 20 Minutes)

- Pre-seed fund guidelines will be explained.
- Permissible expenses and non permissible expenses.
- How to claim your funds.
- The IHK team will explain the reporting guideline
- The IHK team will explain the documents required.
- Then show the details in the PPT

Introduction to Guidance :

This guidance document outlines the permissible and impermissible expenses for seed funding for the Incubatees participating in the Roots of Circularity (RoC) project, which is funded by the European Commission through accountable grants managed by Impact Hub Kathmandu (IH KTM).

Incubatees are entitled to utilise pre-seed funds for their business activities. The following guidelines help us to understand how these funds can and cannot be spent, aligning with the timeframe of the RoC project. In cases of uncertainty, Incubatees are advised to seek guidance from IH KTM's Finance department beforehand.

Principles of Eligibility :

Seed funds will be allocated to participants who have completed the budget requirement process. The budget requirement and approval process is as follows:

Step 1 : During the Circular Finance Masterclass,
a. the entrepreneurs will be oriented on the pre-seed funds, and
b. each will work on areas that will support circular economy initiatives of the business, and align with the program.

Step 2 : The above will be further supported during the monthly 1on1 financial coaching sessions.

Step 3 : Provide a brief narrative with the budget breakdown on the rationale behind the use of the pre-seed funds aligned with circular economy efforts of the enterprise.

Step 4 : The budget requirement will be approved by the Executive Director & the Deputy/Finance Director after a meeting with each enterprise.

Eligible Activities for Pre-Seed Funding:

Eligible activities for pre-seed funding must contribute to the circular economy efforts of the company. Such activities may encompass for example the following:

- Initiatives for re-use and repair such as repair workshops and circular makerspaces.
- Development of ideas and tools for monitoring and evaluating environmental issues, participating in policy planning and decision-making processes, and advocating for the mainstreaming of climate change and environmental sustainability.
- Feasibility studies for circular ideas.
- Participation in staff training courses.
- Development of marketing tools and policies for organizations.
- Procurement of equipment, machinery, and supplies - procurement of such equipment/machinery is meant to contribute to circular economy efforts of the enterprise.
- Any other activities that promote circularity in Nepal.
- Prototype development.
- Product refinement as needed.
- Product testing fees.
- Costs associated with pilot installations.
- Operational expenses.
- Procurement of raw materials.
- Stationery supplies.
- Printing services.
- Rental expenses proportional to business implementation needs for redesigned circular economy business models.
- Fundraising activities.
- Attendance at workshops, seminars, product showcase events, and meetings with investors.
- Marketing expenses including website and social media costs.

- Outsourced market and consumer research, including data analysis.
- Travel expenses (transportation, accommodation), applicable if the site is 50 km away from the IH KTM office.
- Market development site visits.
- Market research and data collection.
- Attendance at training workshops, conferences, industry fairs, and knowledge-sharing events.
- Hosting education sessions such as repair workshops for reusing and recycling plastic waste products.

For any other RoC- related activities, consultation with the Program manager of RoC is advised beforehand.

Ineligible Activities :

The following expenditure items are expressly ineligible across all cost categories:

- Activities that may incite civil unrest.
- Discriminatory activities based on age, gender identity, disability, race, ethnicity, sex, sexual orientation, pregnancy, maternity, religion, or belief.
- Gifts, insurance premiums, under-the-table payments, and staff recruitment expenses. Statutory fines, criminal fines, penalties, and associated legal costs.
- Payments for works or activities fully funded by other sources.
- Activities contravening Nepal's national legislation on State Aid.
- Bad debts owed to related parties.
- Costs related to fraud, corruption, bribery, theft, terrorist financing, or other misuse of funds.
- Inflation or foreign exchange contingencies.
- Depreciation expenses.
- Costs incurred prior to formal agreement execution.

Additionally, import duties, customs fees, sales taxes, and any other local government or public authority charges are ineligible. Taxes exempt or reclaimable via other sources are also ineligible, except when directly related to frontline project costs.

Claiming Funds :

IH KTM operates on a policy of operational necessity, making payments as required unless otherwise agreed. Incubatees are expected to adhere to the same principles. Notification emails for purchases or requisitions should be sent to RoC, the Program Manager, and the Finance department.

Upon approval, the total pre-seed funds will be disbursed to the incubatees upon receipt of their procurement and financial policies. However, this process necessitates a deduction of 1.5% tax deduction at source. The disbursement will be in two installments, half way through the incubation phase.

Mandatory Documentation :

The incubatees receiving financial support are required to provide a narrative with rationale for use of seed funds, followed by a meeting with the financial coach, to approve the receipt of the funds. Please refer to the Principles of Eligibility.

The incubatees will need to submit invoices, agreements, payment proofs, and any other evidence of funded activities. Documentation should also include procurement, financial, and HR policies, invoices, agreements, and a final financial projection report.

Follow-up support for the incubatees will be provided during and up to six months after the incubation phase. IH KTM will offer continuous support to incubatees, including business and financial guidance.

Session 4 : Team discussion on finance support to third parties (FSTP)

Facilitator Guidelines : (Time 60 Minutes)

- The teams will be given a template.
- The teams will discuss within the group.
- The teams will be given 30 minutes to work on the document.
- The teams will finalise the documents.

Objective of Pre-Seed Funding		
What processes are we looking at?	What type of circular solutions do you propose?	What is the expected amount/funds?
Sourcing - Collection of raw materials/ resources		
Make - Production system		
Package - Packaging system		
Distribute - Distribution system		
User		
After use/Disposal		

Cost Benefit Analysis :

Solution (technology, strategy, initiative) to be adopted.	Cost of the circular solutions proposed.	Benefits that will be availed from the circular solutions in terms of social, economic and environmental aspects.

Session 5 : FSTP Reporting

Facilitator Guidelines : (Time 30 Minutes)

- The teams will be notified about the reporting guidelines.
- The teams will be notified about the documents to be submitted.
- The teams will understand about the taxes and bookkeeping.
- The teams will understand how reporting has to be done when and how.

In the process of working on the circular business models, it is also our effort to provide the incubatees with support on their operational framework and processes (if required). Hence, the financial coaching sessions will also focus on bookkeeping and operational management of the enterprises.

The following are the documents required for the disbursement of funds. A 1.5% deduction will be accounted for, the TDS of which will be deposited in the Internal Revenue Department.

1. Procurement policy
2. Financial policy

The enterprise will follow their procurement and financial policies. If the policies are not available the enterprises will need to draft one in order to receive the funds.

Master Class 3 :

Circular Strategy

Master Class 3

Circular Strategy

What will you be informed about?

- Circular strategies
- Mapping emotional and functional needs
- Ideate new product and services
- Design your solutions
- Develop your rationale
- Take away

Facilitator Guidelines :

- **Objective of this session:** The main objective of this session is to redesign an everyday product by reflecting on the functional and emotional needs that it serves and using the circular strategy cards to brainstorm new solutions that are better for people and the planet.
- **Time: Full day**
- **Tools:**
  - Stop watch
  - Board markers
  - Flip charts
  - Duster
  - Meta cards
  - Pens - PPT
  - Worksheet on Mapping emotional and functional needs
  - Worksheet on Ideate
  - Worksheet on design solutions
  - Worksheet on develop your rationale

Instructions :

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Circular Strategies :

Many SMEs have a lack of knowledge, competencies, and capacity to reap the potential benefits found in circular product design, production processes, and business models. A survey of 610 small and medium-sized enterprises shows that 88 percent of enterprises have a positive attitude to circular economy, while 51 percent find that they do not have sufficient knowledge about circular economy for using it in their enterprise.

Lack of advisory services etc. is stated as a barrier to the development of circular business models. So despite the fact that Danish enterprises see the potential in thinking in more circular terms, lack of knowledge and resources is a huge challenge for them when incorporating circular economy into their core business and strategic management. In this session we will be engaging in a hands-on experience how an enterprise/business can make their circular economy.

Mapping emotional and functional Needs :

Facilitator Guidelines : (Time 20 Minutes)

- Start by explaining the overall workshop objective.
- Then split them into groups of 3-4 people.
- Ask each one of them to pick the product Sheet, provided below.
- Use the PPT and explain to them through an example of a car. Ask the participants “What are the emotional needs of a car?” The emotional needs might be a sense of freedom or a car as status symbol.

- Then ask the participants “What is the functional use of the car?” The underlying functional need of a car is to get from one place to another.
- After explaining to them the emotional and functional needs, ask them now in a group to interview a “user” (ask a member from your organization to be a user, you need 3 volunteers).
- Ask the participants to take down notes on the post as they listen.
- Tell the participants to ask open ended questions such as: what are the best/worst parts about the product they have used? Then ask the participant to ask about the why: “Can you tell me why that is important?” as often as you can.
- Tell the participants to seek to understand how they live their lives or operate their business. Explore potential areas to leverage with new ideas.
- Later on, ask the participant to fill the “emotional and functional worksheet” provided in the tool kit.
- Then ask the participant to share their observations and move to insights
- Ask the participant while they are presenting “What is broken in the experience?” and “what they identified as missing from the experience?”

What are the functional and emotional needs and requirements?

Interview a user :

Ideate new products or services :

Facilitator Guidelines : (Time 20 Minutes)

- Ask the participants to read out all the cards in their groups. (Provided below)
- Now ask them to brainstorm using the circular strategy cards: brainstorm and come up with as many ideas by combining circular strategy cars. For example, for a car it may be car sharing service, car rentals, trade-in, remanufacturing, etc.
- Go for quantity and try different card combinations.
- Then ask them to till the Ideate worksheet provided in their tool kits.

Circular Strategy cards :

Product as a Service :

Offers that focus on leasing access to a solution instead of selling ownership of a product. Services can reduce cost volatility and create stickier customer relationships.

Pictured: Philips se//s lighting as a service. By retaining ownership of the lights and equipment, customers have no upfront costs of installation.

Circular Strategies :

Embedding intelligence :

Building technology into materials or products to gather user data and generate valuable insights to improve the customer experience

Pictured: Bundles uses Internet of Things technology to provide customers with a pay-per-wash service on washing machines. The monthly tariff is adjusted retrospectively based on actual usage data.

Product Life Extension :

Extending the lifecycle of products to ensure they remain economically useful by maintaining or even improving them through remanufacturing, repairing or upgrading.

Pictured: Caterpillar has focused on returning components at end of life to same-as-new condition, reducing costs, waste, emissions and need for raw inputs

Smart material choices :

Considering a product's end of life treatment in the choice of materials and inputs, i.e. durable, biodegradable, recycled or recyclable materials.

Pictured: Customers of Splosh subscribe to receive pouches of concentrated cleaning products whicheither safely dissolve as part of the product or can be sent back for a refill.

Closed loop / Take back :

Providing a service to collect old or used products and recovering the value in the materials by recycling or reusing them to make new products.

Pictured: Desso created a take-back programme for its flooring made of recyclable yarn that can be separated from the backing and used over and over again.

Modularity :

A design that divides a product into smaller parts that can then be independently created, used and replaced.

Pictured: Fairphone's modular design and spare parts make it easy for anyone to repair, allowing its phones to last as long as possible.

Ideate worksheet :

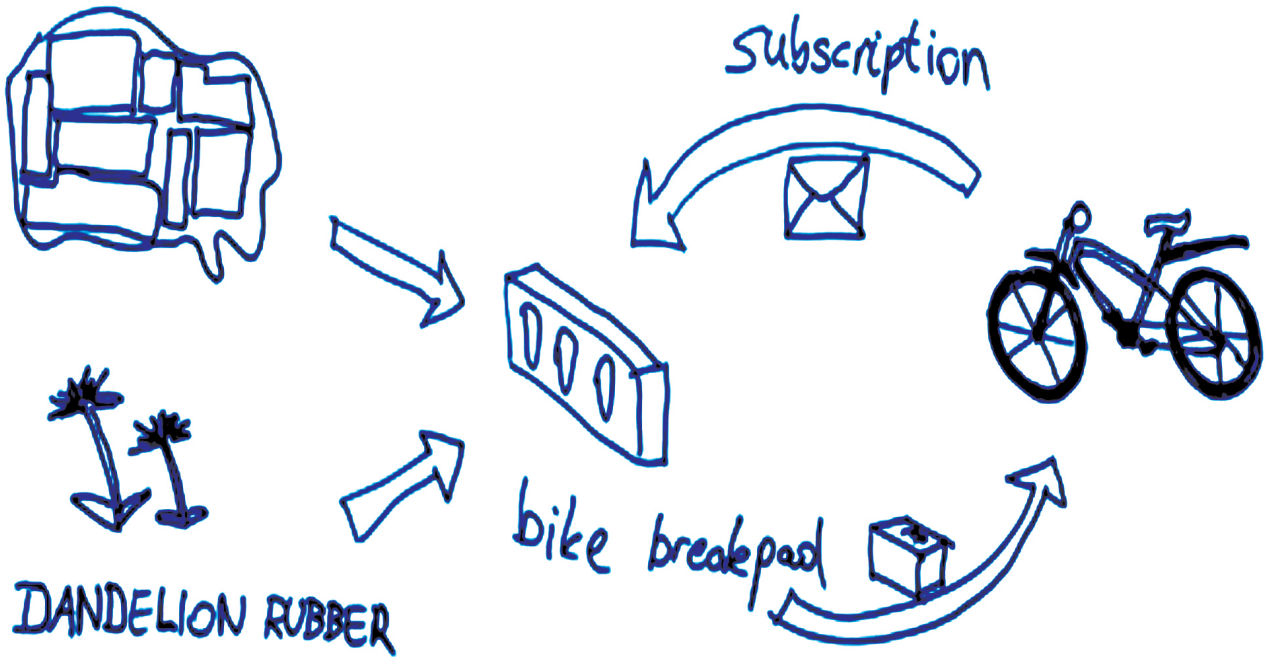
Are there different or better ways to meet these needs by applying circular strategies?

Use Circular Cards For Inspiration :

Design your solutions :

Facilitator Guidelines : (Time 30 Minutes)

- Now ask the participants to pick an idea from their previous worksheet.
- Ask the participants to focus on ideas that better serve user needs while applying circular principles.
- And then ask them to draw and illustrate their selected ideas. Try to be visual and give it a memorable name.
- Then ask them to present their illustrations.
- An example of the illustration is presented below.



Design Worksheet :

Design and illustrate your selected idea. Try to be visual and give it a memorable name.

Develop your rationale :

Facilitator Guidelines : (Time 30 Minutes)

- After the illustrations are done, then we move towards developing a rationale.
- Ask the participants " Why is it better for the user? How does it improve the user experience? What are the economical or practical benefits?"
- hen ask them to write "What makes it circular? Does it increase circularity of materials? Is it regenerative?"
- Then ask them "What systems need to be in place? What feedback or data would be important to have? What infrastructure is needed? Who would you need to collaborate with?"
- The participants need to fill the worksheet provided below in their toolkit.
- Then ask them to present their whole idea and ask the participants to ask critical questions and provide feedback to their peers.questions and provide feedback to their peers.

Develop rationale worksheet :

WHY IS IT BETTER FOR THE USER? Why is it better for the user? How does it improve the user experience? What are the economical or practical benefits?	**WHAT MAKES IT CIRCULAR?** What makes it circular? Does it increase circularity of materials? Is it regenerative?	**WHAT SYSTEMS NEED TO BE IN PLACE?** What systems need to be in place? What feedback or data would be important to have? What infrastructure is needed? Who would you need to collaborate with?

Take Away :

Facilitator Guidelines : (Time 15 Minutes)

- Ask the participants to join you outside
- Form a circle
- Then ask the participants to share what they liked, did not like and what needs to be
- changed
- Brief them about the next masterclass (date, time and locations)

Master Class 3.1 :

Stakeholder/Ecosystem Mapping

Master Class 3.1

Stakeholder/Ecosystem Mapping

What will you be informed about?

- Ecosystem building and ecosystem builders
- How ecosystem enhance customer value and accelerate growth
- How to overcome implementation challenges
- Ecosystem builder core competencies
- Stakeholder mapping exercise
- Defining system boundaries
- Identifying stakeholder
- Mapping stakeholder
- Monitoring and evaluation
- ake away

Facilitator Guidelines :

- **Objective of this session:** The main objective of this session is to understand who your partners are or might be and define your stakeholder engagement strategy.
- **Time: Full day**
- **Tools:**
  - Stop watch
  - Board markers
  - Flip charts
  - Duster
  - Meta cards
  - Pens - PPT

Instructions :

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Ecosystem building and ecosystem builders :

Facilitator Guidelines : (Time 10 Minutes)

- Ask the participants "What do you understand by the word ecosystem?"
- Ask the participants to write on a sticky note. (Give 5 minutes)
- Then ask the participants to stick on the board.
- Read out what the participants have written.
- Then move towards the PPT

Ecosystem building is a proven strategy for delivering outperformance and value creation in the long term, especially through two principal routes:

- **Diversification into new value pools :**

  Ecosystems can unlock significant new revenue streams from outside an incubatee's core operations, as well as secondary opportunities including data monetization (such as through insights and advertisements). They can also be a catalyst for bringing new capabilities to an organization, such as modernizing the technology stack, creating cutting-edge data-and-analytics capabilities, or enhancing partnership management capabilities for the future (McKinsey & Company, 2023).

- **Improvement in valuation multiples :**

  The other effect is on an incubatee's valuation, given ecosystem efforts put the organization on a growth trajectory that may not be possible within the primary industry or that may even position the incubatee more like a platform player. It is important to note that most of the benefit accrues only once adjacent services are mature and meaningfully contribute to the balance sheet, thus indicating the organization's commitment (McKinsey & Company, 2023).

How to overcome implementation challenges?

While the benefits of ecosystems are increasingly clear to organizations across sectors, building successful ones can be complex and many organizations fall short of reaching the impact they set out to achieve. Our analysis of 100 incumbent companies' ecosystem initiatives found that while 55 percent gained traction with customers, only about 10 to 15 percent were able to generate more than 5 percent of total revenue from ecosystem value propositions (refer below figure 1) (McKinsey & Company, 2023).

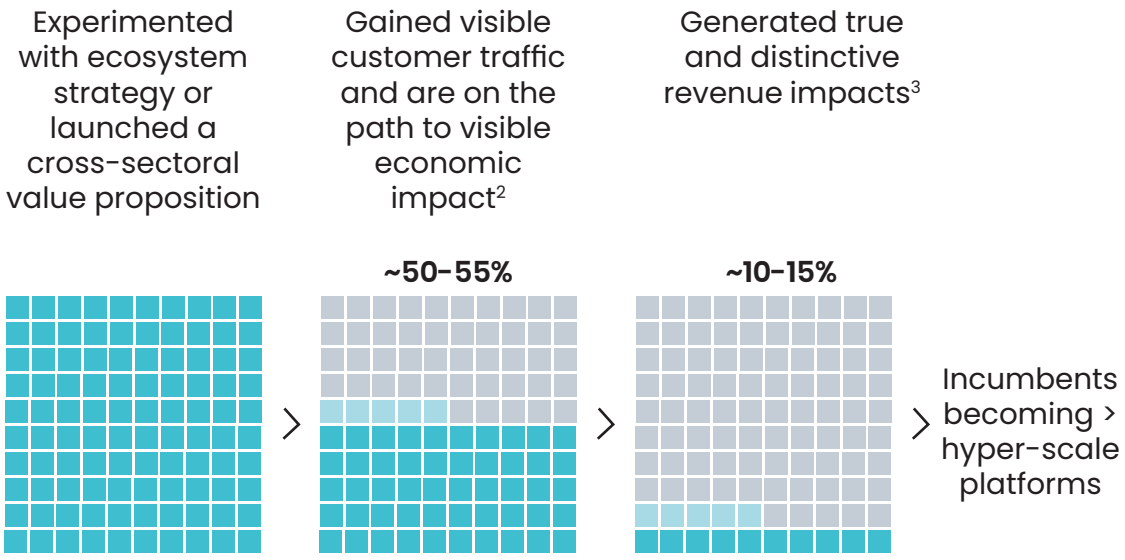
So how do we implement it?

1. Assess complementary sectors to play in :

It is critical to deeply assess which ecosystems are the most attractive, examining value pools and matching opportunities with the company's core assets and growth ambition. With the right initial use cases in prioritized sectors, significant value can be generated early, charting a path to delivering on the broader end-state vision. For example, one insurer has pragmatically mapped out value pools close to (but beyond) insurance and prioritized the health, mobility, and broader financial-services spaces to play in. It launched tangible initial use cases, generating client traction early on—use cases that later became the cornerstone of the company's wide-reaching ecosystem vision. (McKinsey & Company, 2023)

Ecosystem building can be complex, and many organizations fall short of reaching the impact they set out to achieve.

Analysis of 100 incumbent companies' ecosystem strategies and their success over time, 2019–22[1]



based on expert analysis. Source: McKinsey Ecosystem Strategy Hub; McKinsey analysis McKinsey & Company

2. Focus on value for the customer from the start :

Aim for a meaningful quantum leap in customer experience and true value delivered. Test your thinking with real customers early on. A consumer packaged goods company in the sports industry acquired a tech startup to augment its physical product range and improve customer engagement. However, there was a disconnect between the sports app's features and the needs of the company's core customers, which meant the desired synergies were never achieved and the startup was ultimately sold. By prioritizing product features over understanding the underlying needs of customers, businesses risk creating a fragmented and unsatisfactory experience. (McKinsey & Company, 2023)

3. Find the right partners :

Find partners who share the company's principles and handle customers the same way. In economic downturns, it's also advisable to take advantage of M&A opportunities in securing new capabilities and talent that will enable future ecosystem growth (McKinsey & Company, 2023).

4. Strike balance to govern your ecosystem :

Depending on an organization's innovation culture, its capabilities, and the strategic ambition of the initiative, companies need to provide enough independence for the new entity to move rapidly within the right guardrails but still have enough connections to build on core strengths. Consider a financial institution that launched a new beyond-the-core venture. While it achieved early successes, cultural clashes and management-initiated reorganizations (a new venture was olded into an established business unit) hindered decision making and slowed innovation. (McKinsey & Company, 2023)

5. Integrate data across your ecosystem for clear business use cases :

Leverage the data that can be collected through ecosystem initiatives and partners. These can reinforce existing operations or can become the foundation for completely new value propositions. One insurer launched a successful health and well-being loyalty program, using data gathered as a result of frequent customer engagement to reduce insurance claims and design a new breed of financial-services products. (McKinsey & Company, 2023)

6. Measure the right impact metrics :

Focusing on traditional KPIs may not capture the true benefits of ecosystem efforts. Successful large technology players consider the roles that each portfolio asset plays in their overall ecosystems. Some initiatives purposefully make losses but serve as traffic entry points; others may have an enabler role to make sure revenue and profit generation can be maximized elsewhere. Companies need to look across the entire value generation funnel—from customer traffic, to profit generation, to potential valuation uplift—and select the right KPIs accordingly. (McKinsey & Company, 2023)

Who is an ecosystem builder?

Facilitator Guidelines : (Time 10 Minutes)

- Ask the participants "Who do you think is an ecosystem builder?"
- Ask them to write it in a sticky note and post it on the board.
- Then ask the participants "Are you an ecosystem builder? And why?"
- Ask them to then write in a meta card.
- Pick 3 participants to read out what they have written in their meta cards

Ecosystem-builder :

A person or organization that takes the perspective of the whole and hosts the emergence of new and deeper relations to create more impact in pursuit of a shared purpose

Ecosystem builder core competencies :

There are 4 core competencies of an ecosystem builder:

1. Build human relations :

The set of skills around supporting individuals to interact in a healthy manner with others and build strong relationships.

2. Curate content :

The set of skills that cover the gathering, presenting, processing and critical analysis of information that is relevant to a particular topic of interest to a group; supporting meaning-making so that the information becomes knowledge and of value to the collective learning space.

3. Infuse vitality and coherence :

The set of skills that enables an ecosystem-builder to sense into what is needed and possible for the system as a whole and discern how to respond to either energize or calm a group, to either provoke or ease a situation, to either bring a little creative chaos or ground the chaos in order, through conscious interventions that add to the overall learning experience and strengthen the collective.

4. Earn mandate :

The set of skills that helps one understand how to lead and how to exert natural authority in guiding a process and being respected and trusted in doing so; also how to host agreement-making and contracting between diverse parties that may often bring assumed power with them due to (perceived) seniority, rank, or resourcing (money).

ECOSYSTEM PHASE: COMPETENCY SET:	1 Stakeholder Convening	2 Itch/ Convergence	3 Ecosystem Attention	4 Divergence	5 Embodiment
Build Human Relations	Gathering stakeholders Building one-on-one trust Providing safe environment Throughout oll phases; Hosting oneself (meeting and finding ways to process one's own insecurities, activist voice if have deep care for the issue, hurts and no's, and surprises that come up)	Hosting conversations across differences Be able to see dynamics (pacer, cultural, historical) Listening	Building trust Facilitating collaborotion Onboording new participants Weaving Holding grief, pain Presence & Curiosity Listening, quieting the self Ways o creating different relationalities - help people show up differently (embodiment, out of the head) Mediating conflict	Building capacity to continue this Creating opportunities to _ woy or in a new way meet/ keep in contact Listening embed in host orgs Coaching (new) role take-up Enabling knowledge transfer	Creating opportunities to meet/ keep in contact embed in host orgs
Curate Content	Creating the niche Honing the calling question	Mapping key dissonance and acupuncture points	Hosting partners to make choices/paths and take leadership on key issues Seeing what is needed and acting on it (source and bring in expertise) Sensing in & out of the ecosystem, framing 6, re-framing as needed Thinking & processing Supporting the creation of tangible results	Harvesting of content learnings Transferring knowledge Documenting	Applying learning ta possible new role
Infuse Vitality and Coherence	Spurring enthusiasm Hosting openness and curiosity Inviting Creating the space	Shift attention to the whole/ interdependencies Hold the itch internally vs. the urgency Know the difference between facilitating meeting and a whole ecosystem and have the right facilitators	Continuing to bring in new perspectives Creating momentum Sensing the field - for what is needed, for opportunity and tension Sensing tensions and making them visible in o coring and or confronting way	Supporting growth of new branches Exiting the role Letting go fo what is no longer need	Spurring enthusiasm for next level Exiting the role Setting tracks for continuity in a Letting go of what is no longer need way that makes sense
Earn Mandate	Social contracting; enabling give/get Step into authority, leadership Positioning the role: nore as hosting tan as directing	Hosting clear agreements & clarifying investments Articulating and holding clear purpose Managing linear steering of sponsors in a non-linear process	Reloting the internal process to the larger system/outside Ability to call the hard conversations and have them well-hosted Move things forword, keep momentum Holding the bigger tension of the whole	Re-negotiating role or exit	Harvest and feed back learning

Competencies matrix worksheet :

ECOSYSTEM PHASE Competency set:	1 Stakeholder convening	2 Itch/ Convergence	3 Ecosystem attention	4 Divergence	5 Embodiment
Build human relations					
Curate content					
Infuse vitality and coherence					
Earn mandate					

Stakeholder Mapping Exercise :

Assessing the effectiveness of co-creation approaches is important, as stakeholder engagement is increasingly promoted in research and by funding organizations as an important pathway to achieving impact (Graversgaard et al., 2017; Leino & Puumala, 2021; Mauser et al., 2013). Stakeholder engagement is often accompanied by stakeholder analyses, guided by a framework or model for action to guide the engagement process (Boaz et al., 2018). The outputs of stakeholder analyses are often used to generate knowledge about the behaviors, intentions,

connections, agendas, influence, and resources of actors with a stake in a process. This information can then be used to enable the implementation of specific decisions, improve nderstanding of the social and political feasibility in relation to an issue (Brugha & Varvasovszky, 2000; Raum, 2018), and in turn guide future policy directions .

Stakeholder Theory :

Stakeholder theory is concerned with who provides input in decision-making processes, as well as who benefits and who experiences harm from the outcomes of such decisions (Phillips et al., 2003). Freeman et al. (2010) defined stakeholders as any group or individual who can affect or is affected by a process, issue, or objective. Stakeholder inclusion has become a defining element in public participation and democracy building (Gregory et al., 2020). It is increasingly embedded in national and international environmental policy (Coggan et al., 2021; de Jong et al., 2019), as well as in research on co-production (Chambers et al., 2021; Voorberg et al., 2015). This is partly due to a growing recognition of the need to involve those who are affected by or affect a process,

and partly as a response for dealing with complexity, where no single actor has all the answers(Frantzeskaki & Kabisch, 2016; Reed et al., 2009).

Stakeholder mapping typically focuses on responding to questions such as the following (Mehrizi et al., 2009): What is the problem or the solution affecting a system (in its broadest meaning – a set of interrelated things, processes, and actors forming a whole)? How are these affected by or affecting the system? What are stakeholders' interests and beliefs? How can stakeholders be prioritized in an engagement or decision-making process? By contrast, stakeholder analyses investigate stakeholders' perceptions of risks, causes of and potential solutions to a problem, the distribution of resources among stakeholder coalitions, the interrelations and interactions between them, and the windows of opportunity for influencing policy (Basco-Carrera et al., 2017; Reed & Curzon, 2015; Walker et al., 2008). Based on this analysis, strategies and roadmaps for achieving objectives and paths to collective agreements can be developed (Marques et al., 2020; Raum, 2018; Reed & Curzon, 2015; Wutich et al., 2020).

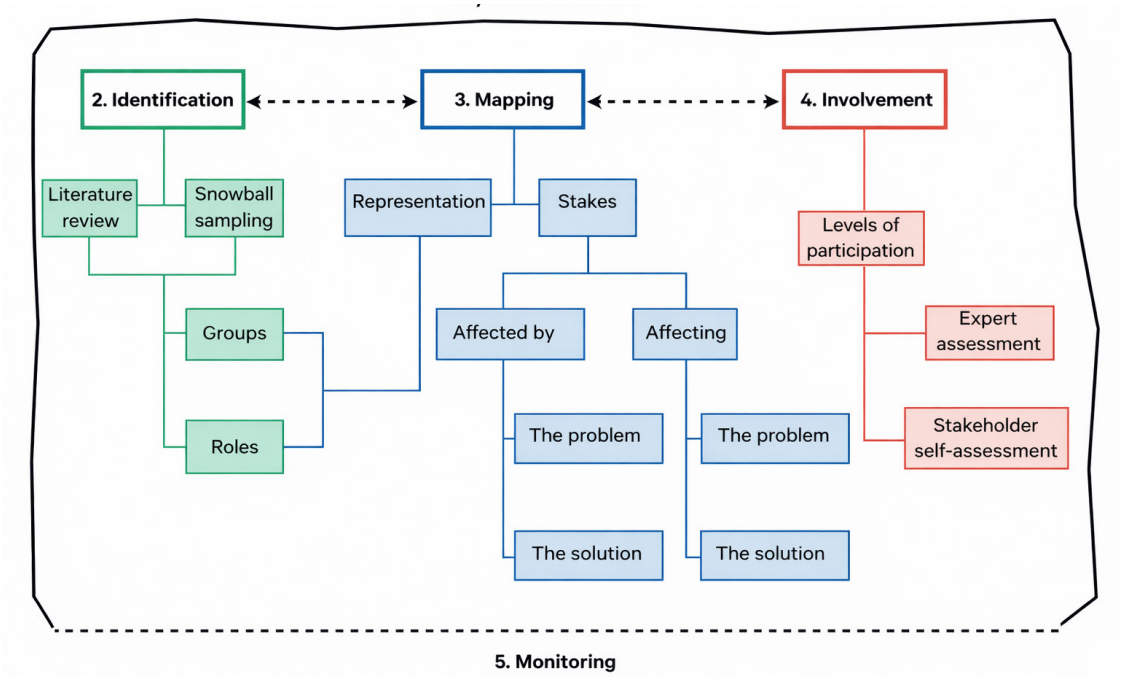


Figure 2 : System Boundaries (Source: MapStakes: a tool for mapping, involving and monitoring stakeholders in co-creation processes, SEI, 2022)

5 Steps Stakeholder Methodology : MapStakes Tool :

The stakeholder methodology is composed of five steps (see the system boundaries figure)

STEP 1 : Defining system boundaries :

System boundaries define the system and what is included, excluded and marginalized and why (Midgley, 2003). Boundaries define the stakeholders that will be identified as relevant to the process and hence represent the first criteria for inclusion and exclusion (Lyon et al., 2020). While setting system boundaries is necessary for identifying stakeholders, the definition of the system needs to occur iteratively throughout the involvement process, as not all actors will understand the

system the same way. The boundaries initially set by researchers can sometimes be interpreted differently by stakeholders (Mehrizi et al., 2009). Therefore, discussing the system with stakeholders is necessary to have a common understanding of what is being assessed.

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Boundaries can be :

- Jurisdictional (e.g. a catchment, a country, a region, a city)
- Sectoral (e.g. energy, water, agriculture)
- Institutional (e.g. ministries, municipalities)
- Conceptual (e.g. nature-based solutions, biomass innovation), scalar (e.g. landscape, bioregion, networks)
- Temporal (e.g. present, future), and
- Spatial (including social space, such as the policy arena, or absolute space, such as distances)

STEP 2: Identifying stakeholder :

Facilitator Guidelines : (Time 15 Minutes)

- Ask the participants "Who are the key players in the field of circularity in your
- context?
- Ask them to fill the worksheet provided to them in their toolkit.
- Then go to the PPT

Researchers' own networks are often the starting point in a co-creation process. Stakeholders who have established a relationship of trust with the person leading the work are more likely to be responsive and dedicated in the subsequent steps. However, there is a need to go beyond researchers' (or the person doing the mapping) own networks. This can be done through literature or document reviews and snowball sampling, for instance of experts in the field and according to predefined groups and roles.

Groups and roles are defined according to the objectives and area of focus in

a project (Barquet & Cumiskey, 2018). In a mapping exercise, stakeholders only represent one stakeholder group to avoid conflict of interests. Stakeholders should either represent themselves or a segment of society. Group representatives, whether from civil society (such as associations or unions) or government (e.g. agencies) should have the support from and be trusted by the people they are representing, and they should have the knowledge relevant to the issues to be discussed or willing to acquire the necessary information.

While stakeholders can only represent one group, it is possible for them to have several roles (Gregory et al., 2020). The same stakeholder group could have a different role in a different context. For example, the role of national authorities will be different in centralized versus decentralized systems of governance. A more robust tracking of stakeholders' groups and roles can reveal biases in the identification process. For example, it could be the case that there are more stakeholders involved in decision- making positions while actors potentially affected by the problem are underrepresented.

Alternatively, there may be equal representation in the number of stakeholders, but with very uneven stakes in the process which could lead to a poor problematization of the issue in question. This identification can also help rethink the engagement process to identify gaps in representation.

Identifying stakeholder Worksheet :

Who are the key players in the field of circularity in your context?
Key public sector organizations are:
Key research organizations (universities/institutes) or circularity are:
Key entrepreneur support organizations are:

Key finance actors are:
Key circularity experts and business networks are:
Key corporates engaged in circularity/sustainability (potential partners) are:
Key start ups with circularity solutions are:

STEP 3 : Mapping stakeholders :

Different methodologies exist for mapping stakeholders (Reed et al., 2009). To increase accessibility of the approach, we suggest two rather simple methodologies: according to representation (Table 1) and according to influence (Figure 2). An example of a fictitious case study is provided in Table 1. Notice how stakeholders only represent one group but may play different roles.

A rainbow diagram (Figure 2) can help analyze the extent to which stakeholders

a. affect the problem and the solution, and

b. are affected by the problem and the solution.

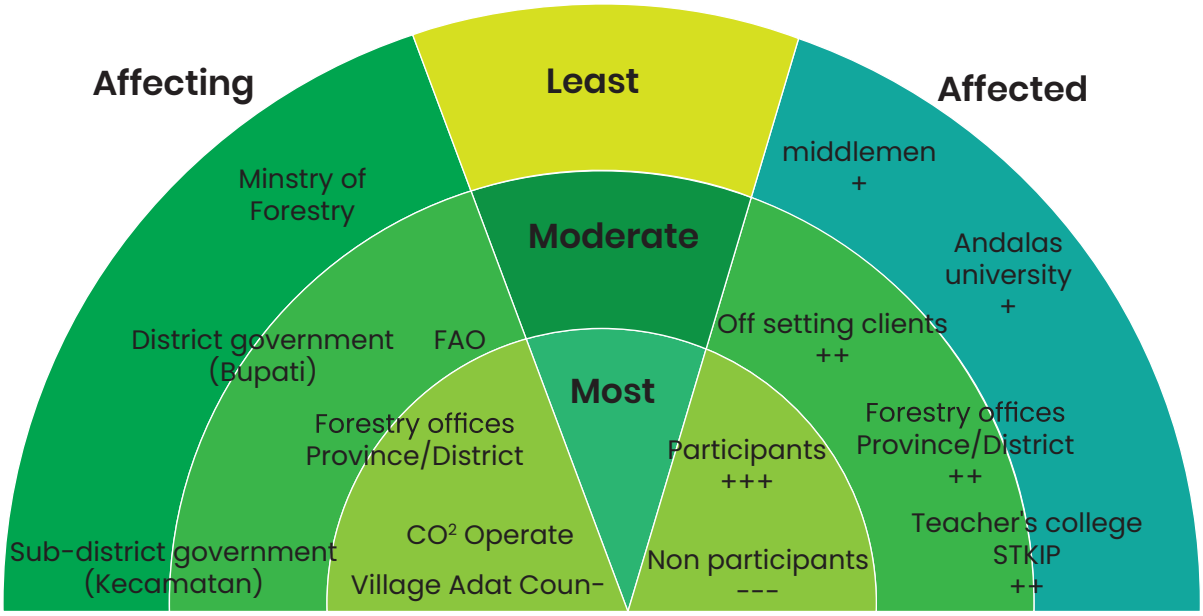


Figure 3: A Rainbow Diagram

Source: https://www.researchgate.net/figure/Stakeholder-rainbow-diagram-and-degree-of-affecting-or-being-affected-by-the-VCM-scheme_fig2 323259373/download?_tp=eyJjb250ZXh0Ijp7ImZpcnN0UGFnZSI6Il9kaXJIY3QiLCJwYWdlIjoiX2RpcmVjdCJ9fQ

Results from this methodology help assess whether the most influential or influential stakeholders are being included in the stakeholder map. Outputs from the process are highly dependent on the selection of participants and the process design. Unbalanced representation will skew results in favor of the over-represented group.

Therefore, although as many stakeholders as deemed feasible can be included in a process, there is a need for balance across roles. If there are too many stakeholders providing expert knowledge and too few able to influence decisions or implement actions, the result might become a knowledge-rich workshop, but with very few possibilities to influence practice.

If, on the contrary, there are too many stakeholders with decision-making roles and too few stakeholders with expert knowledge (including knowledge on everyday experiences like local knowledge), the process could easily become top-down with potentially little connection to everyday practices. Additionally, under-represented groups may become further marginalized and isolated, and outcomes may be biased towards the needs and priorities of those who were able to participate at the expense of those who were excluded (Reed et al., 2009). This, in turn, is likely to jeopardize levels of trust between stakeholders and those with statutory responsibilities (Reed & Curzon, 2015).

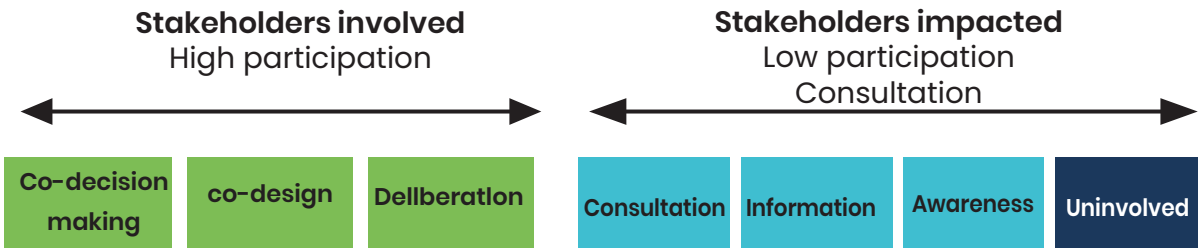
Stakeholder Group	Name, Position and Organization	Role						
		Decision makers	Implementers	Coordinators	Knowledge Provider	Financers	Lobbyists	Gatekeepers
SH1: Authorities	Regional Coordinator, Contingency Agency	☐	☒	☒	☐	☐	☐	☐
	Municipal Council, Municipality	☒	☒	☐	☐	☐	☐	☐
SH2: Civil Society	Representative of association for local inhabitants	☐	☐	☐	☐	☐	☒	☐
	House owner	☒	☐	☐	☐	☐	☒	☐
SH3: Private Sector	Insurance Company	☐	☐	☒	☒	☐	☒	☒
	Private Company	☐	☐	☐	☒	☐	☐	☒
SH4: Research Community	Climate Adaptation Unit, government agency	☒	☐	☐	☒	☐	☒	☐
	Researcher, University	☐	☐	☐	☒	☐	☒	☐
SH5: NGOs	Transboundary Commission	☐	☐	☒	☒	☐	☐	☐
		☐	☐	☐	☒	☐	☐	☐
SH6: Others (circularity/ sustainability (potential partners)		☐	☐	☒	☒	☐	☐	☐

Table 1: Mapping Stakeholders example

Source:https://weadapt.org/knowledge-base/sei-urban-toolbox-for-liveable-cities/mapstakes-a-tool-for-co-creation-processes/

STEP 4: Involving stakeholders :

The fourth step helps to assess the level of involvement or participation required and desired by each stakeholder. This addresses the questions: how much should stakeholders be involved and when, according to experts? And how much and in what way do stakeholders want to be involved? These questions require consideration by "process owners", the individual(s) carrying out the mapping exercise.



Typology of Participation

Figure 4: Levels of Participation (Source: adapted from Arnstein 1969)

The above picture depicts an adapted version of a typology of participation developed by Arnstein (1969)
and further developed by Basco-Carrera et al. (2017). It includes one level of non-participation (uninvolved), three levels of low participation (awareness, information, and consultation) and three levels of high participation that relate to different stages in a co-creation process (deliberation, co-design and co-decision-making).

As more involvement is needed from stakeholders, the number of individuals interested and available in taking part in the process is likely to decrease. The level of involvement is defined iteratively. In a first step, process owners determine the level of involvement they wish to have from stakeholders, based on the stakeholder's group, role(s), and how affected they are or how much they affect a situation. In a second step, the process owners consult stakeholders regarding their own views on what level of involvement they are willing to have in the project.

This second iteration might result in some stakeholders not being willing to participate to the extent wished for (or not at all), despite their importance to the process. In such cases, it is important to keep these stakeholders in the map and to find out the reason why they are not willing to be part of the project. This may change over the course of the project, for example due to changes in time availability, perceived importance, or interest.

Different levels of engagement might be required at different stages of a process. For instance, information meetings and other general types of activities can attract a broader audience. Conversely, tasks related to data provision or co-assessment of risks rely on there being a few dedicated and interested stakeholders, referred to as key stakeholders, at the very top of the ladder. Key stakeholders are often willing to dedicate time to the process but will also expect to be part of making decisions. Therefore, managing expectations among stakeholders is important from the start, as different stakeholders will have different interests and hence reasons for participating.

In theory, stakeholders that are most affected and "most affecting" should be participating at a high level (e.g. co-decision-making), and conversely stakeholders that are less affected but also "less affecting" can afford to be involved to a lower degree. Actors that are more affected by an intervention (e.g. a nature-based solution) or by a problem (e.g. a hazard), even when they are not affecting the intervention or the problem, should also be highly involved in the co-creation process. However, in practice, participation depends on many other aspects, some of which may be pragmatic, ranging from willingness to be involved to time availability or personal interests. The level of involvement and participation goes hand in hand with stakeholders' interests. The more engaged a stakeholder is, the higher up the participation pyramid he or she will both be willing and expected to be in the process. Although stakeholders' positions are not static and might change, particularly in longer engagements, understanding involvement is important for managing expectations. This is often done through iterative dialogue.

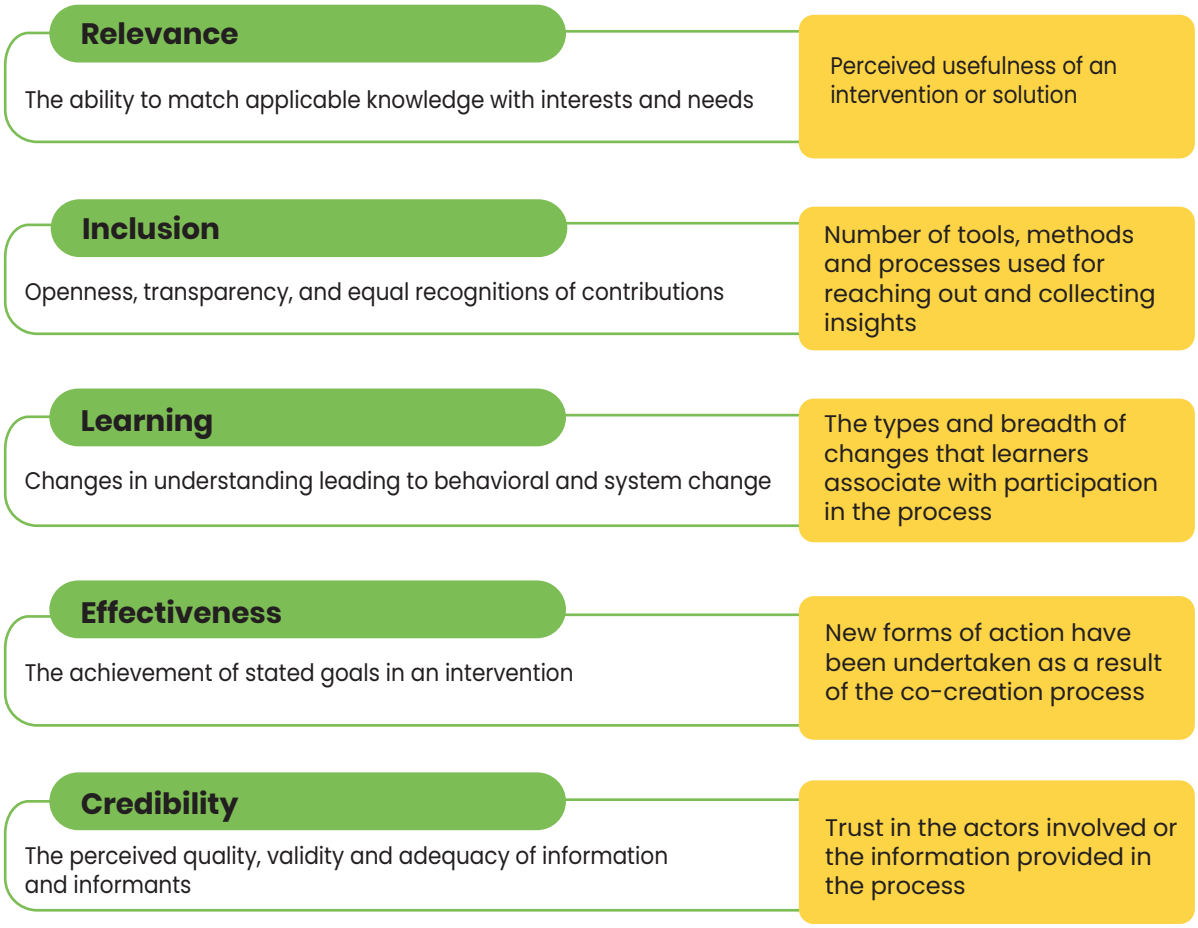
However, mismatches between expected and desired involvement rarely lead to a more reflective exercise. For example, what leads to mismatching expectations of the process? What determines interest from stakeholders to engage? As increased demands are placed on both research and policy processes for including stakeholders, understanding this mismatch is fundamental for addressing the dynamics that might deter stakeholders from participating, or discourage researchers from pursuing a more inclusive approach.

STEP 5 : Monitoring and Evaluation :

Co-creation can be highly resource intensive, and therefore it can be challenging to engage stakeholders throughout a process, despite its popularity. Sometimes co-creation processes can result in stakeholder fatigue, which may limit the quality of the results (Barquet et al., 2018). Additionally, it is not clear whether co-creation processes are effective for achieving better results (Mayne, 2008, 2015). Thus, more evidence is needed to assess the impact and effectiveness of different aspects of co-creation processes (Durose et al., 2018).

Improving the evidence base of co-creation could increase the credibility of the results, improve the understanding of social learning, and show the value of co-creation processes (Ensor & Harvey, 2015; Van Epp & Garside, 2019). To achieve this, development and testing of robust indicators are necessary to monitor and evaluate processes, to highlight and target areas for improvement. The indicators will inform the identification of best practices, as there are few standardized approaches for co-creation (Huang & Harvey, 2021).

We devised a set of criteria, relevance, inclusion, learning, effectiveness, and credibility (RILEC), that captures a number of dimensions that are relevant for assessing the role of co-creation in a process, project, or intervention; these criteria are designed building on existing co-creation and learning criteria in the literature (Bos et al., 2013; Huang & Harvey, 2021; Sarkki et al., 2015; Schuck-Zöller et al., 2017). The proposed criteria differ from previous ones in that we do not consider legitimacy as a criterion to fulfill (see for example Heink et al., 2015; Sarkki et al., 2015). Rather, legitimacy is considered to be an outcome from fulfilling these five criteria:



Relevance refers to the ability to match applicable knowledge with interests and needs (Sarkki et al., 2015). Technology studies show that perceived relevance is closely connected to perceived usefulness and directly influences public acceptance (Taherdoost, 2018). Perceived usefulness coupled with an inclusive process can grant legitimacy to a project or intervention. Relevance can be monitored by assessing whether interventions have contributed to generating solutions that stakeholders consider legitimate.

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b. Inclusion refers to whether co-creation led to an inclusive process characterized by openness and transparency, and where equal recognition was granted to all contributions (Chu & Cannon, 2021). An inclusive process is likely to be perceived as fairer, and therefore the decisions reached in that process are likely to have more legitimacy than those emerging from top-down approaches (Barquet & Cumiskey, 2018; Sarkki et al., 2015). Inclusion can be monitored by assessing the type and reach of outreach tools, inquiry-based methods, and scope for co-creative renas (Chu & Cannon, 2021).

d. Effectiveness relates the results of activities to the achievement of objectives and responds to the question, "are we doing the right things?" When assessing effectiveness, the focus is on monitoring whether interventions have achieved their stated goals either in the process (e.g. new forms of action have been undertaken as a result of the co-creation process) or the outcomes (e.g. decrease in economic losses from extreme events; Craft & Fisher, 2016). Effectiveness of a process could lead to impact beyond immediate results, e.g. behavioral or structural changes (Dlouhá et al., 2013), but not necessarily.

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e. Credibility can be understood as the perceived quality, validity, and adequacy of the information (source credibility) or the informant(s) exchanging information (actor credibility; Lachapelle et al., 2014; Sarkki et al., 2015). Perceptions of credibility play a key role in the likelihood of being persuaded. Credibility directly influences attitudes toward risk and policy issues more generally (Lachapelle et al., 2014). This proposed framework is not only relevant for evaluating co-creation processes at the end of a project, but also to regularly monitoring them. This can provide real-time information on how to adjust the co-creation process where needed. The RILEC criteria can be monitored through indicators, as exemplified in the yellow boxes in Figure 4. This is not an exhaustive list, and indicators need to be further contextualized according to the system boundaries and purpose of the process.

Data to track RILEC indicators can be collected using qualitative and quantitative methods, including key informant interviews, surveys, and questionnaires. For monitoring purposes, a baseline assessment should be followed by data collection at regular intervals (e.g. annually), using the same set of indicators in order to ensure comparability over time.

Take Away :

Facilitator Guidelines : (Time 15 Minutes)

- Ask the participants to join you outside
- Form a circle
- Then ask the participants to share what they liked, did not like and what needs to be
- changed
- Brief them about the next masterclass (date, time and locations)

Master Class 3.2 :

Visibility and Branding

Master Class 3.2
Visibility and Branding

What will you be informed about?

- Brand Promise
- Create your narrative
- Take away

Facilitator Guidelines :

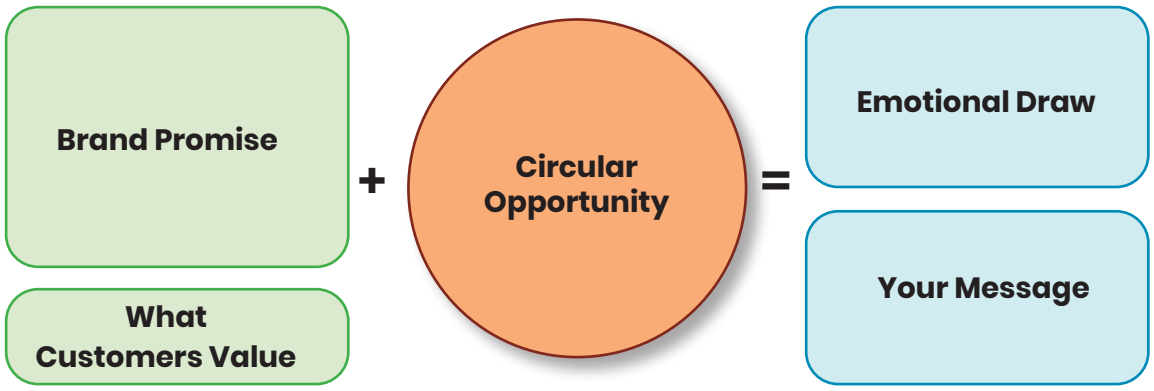
- **Objective of this session:** The main objective of this session is to understand individual brand value and design their brand values as well as to create their narratives.
- **Time: Full day**
- **Tools:**
  - Stop watch
  - Board markers
  - Flip charts
  - Duster
  - Pens - PPT

Instructions :

- To go through this section and create your own PPT.
- There are facilitator guideline pop up boxes with instructions
- You are more than welcome to change the instructions and use it to cater to your audience
- The instructions are just simple step by step process
- May sure to have all the logistics prepared

Brand Promise :

Brand purpose is emerging as one of the drivers of customer engagement. Increasingly, people are making decisions based on an emotional connection to a particular brand. Reinforcing your brand through a circular innovation strategy is one way to build customer loyalty, but finding the right messaging is key. What are the underlying benefits to customers that will drive their emotional response and attachment? In this session we will be helping you to think about how you engage with your customers emotionally. What does your brand promise to do for your customers that differentiates it from anything else out there? This is a process to help you figure out how your circular opportunities reinforces your brand value.



Facilitator Guidelines : (Time 15 Minutes)

- Ask the participants to open the brand worksheet in their toolkits.
- Ask the participants to complete the sentences in their toolkits.
- Ask the participant "What would be the best in your company ?" For example, Harley Davidson "The only motorcycle manufacturer"
- Then ask the participant to fill THAT sentence. For example: "that makes big loud motorcycles"
- Then ask the participants to fill the FOR sentence. For example: "for macho guys and macho wannabes"
- Then ask the participants to fill the IN sentence. For example: "mostly in the United States"
- Lastly ask the participants to fill the IN AN ERA OF sentence. For example; "in an era of decreasing personal freedom"

Brand promise worksheet :

Complete the sentences :

(What) The Only : .....

.....

.....

(Category) That : .....

.....

.....

(For Who) For : .....

.....

.....

(Market Geography) In : .....

.....

.....

(Underlying Trend) In An Era Of : .....

.....

.....

Facilitator Guidelines : (Time 30 Minutes)

- After completing the sentences, ask the participants to fill the "My customer value". For example: freedom, social status, convenience, saving money, being hip etc. (Give 5 minutes)
- After that ask the participants to fill the "circular opportunity". For example: making our packaging biodegradable. (Give 10 minutes)
- After the participants are done filling the circular opportunity for them to fill the "Emotional Draw" . Ask the participants to write how this makes the people feel? For example: Altruistic, empowered, smart, techy, inspired. (Give 5 minutes)
- Then ask the participants to fill in the "your message" for example: you'll be ahead of the curve if you integrate..... Into your life. (Give 10 minutes)

My Customers Value :

Circular Opportunity :

Emotional Draw :

Your Message :

Create your Narrative :

Learn the basics of telling great stories around your product or service and how it relates to circularity. What is an immersive and emotional story that makes people feel invested in your brand? In this section we will learn to develop the Story of Self, Story of Us and Story of Now.

Facilitator Guidelines : (Time 20 Minutes)

- Divide the participants in the groups of 3 - 4
- Then ask the participants to pick 1 speaker, 1 listener and 1 observer.
- Then ask the speaker to tell his/her/their story to the listener.
- The listener needs to listen to the story.
- The observer will observe the conversation and they will tell what they observe. For
- instance if they felt the story of self, what could have been better and how did the

- listener react.
- The speaker will get 2 minutes to speak.
- Continue until everyone gets to speak.
- Then ask the participants to write their story of self in their tool kit. (Give 12 minutes)

Story of Self :

Story of us :

Facilitator Guidelines : (Time 15 Minutes)

- Now we move towards writing the story of us !
- Ask the participants to close their eyes and think, how did he/she/them found their team? How did they meet? How did they connect? What was one vision or motive for them to come together?
- Ask them to close their eyes and think, play melodic music behind them while the think.
- Now ask them to write the story of us in their toolkit. (Give 10 minutes)

Story of us :

Story of now :

Facilitator Guidelines : (Time 30 Minutes)

- Now after drafting the story of us, ask the participants to think where they are now? As a team, as a business, as an organization, as a brand?
- What they aim to achieve is what needs to reflect here in the story of now.
- Then ask the participants to write the story of now in their tool kits. (10 minutes) Then ask

Story of now :

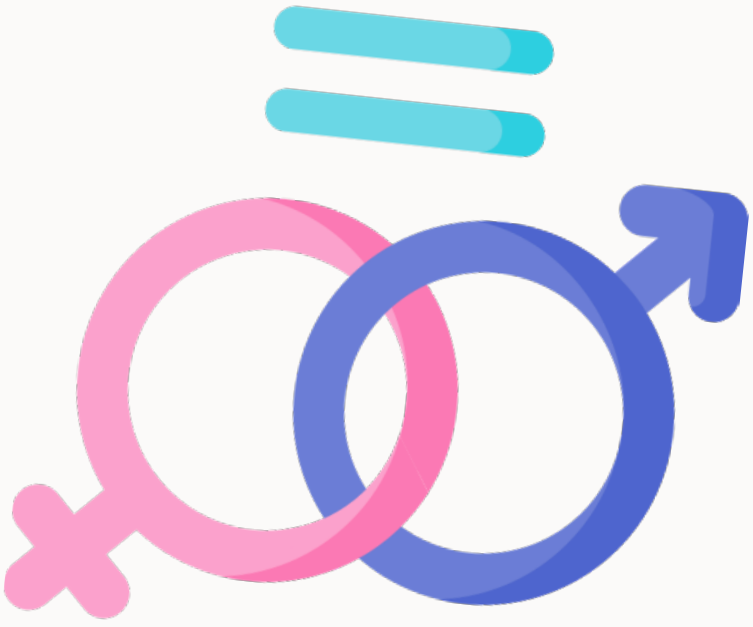
Take Away :

Facilitator Guidelines : (Time 15 Minutes)

- sk the participants to join you outside
- Form a circle
- Then ask the participants to share what they liked, did not like and what needs to be changed
- Brief them about the next masterclass (date, time and locations)Brief them about the next masterclass (date, time and locations)

Master Class 4.2 :

GEDSI



Master Class 4.2
GEDSI

What will you be informed about ?

- **SESSION 1 : Case Studies on GEDSI and CE**

  - analyze real-world case studies to identify key issues related to sexual harassment and the application of GEDSI principles in the workplace.
  - apply Gender Equality, Disability, and Social Inclusion (GEDSI) principles in developing effective strategies for preventing and addressing sexual harassment
  - existing workplace policies and practices in the context of the case studies, identifying gaps and proposing improvements

SESSION 1: Case Studies on GEDSI and CE

Session 1 Objectives :

1. Participants will critically analyze real-world case studies to identify key issues related to sexual harassment and the application of GEDSI principles in the workplace.
2. Participants will learn how to apply Gender Equality, Disability, and Social Inclusion (GEDSI) principles in developing effective strategies for preventing and addressing sexual harassment.
3. Participants will assess the effectiveness of existing workplace policies and practices in the context of the case studies, identifying gaps and proposing improvements.
4. Participants will discuss the role of leadership in fostering a harassment-free environment and ensuring accountability for actions taken (or not taken) in the case studies

5. Participants will work collaboratively to propose practical solutions and best practices for preventing sexual harassment, ensuring these solutions are inclusive and considerate of intersectionality.

6. Participants will enhance their critical thinking and decision-making skills by debating and defending their proposed solutions based on the case study scenarios.

7. Participants will develop a deeper understanding of the diverse experiences of individuals affected by harassment, fostering empathy and a commitment to creating an inclusive workplace culture.

1. Instructions For The Trainer :

- Pre-Session Preparation: Familiarize Yourself with the Case Studies: Review each case study thoroughly, understanding the key issues related to sexual harassment, the application of GEDSI principles, and potential solutions.

- Prepare Discussion Questions: Develop open-ended questions that will prompt participants to think critically about the case studies and relate them to real-world scenarios. Set Objectives: Clearly define the session's objectives, ensuring they align with the overall goals of understanding and applying GEDSI principles in the context of workplace sexual harassment.

- Arrange Materials: Ensure all necessary materials (e.g., case study handouts, whiteboards, markers, digital tools) are prepared and accessible.

2. Session Introduction :

- Welcome Participants: Begin the session with a warm welcome, introduce yourself, and briefly explain the session's purpose and objectives.

- Set Ground Rules: Establish ground rules for respectful and inclusive discussion, emphasizing confidentiality, active listening, and the importance of diverse perspectives. Introduce GEDSI Principles: Provide a brief overview of GEDSI principles, highlighting their relevance to the prevention of sexual harassment.

3. Presenting the Case Studies :

- Distribute Case Studies: Provide participants with copies of the case studies, either in print or digitally, and allow them a few minutes to read through them individually. Set the Context: Give a brief summary of each case study, ensuring participants understand the key issues and the context in which the events occurred.

4. Facilitating the Discussion :

- Break into Small Groups (Optional): Depending on the number of participants, consider dividing them into smaller groups to discuss the case studies. Assign a case study to each group if applicable.

- Guide the Discussion: Use your prepared questions to guide the discussion, encouraging participants to think critically about the issues and propose solutions.
- Encourage Participation: Ensure that all participants have the opportunity to share their thoughts, and encourage quieter members to contribute.
- Link to GEDSI Principles: Continuously tie the discussion back to the GEDSI principles, asking participants to consider how these principles can be applied to the scenarios.

5. Group Presentations and Feedback :

- Group Reporting: If participants worked in small groups, have each group present their findings and proposed solutions to the larger group.
- Facilitate Feedback: Encourage other participants to provide feedback on the presentations, fostering a collaborative learning environment.
- Summarize Key Points: After each presentation, summarize the key takeaways, emphasizing how the GEDSI principles were applied.

6. Wrap-Up and Reflection :

- Reflect on Learnings: Ask participants to reflect on what they have learned from the case studies and how they can apply these insights in their workplace.
- Review Objectives: Revisit the session's objectives, confirming that they have
- been met and highlighting any additional insights gained during the discussion.
- Encourage Further Action: Motivate participants to take what they've learned back to their workplaces and consider how they can contribute to a harassment-free and inclusive environment.
- Available for Questions: Make yourself available for any follow-up questions or discussions participants may have after the session.

7. Post-Session Follow-Up :

- Provide Resources: Offer additional resources, such as articles, toolkits, or guidelines, for participants to explore further on their own.
- Collect Feedback: Gather feedback from participants on the session, using it to improve future facilitation efforts.

Case Studies

Case Study 1 :

Women's Cooperative and the Circular Economy

Scenario :

In a small rural community, a women's cooperative has been established to upcycle agricultural waste into sustainable products such as organic fertilizers and eco-friendly packaging. The cooperative provides economic opportunities for women who have traditionally been excluded from formal employment due to gender biases and cultural norms. Despite their success, the cooperative faces challenges in scaling up due to limited access to funding and markets.

Discussion Questions :

- How can the cooperative overcome barriers to scaling up while ensuring that women remain central to its operations?
- What strategies can be employed to further promote gender equality and economic empowerment within the cooperative?

Case Study 2 :

Disability-Inclusive Circular Economy Initiative :

Scenario :

A city government has launched a circular economy initiative focusing on recycling and waste reduction. However, feedback from the disability community has highlighted that the recycling facilities are not accessible, and the educational materials are not available in formats suitable for people with disabilities. The city government is now revising its approach to include more inclusive practices.

Discussion Questions :

- What specific changes should the city government implement to ensure that the recycling program is fully accessible to people with disabilities?
- How can involving people with disabilities in the planning and implementation process improve the overall effectiveness of the initiative?

Case Study 3 :

Inclusive Reporting Mechanisms :

Scenario :

A mid-sized tech company has implemented a strict anti-harassment policy but notices that employees with disabilities are not utilizing the reporting mechanisms. After investigating, it's discovered that the current online reporting tool is not accessible to those with visual impairments, and the company lacks alternative reporting options.

Discussion Points :

- Assess how the company's existing reporting mechanisms fall short in upholding GEDSI principles.
- Discuss how the company can redesign its reporting tools to be more inclusive.
- Explore the impact of accessible reporting mechanisms on the prevention of harassment for all employees.

Case Study 4 :

Leadership Accountability in Promoting GEDSI Principles :

Scenario :

In a large corporation, a senior manager is reported for making inappropriate comments towards a female employee. The company has a robust anti-harassment policy, but the senior management hesitates to take action due to the manager's high rank and long tenure.

Discussion Points :

- Analyze the role of leadership in enforcing anti-harassment policies in line with GEDSI principles.
- Discuss the potential consequences of leadership inaction on workplace culture and employee trust.
- Explore strategies to hold leadership accountable while promoting a culture of respect and inclusion.

Case Study 5 :

Implementing GEDSI in a Medium-Sized Tech Company :

Background :

A medium-sized tech company is looking to enhance its inclusivity and diversity efforts. The company has a predominantly male workforce and lacks a structured approach to disability inclusion.

Task :

Conduct a GEDSI analysis of the company and develop a plan to integrate GEDSI principles into its operations, including stakeholder engagement strategies.

Case Study 6 :

GEDSI Challenges in a Rural Community-Based Enterprise :

Background :

A community-based enterprise in a rural area focuses on local craft production. The majority of workers are women, but there is limited inclusion of people with disabilities, and the enterprise struggles with social inclusion due to traditional gender roles.

Task :

Analyze the GEDSI challenges the enterprise faces and propose strategies to address them, including how to engage local stakeholders effectively.

Templates For Gedsi Policy

TEMPLATE 1

Gender Equality, Disability, and Social Inclusion (GEDSI) Policy

Version : 1.0

Review Date : [Insert Date]

Next Review Date : [Insert Date]

1. Purpose :

This policy outlines our organization's commitment to promoting Gender Equality, Disability, and Social Inclusion (GEDSI). It provides direction for creating an inclusive environment where all individuals, regardless of their gender, ability, or social background, can participate fully and equitably in all aspects of our organization and its activities.

2. Scope :

This policy applies to :

- All employees, volunteers, contractors, and interns/work placements.
- Associate trainers.
- Deployees and standby personnel/applicants.
- Board members.

3. Values Statement :

- Our organization is guided by core values of accountability, integrity, empathy, and collaboration. We are committed to ensuring that equality and inclusion are embedded in all our work, promoting a culture where diversity is valued, and discrimination and exclusion are actively challenged.

4. Policy Statement :

- We recognize that many people in our communities face barriers and discrimination that hinder their full participation. By fostering an inclusive culture, we can leverage each individual's unique contributions. Our approach is grounded in the understanding that people of all identities have different needs, priorities, and constraints. Achieving equity and inclusion may require treating people differently to achieve similar outcomes.

We are committed to :

- Upholding the principles of equality and inclusion as fundamental human rights.
- Recognizing the intersectionality of discrimination and addressing systemic and structural barriers.
- Encouraging dialogue and fostering an environment of openness and inclusivity.
- Working in partnership to address inequalities and promoting shared responsibility for inclusion.

5. Procedures :

To promote GEDSI, our organization will :

- Mainstream inclusion principles across all work and encourage full participation of all people in our programs.
- Integrate GEDSI principles into business processes, management, leadership, and performance frameworks, with a zero-tolerance approach to discrimination.
- Provide training to all staff to ensure alignment with our inclusion strategies.
- Maintain a professional and inclusive workplace that actively calls out inappropriate behavior.
- Support staff experiencing gendered violence by providing a safe workplace environment.
- Encourage diverse participation by focusing on recruitment and support strategies that attract culturally diverse, Indigenous, persons with disabilities, and LGBTQIA+ applicants.
- Apply fair parental leave arrangements and flexible work arrangements.
- Influence partners and decision-makers to adopt GEDSI principles.
- Monitor and evaluate programs through an equality and inclusion lens.
- Investigate any breaches of the Code of Conduct related to equality and inclusion and address incidents of harassment promptly and sensitively.

6. Monitoring and Review :

- The organization will conduct regular audits and monitor individual staff performance annually to ensure the effectiveness of GEDSI implementation. The CEO will present progress to the Board annually, and the Inclusion Committee will oversee the development of an Inclusion Roadmap and conduct peer reviews of GEDSI-related activities.

7. Roles and Responsibilities :

- **Board :** Provide governance and stewardship in the overall GEDSI policy.
- **Senior Management Team :** Offer support and leadership, promoting an inclusive workplace culture.
- **nclusion Advisor :** Oversee and advise on the implementation of GEDSI strategies.
- **Inclusion Committee :** Translate policy into action, monitor progress, and drive implementation.
- All Staff: Contribute to ensuring diversity and inclusion, engage in discussions about equality, and uphold the organization's values.

8. Definitions :

- **Gender Equality:** Equal opportunities, rights, and responsibilities for all people, regardless ofgender.
- **Disability:** Long-term physical, mental, intellectual, or sensory impairments that may hinder fulland effective participation in society.
- **Social Inclusion:** Creating an environment where all people are treated fairly and respectfully and are able to participate fully.

9. Related Policies and Documents :

- Code of Conduct
- Anti-Discrimination, Anti-Harassment, and Bullying Policy
- Grievance Policy
- Occupational Health and Safety Policy
- Privacy Policy
- Reconciliation Action Plan

Approved by : [Insert Name and Title]

Date : [Insert Date]

Version Number : 1.0

Distribution : [Internal/External]

This template should serve as a foundation, which you can further tailor based on the specific content of your organization and the provided documents.

TEMPLATE 2

GEDSI (Gender Equality, Disability, and Social Inclusion) Policy for [Non-Profit Organization Name]

I. Introduction :

1.1 Purpose :

This Gender Equality, Disability, and Social Inclusion (GEDSI) Policy outlines [Non-Profit Organization Name]'s commitment to promoting gender equality, disability inclusion, and social inclusion in all aspects of our work. Our organization is dedicated to supporting start-ups and entrepreneurs, and we recognize that fostering an inclusive and equitable environment is crucial for the success and sustainability of the entrepreneurial ecosystem.

1.2 Scope :

This policy applies to all employees, volunteers, partners, stakeholders, and programs conducted by [Non-Profit Organization Name]. It governs our interactions with the start-ups we support, our internal operations, and our external partnerships.

II. Policy Statement :

[Non-Profit Organization Name] is committed to integrating GEDSI principles into our organizational culture, programs, and the support we provide to start-ups. We believe that gender equality, disability inclusion, and social inclusion are fundamental to creating a diverse and innovative entrepreneurial community.

III. Objectives :

3.1 Gender Equality :

Promote equal opportunities for all genders in access to start-up support, funding, and resources. Ensure that our programs and services are designed and delivered in a gender-sensitive manner. Encourage gender diversity in leadership and decision-making within the start-ups we support.

3.2 Disability Inclusion :

Ensure that our services, events, and resources are accessible to entrepreneurs with disabilities. Advocate for and support the inclusion of people with disabilities in the start-up ecosystem. Provide reasonable accommodations to entrepreneurs, employees, and volunteers with disabilities.

3.3 Social Inclusion :

Promote the inclusion of marginalized and underrepresented groups in entrepreneurship. Ensure that our programs are inclusive of diverse socio-economic backgrounds, ethnicities, and communities. Support start-ups that address social challenges and contribute to inclusive economic development.

IV. Principles :

4.1 Non-Discrimination :

We are committed to providing a work environment and support services free from discrimination, harassment, and bias based on gender, disability, race, ethnicity, socio-economic background, or any other characteristic.

4.2 Equal Access and Opportunity :

We will ensure that all entrepreneurs, regardless of their background, have equal access to our programs, resources, and networks.

4.3 Empowerment and Participation :

We will actively engage and empower women, people with disabilities, and marginalized groups in theentrepreneurial ecosystem, ensuring their voices are heard and their contributions valued.

4.4 Accountability and Transparency :

We will regularly monitor and report on our progress in implementing this GEDSI policy and hold ourselves accountable to our community, partners, and stakeholders.

V. Implementation :

5.1 Leadership and Governance :

Senior leadership will champion GEDSI principles and ensure their integration into the organization's strategy and operations.
A GEDSI Task Force will be established to oversee policy implementation, provide guidance, and monitor progress.

5.2 Recruitment and Employment :

Ensure diversity in recruitment and hiring processes, with a focus on attracting candidates from underrepresented groups. Implement training and development programs that are accessible and inclusive for all employees and volunteers.

5.3 Program Design and Delivery :

Apply a GEDSI lens to all program planning, ensuring that our services are inclusive and address the diverse needs of start-ups.
Provide targeted support to women-led, disability-led, and socially-driven start-ups. Ensure that our events, workshops, and mentoring programs are accessible to all entrepreneurs, including those with disabilities.

5.4 Funding and Investment :

Promote gender-responsive and inclusive investment practices within our funding programs. Encourage investors and partners to adopt GEDSI principles in their investment decisions. Track and report on the allocation of funding to women-led, disability-led, and socially inclusive start-ups.

5.5 Capacity Building and Training :

Provide training on GEDSI principles for our staff, volunteers, and the start-ups we support. Offer mentorship and capacity-building opportunities specifically for underrepresented entrepreneurs.

5.6 Communication and Awareness :

Ensure that all communication materials and outreach efforts reflect our commitment to GEDSI.
Use inclusive language and imagery in all public-facing communications. Promote awareness of GEDSI principles within the entrepreneurial ecosystem.

5.7 Monitoring and Evaluation :

Develop and use indicators to measure progress on gender equality, disability inclusion, and social inclusion. Conduct regular reviews of our programs and policies to ensure they are aligned with GEDSI objectives. Report on GEDSI outcomes to our community, partners, and donors.

VI. Roles and Responsibilities :

6.1 Senior Management :

Provide leadership and resources for the effective implementation of the GEDSI policy. Ensure that GEDSI principles are embedded in all strategic planning and decision-making processes.

6.2 GEDSI Task Force :

Oversee the implementation of the GEDSI policy and provide regular updates to senior management. Coordinate GEDSI-related initiatives and training programs.

6.3 All Employees and Volunteers :

Uphold the values and principles of the GEDSI policy in their daily work. Participate in GEDSI training and apply the learnings to their roles.

6.4 Start-Ups and Partners :

Encourage start-ups and partners to adopt GEDSI principles in their operations and practices. Collaborate with diverse groups to promote inclusion and equity in the entrepreneurial ecosystem.

VII. Reporting and Accountability :

7.1 Reporting Mechanisms :

Establish clear channels for reporting and addressing incidents of discrimination, harassment, or exclusion. Ensure confidentiality and protection for individuals who report such incidents.

7.2 Regular Review :

The GEDSI policy will be reviewed annually to assess its effectiveness and relevance. Feedback from employees, volunteers, partners, and start-ups will be incorporated into the review process.

VIII. Conclusion :

[Non-Profit Organization Name] is committed to fostering an entrepreneurial environment where all individuals, regardless of gender, disability, or social background, can succeed. Through the implementation of this GEDSI policy, we aim to strengthen our impact by ensuring that the start-ups we support are diverse, inclusive, and equitable.

Approved by : [Executive Director's Name]

Next Review Date : [Insert Date]

This policy should be communicated to all members of the organization, start-ups, and partners, ensuring that everyone is aware of their role in promoting and upholding GEDSI principles within [Non-Profit Organization Name].

Resources & References

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4. https://kiwainitiative.org/doclink/gedsi-en-1 yJ0eXAiOiJKV1QiLCJhbGciOi JIUzI1NiJ9.eyJzd WIiOiJnZWRzaS1lbi0xIiwiaWF0IjoxNzA5Nzc2NDkxLCJleHAiOjE 3MDk4NjI4OTF9.pfsoioS M88aWUM5zBLnzEdSoJUU5HsLjc8hFGNH5Jms

5. https://humanrights.ph/wp-content/uploads/2024/01/I-ACT-GEDSI-checklist-Jan-2024.pdf
6. https://www.undp.org/sites/g/files/zskgke326/files/2024-05/2024_UNDPPH_ACE_GEDSI%20R eport.pdf

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Master Class 5 :

Circular Business Model Canvas

Master Class 5
Circular Business Model Canvas

What will you be informed about ?

- Introduction Circular Business Model Canvas
- Nine components Circular Business Model Canvas
- Take away

Facilitator Guidelines:

- **Objective of this session:** The main objective of this session is to redesign an everyday product by reflecting on the functional and emotional needs that it serves and using the circular strategy cards to brainstorm new solutions that are better for people and the planet.
- **Time: Full day**
- **Tools :**
  - Stop watch
  - Board markers
  - Flip charts
  - Duster
  - Meta cards
  - Pens
  - PPT
  - Worksheet on Mapping emotional and functional needs
  - Worksheet on Ideate
  - Worksheet on design solutions
  - Worksheet on develop your rationale

Instructions :

- To go through this section and create your own PPT.
- There are facilitator guideline pop up boxes with instructions.
- You are more than welcome to change the instructions and use it to cater to your audience.
- The instructions are just a simple step by step process.
- May sure to have all the logistics prepared.

Introduction to Circular Business Model Canvas (CBMC) :

A Circular Business Model Canvas adapts the traditional business model canvas to embed resource loops, longevity, regeneration, and system value. It helps organizations design models that decouple growth from resource consumption. It is a visual framework for describing the different elements of how a business works. It illustrates what the business does, for and with whom, the resources it needs to do that and how money flows in and out of the business. It can be used to design new models or to analyze current models. The canvas is made up of nine different elements. This introduction will explain what each of them might describe in an arts and cultural context. One advantage to the Circular Business Model Canvas is that it is not a linear description. This allows for the effects of alterations in one area to be clear, making it easier to play around with changes to current or potential models.

Nine components of CBMC :

1. Customer Segments :

Defines the different groups of people or organizations an enterprise aims to reach and serve. Customers comprise the heart of any business model. Without (profitable) customers, no company can survive for long. In order to better satisfy customers, a company may group them into distinct segments with common needs, common behaviors, or other attributes. A business model may define one or several large or small Customer Segments. An organization must make a conscious decision about which segments to serve and which segments to ignore. Once this decision is made, a business model can be carefully designed around a strong understanding of specific customer needs. Customer groups represent separate segments if:

- Their needs require and justify a distinct offer
- They are reached through different Distribution Channels
- They require different types of relationships
- They have substantially different profitabilities
- They are willing to pay for different aspects of the offer

2. Value Propositions :

Describes the bundle of products and services that create value for a specific Customer Segment. The Value Proposition is the reason why customers turn to one company over another. It solves a customer problem or satisfies a customer need. Each Value Proposition consists of a selected bundle of products and/or services that caters to the requirements of a specific Customer Segment. In this sense, the Value Proposition is an aggregation, or bundle, of benefits that a company offers customers. Some Value Propositions may be innovative and represent a new or disruptive offer. Others may be similar to existing market offers, but with added features and attributes.

3. Channels :

Describes how a company communicates with and reaches its Customer Segments to deliver a Value Proposition. Communication, distribution, and sales Channels

comprise a company's interface with customers. Channels are customer touch points that play an important role in the customer experience. Channels serve several functions, including:

- Raising awareness among customers about a company's
- products and services
- Helping customers evaluate a company's Value Proposition
- Allowing customers to purchase specific products and services
- Delivering a Value Proposition to customers
- Providing post-purchase customer support

4. Customer Relationships :

Describes the types of relationships a company establishes with specific Customer Segments. A company should clarify the type of relationship it wants to establish with each Customer Segment. Relationships can range from personal to automated.

Customer relationships may be driven by the following motivations:

- Customer acquisition
- Customer retention Boosting sales (upselling)

5. Key Resources :

Describes the most important assets required to make a business model work. Every business model requires KeyResources .These resources allow Questions to be Answered: What Key Resources Describes the most important assets required to make a business model work. These resources allow an enterprise to create and offer a Value Proposition, reach markets, maintain relationships with Customer Segments, and earn revenues. Different Key Resources are needed depending on the type of business model. A microchip manufacturer requires capital-intensive production facilities, whereas a microchip designer focuses more on human resources. Key resources can be physical, financial, intellectual, or human. Key resources can be owned or leased by the company or acquired from key partners.

6. Key Activities :

Describes the most important things a company must do to make its business model work. Every business model calls for a number of Key Activities. These are the most important actions a company must take to operate successfully. Like Key Resources, they are required to create and offer a Value Proposition, reach markets, maintain Customer Relationships, and earn revenues. And like Key Resources, Key Activities differ depending on business model type. For software maker Microsoft, Key Activities include software development. For PC manufacturer Dell, Key Activities include supply chain management. For consultancy McKinsey, Key Activities include problem solving.

7. Key Partnerships :

Describes the network of suppliers and partners that make the business model work. Companies forge partnerships for many reasons, and partnerships are becoming a cornerstone of many business models. Companies create alliances to optimize their business models, reduce risk, or acquire resources.We can distinguish between four different types of partnerships:

- Strategic alliances between non-competitors
- Competition: strategic partnerships between competitors
- Joint ventures to develop new businesses

8. Cost Structure :

Describes all costs incurred to operate a business model. This building block describes the most important costs incurred while operating under a particular business model. Creating and delivering value, maintaining Customer Relationships, and generating revenue all incur costs. Such costs can be calculated relatively easily after defining Key Resources, Key Activities, and Key Partnerships. Some business models, though, are more cost-driven than others. So-called "no frills" airlines, for instance, have built business models entirely around low Cost Structures.

9. Revenue Streams:

Represents the cash a company generates from each Customer Segment (costs must be subtracted from revenues to create earnings). If customers comprise the heart of a business model, Revenue Streams are its arteries. A company must ask itself, For what value is each Customer Segment truly willing to pay? Successfully answering that question allows the firm to generate one or more Revenue Streams from each Customer Segment. Each Revenue Stream may have different pricing mechanisms, such as fixed list prices, bargaining, auctioning etc. A business model can involve two different types of Revenue Streams:

- Transaction revenues resulting from one-time customer payments
- Recurring revenues resulting from ongoing payments to either deliver a Value Proposition to customers or provide post purchase customer support

FACILITATOR GUIDELINES : (Time 60 minutes)

1. **Customer segment** - Defines the different groups of people or organizations an enterprise aims to reach and serve. Identify if it is a B2C or B2B model (see below).

2. **Value proposition** - Describes the bundle of products and services that create value for a specific customer segment. What is your business solution to address customers' pain points? Characteristics of your products and services: newness, performance, customisation, "getting the job done", design, brand/status, price, cost reduction, risk reduction, accessibility, convenience / usability.

FACILITATOR GUIDELINES : **(Time 60 minutes)**

3. **Sales Channels** - Channels are the best way for a business to reach out to their Customer Segment. Includes how a business interacts/ communicates with its customer segments to deliver its products and services.

4. **Customer relationships** - Describes the types of relationships a company establishes with specific customer segments. Customer relationships may be driven by customer acquisition, customer retention, and boosting sales. Example - personal assistance, communities, co-creation, automated services, self service.

5. **Revenue streams** – Represents the money a business makes/generates from each customer segment (costs must be subtracted from revenues to create earnings). Example - asset sale, usage, subscription fee, lending/renting/leasing, licensing etc.

6. **Key activities** – Describes the most important things a company must do to make its business model work. Most important actions an enterprise must take to operate successfully. Example - production (design, make and deliver), problem solving (new solutions for customer problems), platforms.

7. **Key resources** – Describes the most important assets required to make a business model work. Types of resources - physical, intellectual (brand, patents, copyrights, data), human, financial.

8. **Key partnerships** – Describes the network of suppliers and partners that make the business model work. Enterprises create alliances to optimize their business models, reduce risk, or acquire resources. Types of partnerships - strategic partnerships with non-competitors, coopetition, joint ventures, buyer-supplier.

9. **Cost structure** - All costs incurred to operate a business. Two types - cost driven (leanest cost structure, low price, maximum automation, extensive outsourcing) and value driven (focused on value creation, premium value proposition).

- **How a company creates benefits :**
    - Product/service
    - Customers
    - Make money
    - Social & Environment Impacts

Simple tips

- Complete the canvas in one sitting
- Don't debate answers much. Put something down or leave it blank
- Think in the present, don't project too far ahead
- Multiple ways to use the canvas
- Use a customer-centric approach when completing it
- Use color coded post-it notes - Green, Yellow, Pink - should be revisited

Take Away :

Facilitator Guidelines : (Time 15 Minutes)

- Ask the participants to join you outside
- Form a circle
- Then ask the participants to share what they liked, did not like and what needs to be
- Brief them about the next masterclass (date, time and locations)

The Business Model Canvas

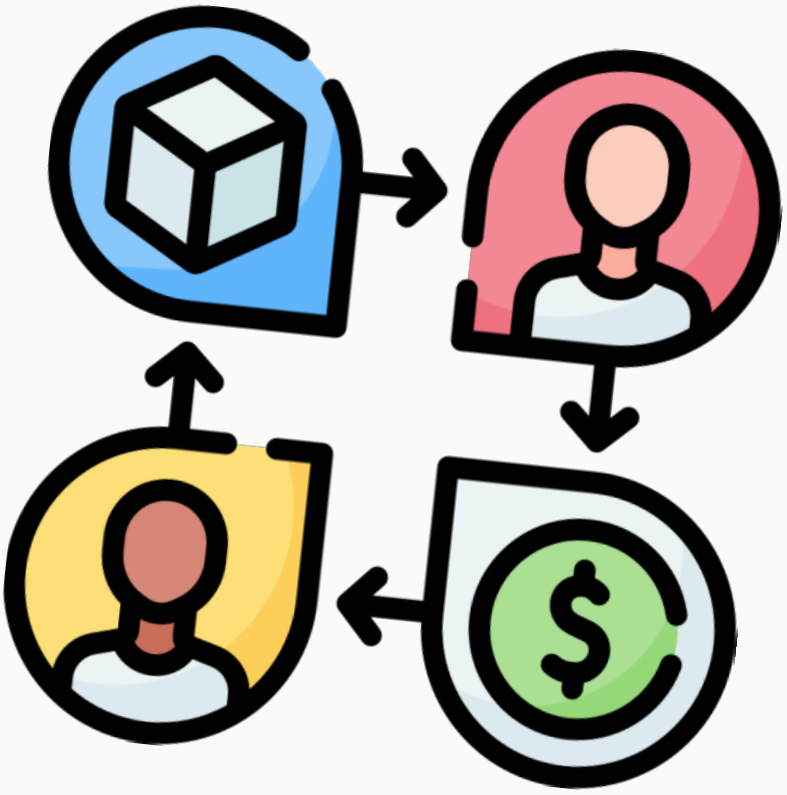
Designed for:	Designed By:	Date:	Version:

Key Partnerships	Key Activities	Value Propositions	Customer Relationships	Customer Segments
	Kev Resources		**Channels**	

Cost Structure	Revenue Streams

Master Class 6 :

Circular Business Plan Development



Master Class 6

Circular Business Plan Development

What will you be informed about?

- Business description
- Problem statement
- Circular strategy
- Circular Value/Supply Network
- Investment landscape
- Team
- Take away

Facilitator Guidelines :

- **Objective of this session:** The main objective of this session is to develop a business plan of each of the participants. They
- **Time: Full day**
- **Tools :**
  - Stop watch
  - Board markers
  - Flip charts
  - Duster
  - Meta cards
  - Pens
  - PPT
  - Worksheet on Mapping emotional and functional needs
  - Worksheet on Ideate
  - Worksheet on design solutions
  - Worksheet on develop your rationale

Instructions :

- To go through this section and create your own PPT.
- There are facilitator guideline pop up boxes with instructions
- You are more then welcome to change the instructions and use it to cater to youraudience
- The instructions are just simple step by step process
- May sure to have all the logistics prepared

Business Description :

Company : .....

Industry : .....

Status : .....

Established in : ..... **(stage)**

Team : .....

Location : .....

Add your enterprise logo here

Background (the story of your product and business) Iterations, failures, learnings that got you to the

Circular Value Proposition (reflect your unique selling point)

- Social
- Environmental
- Economic

Vision :

Mission :

Values :

Core products :

Scale of operation :

Annual turnover : (gross)

Customers : (who are they)

Circular Solution :

Problem Statement (Industry overview and the challenges you are facing in your business)

Circular Solution (Describe the solution, where the pre-seed fund is going to be spent):

- Why is it required?
- How is your solution different from those existing in the market?
- Why should customers (B2B, B2G, B2C) buy it? - relate to value proposition

Competitors' overview

Circular Strategy :

Business model canvas aligned to the strategy:

Marketing plan :

In alignment with the business plan, ... is anticipating to focus on the following marketing activities for the next 3-4 years. The activities below present a working plan for marketing, and will be updated in ccordance with the needs and requirements of the enterprise.

Year 1	Year 2	Year 3

Stakeholder Mapping :

Who are the key stakeholders in the field of circularity in your context?

Stakeholder group	Individual, Organization	Role						
		Decision makers	Implementers	Coordinators	Knowledge provider	Financer	Lobbyist	Gatekeeper
SG1: Government Representatives and Authorities								
SG2: Civil Society								
SG3: Private Sector								
SG4: Research Community								
SG5: NGOs								
Others (circularity/sustainability (potential partners)								

Circular Value or Supply Network :

A Circular Value or Supply Network is an interconnected system of actors including but not limited to suppliers, manufacturers, service providers, users, collectors, recyclers, refurbishers, policymakers collaboratively working to retain, recover, and regenerate value from products, materials, and resources.

Unlike a linear supply chain (take make waste), a Circular Value or Supply Network is designed with focus to:

- Extend product life
- Recover materials
- Reduce waste leakage
- Regenerate natural systems

Key Components of a Circular Value Supply Network :

- Production SystemDesign for durability & disassembly, Modular architecture, Non-toxic materials
- User / Consumption System: Access over ownership, Repair culture, Return participation
- Reverse Flow System: Collection infrastructure, Logistics & sorting, Redistribution channels
- Recovery System: Repair centers, Refurbishment hubs, Remanufacturing facilities, Recycling units

- Information System: Data sharing, Traceability platforms, Impact measurement
- EPR (Extended Producer Responsibility): Waste regulations, Incentive structures, Standards & certification

Designing the Network: Step-by-Step :

Step 1 : Map Current Linear Flows

Identify :

- Material inputs
- Value creation stages
- Waste points
- Leakage zones

Step 2 : Identify Loop Opportunities

Ask :

- Can the product be reused?
- Can components be recovered?
- Can waste become input?

Step 3 : Identify Missing Actors

Circularity often requires new roles :

- Repair partners
- Take-back aggregators
- Recycling specialists
- Platform intermediaries
-

Step 4 : Design Reverse Logistics

Plan :

- Who collects?
- Who pays?
- Where does it go?
- What condition is required?

Step 5 : Align Incentives

Mechanisms :

- Deposits
- Discounts
- Service contracts
- Revenue-sharing models

Step 6 : Pilot & Iterate

Test :

- Small geography
- Single product line
- Limited stakeholder group

Circular Business Model Canvas :

Overall BMC for the enterprise - based on all customer segments

Investment Landscape :

The financial projection provides an overview of the business facilitated by the investment to be injected.

Standard of Limiting Conditions

Capital Expenditure (CapEX) Requirement

Financial projection

Assumptions
Following assumptions were taken into consideration, while conducting the financial projection of the proposed project:

- Revenue
- Cost of Goods Sold (COGS)
- Operational expenses
- Depreciation rate for the solar energy asset is calculated by
- Taxation

Evaluation parameters

The main evaluation criteria for the projection has been the following :

- Return on Investment (ROI)
- Net profit margin

Team :

Team Member Photo	Team Member Description (Name, Designation, Responsibilities)

Take Away :

Facilitator Guidelines : (Time 15 Minutes)

- Ask the participants to join you outside
- Form a circle
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- Brief them about the next masterclass (date, time and locations)

Master Class 7 :

Reflection & Planning (Circularity Roadmap)

Master Class 7

Reflection & Planning (Circularity Roadmap)

What will you be informed about?

- Product journey mapping
- Preparing for pitch
- Take away

Facilitator Guidelines :

- **Objective of this session:** The main objective of this session is to learn about their products components and to map their product journey.
- **Time: Full day :**
- **Tools :**
  - Stop watch
  - Board markers
  - Flip charts
  - Duster
  - Meta cards
  - Pens
  - PPT
  - Product journey mapping worksheet

Instructions :

- To go through this section and create your own PPT.
- There are facilitator guideline pop up boxes with instructions
- You are more then welcome to change the instructions and use it to cater to youraudience
- The instructions are just simple step by step process
- May sure to have all the logistics prepared

Product journey mapping :

Circularity means rethinking a linear use cycle of your product or service with a beginning, middle, and end. If a product or service is truly circular, it will never actually have an end to its life, but continuously take a new form. Mapping this journey will ensure that your product is staying in a useful state for as long as possible and adds value at every stage.

Facilitator Guidelines : (Time 15 Minutes)

- Ask the participants to write down their products or one component of the product. For example: carpet tile
- Then ask the participants to fill the “explore” section in their tool kit. Ask them to write the commercial application of their product. (Give 5 minutes)
- Then ask the participants to interview a user and ask them to write down in the tool kit regarding what the functional needs and requirements of their product are. The participants are encouraged to interview a user and need to fill the “Interview a user” in their tool kit. (Give 5 minutes)
- Then ask the participants to write down the chemical components of their product. Meaning what are the chemicals/resources used to make the product. For example: what are the chemical components required to develop a carpet tile?
- Ask the participants to fill the “Which chemicals should be designed out?” in their tool kit.

Explore :

Interview a user :

Which chemicals should be designed out?

(Highlight the chemicals of concern that should be designed out in the next phase.)

Yarn Face - Polymer
Nylon 6
Toxic : Yes/No

FACILITATOR GUIDELINES : (Time 60 minutes)

- Start by asking the participants "How long is the intended use phase initially for the product or service? And could this be extended?"
- Then ask the participants "What's next?" What happens after it's first use cycle?
- Keep asking the participants:
    - Does it return to the biosphere (such as packaging that biodegrades)
    - Does it get reused or repurposed by a new user? (such as a cell phone that someone else uses after you in a new market or a wine bottle becoming a decoration item)
    - Does it get repaired or refurbished? (such a pair of boots that gets repaired)
    - Does it get remanufactured? (such as a phone case that gets remade instead of throwing away the whole smartphone)
    - Does it get recycled? (such as metal that gets melted down and re-use)
    - Do this for multiple cycles. What are the journeys for the different parts of your product or service after use? Likely your product will break down into its core elements/components the further you go into cycles of use.
    - Before finalising, consider the practical challenges in disposal, collection and recovery stages. (For example, a particular product or product component might be made of recyclable material, but not be recycled in reality.)
    - For components that do not have a circular pathway, how could they be re-designed? You might consider revisiting the Materials Breakdown activity if you need help with this.

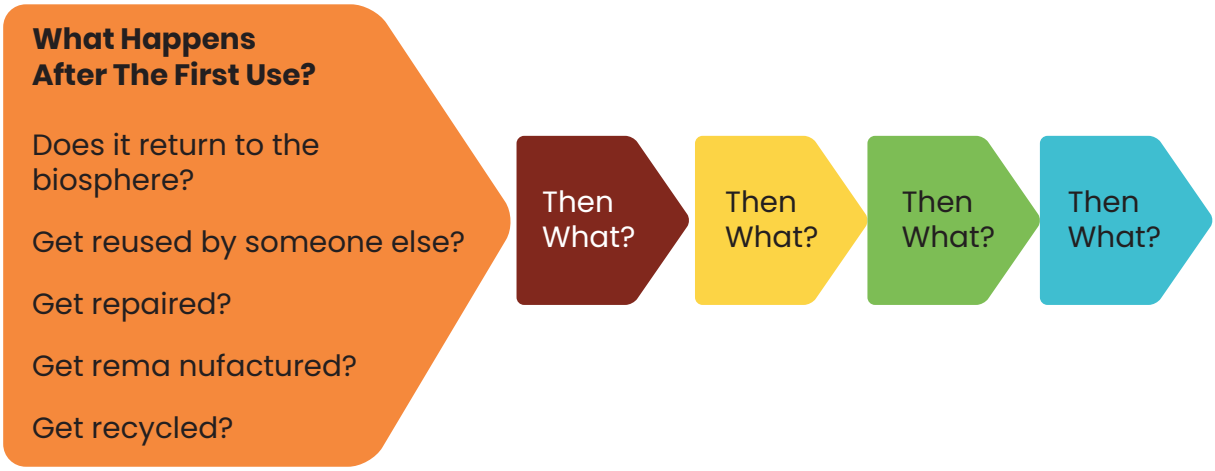
Product Journey Mapping Worksheet :

My product is .....

Initial use phase (How long will it be in use for in the first use cycle?)

.....

.....



FACILITATOR GUIDELINES : (Time 60 minutes)

- Start by asking the participants with following questions
    - What did you like the most about this program? List down atleast 3 things.
    - What did you learn from this program? List down atleast 3 things.
    - What did you hope for but didn't manage to achieve during this time? Listdown atleast 3 things.
    - What specific activities do you need to keep doing based on the things you have learned and liked? List down atleast 3 things.
    - What are possible things you CAN START to do to work towards having thehings you longed for? List down atleast 3 things.
- Fill the action planning worksheet below accordingly,
    - Milestones: You have 15 minutes to discuss 2 milestones for your company. Decide on the prioritisation for your milestones. Each milestone on a separate table
    - Criteria of Success: What would you need to accomplish to feel successful in each milestone? Pick what you have control over bjectively & quantitatively measurable Be realistic - what is possible in 6 months
    - Key activities: Break down each milestone into about 5 activities Detailed enough to guide your actions Who owns the task? Doesn't have to do all of the work - just needs to be responsible for making sure that it gets done in the best way possible
    - Key Performance Indicator: For each milestone pick one "Key Performance Indicator" to track This KPI should determine your performance i.e. is the company on track to succeed in that milestone?

Action Planning :

Example

Roadmap			
Milestone 1 Hiring process for new sales associates	**Key Activities**	**Who**	**By when**
	• Create a draft of the job description and hiring ad. Review both with HR. Revise based on their input.		
	• Draft interview process, key questions to ask and the 3-5 "must have" qualifications to hire. Review draft with HR and revise based on input.		
	• Draft outline of new hire orientation process. Review with HR and revise based on input.		
	• Create 1-2 page "new hire checklist" of above steps from job ad posting through hire and first 30 days of orientation		
Key Performance Indicator (KPI): Number of applications received for 'Sales Associate' position.			

Roadmap			
Milestone 1	**Key Activities**	**Who**	**By when**
	•		
	•		
	•		
	•		
Key Performance Indicator (KPI):			

Roadmap			
Milestone 2	**Key Activities**	**Who**	**By when**
	•		
	•		
	•		
	•		
Key Performance Indicator (KPI):			

Take Away :

FACILITATOR GUIDELINES : (Time 15 minutes)

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