

Plastic Upcycling

Replicator Workbook Preview



What's it all about?

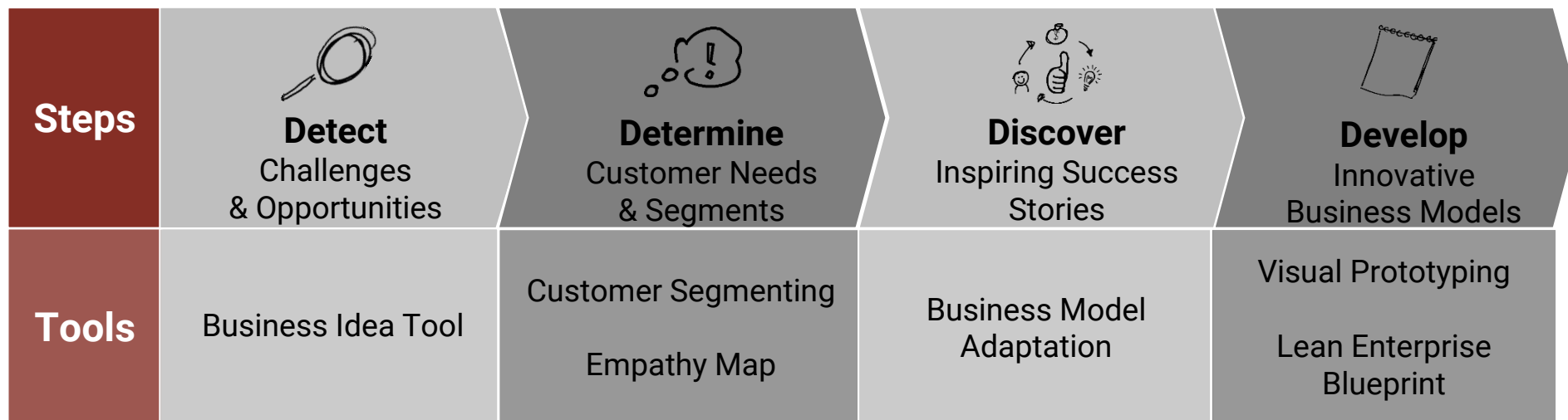


Do you want to learn from proven business models from eco-inclusive enterprises around the world to tackle some of the key challenges your country is facing?

Various entrepreneurs have already developed innovative business models that turned out to be successful and create relevant social, economic and environmental impacts. Replicating solutions that work can offer a fast and effective way to contribute to sustainable development and improve people's livelihoods.

The Replicator Workbook guides the process

We developed our SEED Replicator Workbooks to guide you through the process of transferring a business model to another geographic location. Our workbooks identify best practices and shed light on conditions under which eco-inclusive enterprises in your sector operate. They include exercises that will guide you to explore your market and adapt business models to your context.



How to use the Replicator Workbook?



In this workbook preview, click on **INSIGHTS** or **TOOLS** to discover more
Or simply scroll to the next page



Insights

into success stories & challenges of established eco-inclusive enterprises

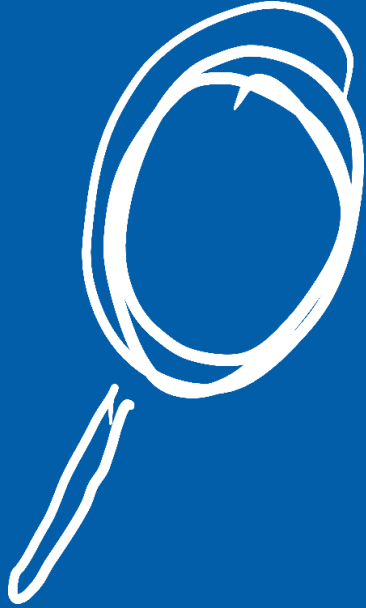
In our workbook, we include various **READINGS** on **proven models of eco-inclusive enterprises** around the globe, complemented by sets of best practices and explanations of conditions under which eco-inclusive enterprises operate. These readings are based on experiences of entrepreneurs active in the field of **plastic upcycling**.



Tools

to guide you step-by-step as you develop your own eco-inclusive enterprise

Each **TOOL** provides step-by-step guidance to arrive at key outcomes. The first page of each tool offers a short overview of **when** to use the tool, **what** you do in the tool, **how** the tool is best used and which **key outcomes** are expected. The workbooks explains in detail what to do and which questions to ask yourself at each step while using worksheets for you to document your outputs.



Detect sustainability challenges in your country and brainstorm solutions to tackle them. Learn about the potential of plastic upcycling and the social, environmental and economic impacts you could achieve.



Converting solid plastic to waste

There are several types of plastic available as raw material for upcycling, distinguished by the polymer they are made off:

- ➔ PET (polyethylene): plastic soft drinks and water bottles, beer bottles, salad dressing containers, food packages.
- ➔ HDPE (high-density polyethylene): milk bottles, detergent bottles, oil bottles, toys, plastic bags.
- ➔ PVC (polyvinyl chloride): i.e. vinyl: food wrap, vegetable oil bottles, blister packing.
- ➔ LDPE (low-density): bread bags, squeezable bottle, fiber, tote bags, bottles, clothing, furniture, carpet, garment bags.
- ➔ PP (polypropylene): margarine and yogurt containers, container caps, wrapping that replaces the cellophane.
- ➔ PS (polystyrene): egg cartons, fast food trays, disposable plastic silverware.
- ➔ Any combination of the above.

These waste materials can be sourced by a variety of suppliers, such as informal waste collectors, private households, restaurants, wholesalers, stores and markets, public institutions, collection points, industries, companies and business.

...into valuable products

Upcycling plastic waste and adding value to it offers the business potential to produce a variety of valuable products within different product categories and with different capital, human resource and research & development requirements, for example:

Handicraft	Secondary Raw Material	Commodities	Awareness Raising Services & Advocacy
<ul style="list-style-type: none"> • Decorative objects e.g. gift boxes, fashion, accessories and jewelry. • Bags and clothing e.g. fleece and jumpers 	<ul style="list-style-type: none"> • Plastic pellets and granules e.g. HDPE, LDPE, PP, PS and PET resin. 	<ul style="list-style-type: none"> • Furniture e.g. chairs and benches • Decks, floors and pergolas • Construction material, e.g. fencing and plastic posts, bricks 	<ul style="list-style-type: none"> • Education campaigns • Beach & city clean – ups • Workshops and tours • Upcycled art exhibitions & events

From Trash to Cash

A grey silhouette of a world map with a network of thin white lines connecting various geographical locations across all continents. A large, light-green diagonal banner is overlaid on the map.

Participate in an upcoming Replicator Workshop
to discover **more about plastic upcycling!**



Discover proven business models and adapt them to your local market. Identify key business model features.

The Originators: All Women Recycling

Successful examples of eco-inclusive enterprises



All Women Recycling (AWR) is an eco-inclusive enterprise that sources discarded plastic bottles from different suppliers. Its female employees turn the 2-litre PET bottles into greeting cards and bespoke gift boxes called kliketyklikboxes™, which serve a worldwide niche market. AWR has developed a new value chain in the waste management sector through these creative crafts. By increasing the income of all those involved along the value chain, AWR increases the purchasing power of people in some of the poorest areas of Cape Town. AWR goes on to develop new and exciting eco-products that to date have saved over 1.2 million PET bottles from going to landfills.

All Women Recycling won a SEED South Africa Award in 2014.

Value Proposition: The greeting cards and trendy gift kliketyklikboxes™ are unique, versatile, useful and eco-friendly products sold all around the world through agents and distributors. The gift boxes have versatile uses as hostess gifts, wedding favour gifts, Christmas décor, wrapping or as customised corporate gifts for clients strengthening their corporate brand.

Key facts

Founded in: 2009

Country of headquarters: South Africa

Operates in: southern suburbs of Cape Town, South Africa

Employee size (2016): 11

Website: www.allwomenrecycling.com

The Originators: Green Africa

Successful examples of eco-inclusive enterprises



Green Africa is an enterprise that recovers and recycles all types of plastic, but especially dirty polythenes (LDPE), to produce plastic poles. In contrast to other plastic upcycling businesses, the enterprise is able to recycle dirty LDPE without the need to wash it beforehand. The enterprise sources its input materials externally from different suppliers. The collection of LDPE addresses the problem of litter that creates a lot of environmental problems. Environmental benefits envisaged through effective removal include fossil oil savings, CO2 emissions reductions and remediation of other adjacent problems like health issues, flooding and pollution..Green Africa won a SEED Award in 2009.

Value Proposition: The produced plastic poles are affordable, long-lasting, eco-friendly and termite- and water-resistant and thus offer a promising alternative to and many advantages over wood poles. The enterprise provides a steady income for marginalised waste collectors, mainly poor youth and women.

Key facts

Founded in: 2009

Country of headquarters: Kenya

Operates in: Nairobi, Kenya

Employee size (2016): 10

Insights

The Originators

Successful examples of eco-inclusive enterprises



Participate in an upcoming Replicator Workshop
to discover **more exemplary eco-inclusive enterprises!**



Determine your target customer and the benefits you want to create for your stakeholders. Map out why your solution is unique and why your customers will love it!

Your Customer Tool



When?

To refine your business idea, you need to identify your potential customers. Therefore, this tool is best applied in the elaboration process of your business idea.

What?

Customers stand in the centre of any business. Even the best idea is worthless if no one buys the product. Most enterprises serve different groups of customers (customer segments) that share certain characteristics. Identifying the different segments in the first step helps you to learn more about each of them. Once you have stepped into your customers' shoes, you can target your product and marketing activities better.

How?

Sit down to think about which customer groups you would like to serve. Once you have identified the customer segments, it's time to go out and speak with your potential customers to gain a better understanding of their needs.

Steps?

Step 1 → Identify Customer Segments

Step 2 → Understand Your Customers



Key outcomes

- Get to know potential customer segments for your product
- Set the basis to build a customer-centric business model

Your Customer Tool



Step 1

Identify Customer Segments

The first step is to divide the large pool of potential customers into customer segments. Customer segments are groups of customers who share certain characteristics or behave in a similar way.

- What will influence the preferences of potential customers towards your product or service?
- Will individual buyers have different expectations and needs from small stores? What about government institutions, NGOs or businesses?
- Will grandchildren have different expectations and needs than their grandparents for example? What about men and women, people with different religions, incomes, education levels or professions?
- Will people in rural areas have different expectations and needs from urban citizens? What about people in City X and City Y?
- Will people who have different knowledge about your product or service have different purchasing and usage patterns? Buy it more or less often, use it more or less often or use it in different ways?

Complete the information you gathered in the *Your Customer Segments* WORKSHEET on the following page. We have left space for up to five customer segments; you should identify at least two.

Step 2

Understand Your Customers

- Out of the customer segments you identified in Step 1, select the ones that appear most important for you, for example because of their size, because they are most likely to buy your product or because they are the easiest ones for you to reach.
- For each of your key customer segments complete the WORKSHEET *Your Empathy Map*.
- The *Empathy Maps* ask you to step into your customers' shoes: What does he/she think, say, see, do, feel, and hear? You can answer the questions in discussions with your team, through internet research, interviewing or observing potential customers etc.
- It's easier to answer the questions if you imagine one representative person of each segment, and add their name and age in the middle of the *Empathy Map*, in addition to the title of the customer segment.

You will find relevant key questions for your EMPATHY MAP on the next page!

Your Customer



→ **What does she/he think?**

- What matters most to her/him? What moves her/him? What are her/his dreams? Which may be her/his worries?

→ **What does she/he say?**

- What does she/he tell others? What is his/her attitude? Does she/he influence others?

→ **What does she/he see?**

- What kind of products/services does your customer see in the market? What attempt is being made to influence her/him?

→ **What does she/he do?**

- What is she/he constantly trying to improve? What activities does she/he cherish doing? How does she/he spend their time?

→ **How does she/he feel?**

- What does she/he experience in relation to your product or service domain? This experience can be negative or positive.

→ **What does she/he hear?**

- What do friends say? What do her/his influencers say? What media channels influence her/his opinions on products and services?

- Keeping the following questions in mind will prove useful during the refinement process of your business idea:
 - How can you fulfill the needs of your customers, and provide them with more benefits?
 - Should the product or service be targeted towards different market segments?
 - Is there anything else you still want to learn about your customers?

Your Customer



WORKSHEET Your Customer Segments

Step 1

Customer Segments					
Title	Households	Local businesses	Gift buyers	Unique product seekers	
Description	Seeking affordable household utensils	Interested in wholesale products	On the lookout for special gifts	Interested in cool interesting new products	

Your Customer



WORKSHEET Empathy Map

Step 2

<p>What does she/he think?</p> <p>How can I support local businesses</p> <p>How can I increase my profits?</p>	<p>What does she/he say?</p> <p>I want to diversify my products</p>	<p>What does she/he see?</p> <p>Increasing demand for ethical products</p>
<p>What does she/he hear?</p> <p>Customers interested in eco-friendly products</p>	<p>Who is he/she?</p> <p>Local business woman</p>	<p>What does she/he do?</p> <p>Runs a small business</p> <p>Cares for the society & environment</p>
<p>What does she/he feel?</p> <p>Open to new markets</p>		
<p>How did you learn about your customer?</p> <p>Asking family members, friends, relatives and interviewing other locals.</p>		

SEED Replicator Tools

A light gray world map with small flag icons placed on various continents. Thin white lines connect these flags, creating a global network pattern. A large, semi-transparent green banner is overlaid diagonally across the center of the map.

Participate in an upcoming Replicator Workshop
to discover **more business planning tools!**



Let's replicate the success of **eco-inclusive enterprises** together!

Learn more about the SEED Replicator and how to apply to an upcoming workshop near you:

- ✉ replicator@seed.uno
- 🌐 seed.uno
- 📘 facebook.com/seed.uno
- 🐦 [@seed_sustdev](https://twitter.com/seed_sustdev)

