



HELLO!

Since we launched prototypes of zero-waste businesses, many of you asked for references so you may be able to do the same. We heard you.

We've created this toolkit not because we are the experts on the matter but because we see ourselves in you back when we first started. We share the same questions, challenges, and aspirations in this journey that began in 2017 and pursued amidst the pandemic.

How might we redesign businesses like sarisari stores, eateries and cafes to reduce waste, especially single-use plastics? How can my business thrive but not cost the Earth?

This toolkit is in no way a prescriptive manual. It is a living document of collective wisdom drawn from the experiences of the Wala Usik community in Negros, Philippines, as we continue to build the business case of waste reduction in the MSME sector. Developed through design thinking, multi-sectoral consultations, pilot testing, community forums and exchanges, this document is a gathering of information and insights that may aid us in our transition to a circular economy.

We won't pretend to have all the solutions and answers, but we've started a joint effort to develop this toolkit's technical implementing framework that may guide MSMEs in designing zero-waste and circular business models. With this toolkit, we hope you will find more ideas to explore, challenges to overcome, case studies to be inspired by, and partners to tap. Let us innovate together by building on ideas that resonate and make sense the most to our community.

We also invite you to contribute and add to this collective wisdom by participating in the Wala Usik Community Facebook page. This current edition is in English but we hope to translate in local languages, so that we may reach more grassroots entrepreneurs who understand the need for business to be ecologically sustainable.

The problems we face today are constantly evolving, and so must our ideas and solutions. Thank you for being a part of this ongoing journey towards building a circular economy.

REGARDS,

Team Wala Usik Economy

Philippine Reef and Rainforest Conservation

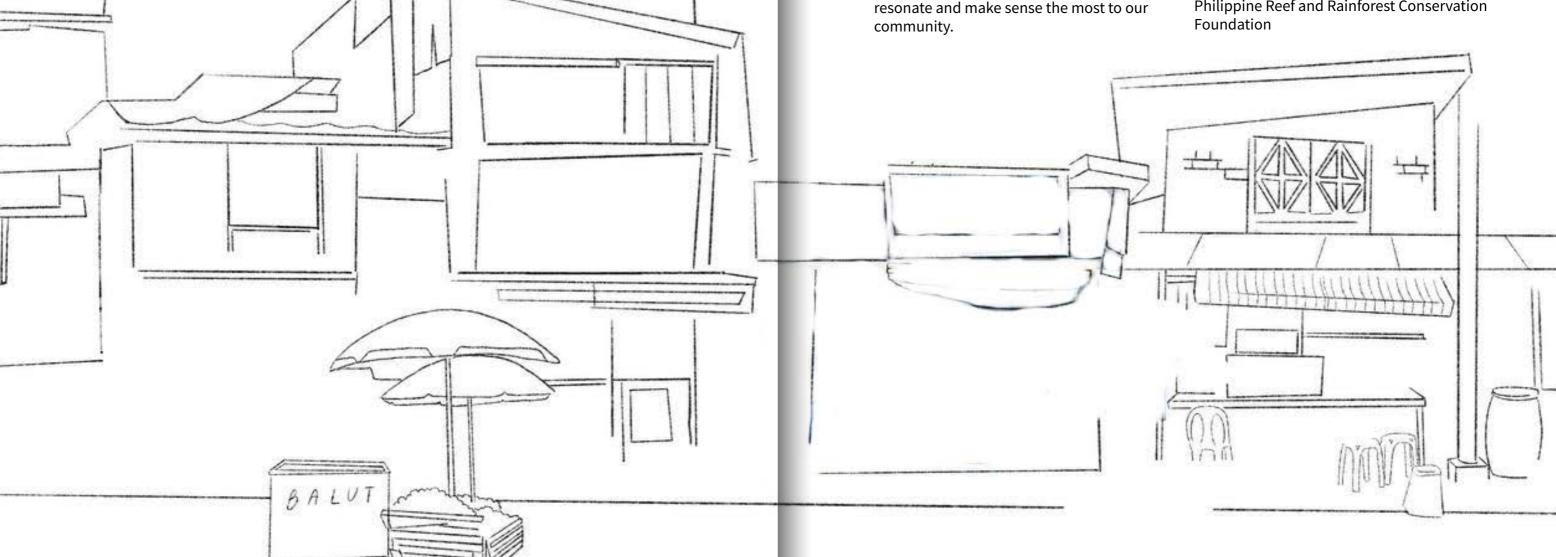






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WHAT'S IN THIS TOOLKIT?

"Ibalik ang Wala Usik" (Bring back wasting nothing): The Business of Reducing Waste is a toolkit for MSMEs implementing zero-waste and circular business ideas. It is a collection of information and insights enabling innovations and building the business case to reduce waste, especially single-use plastics, in the MSME sector.



WHAT IS WALA USIK?

Localizing circular economy by bringing back the culture of wasting nothing

Today, many modern products are designed to live a single-use life. After they serve their purpose, they become useless. They are products of a linear economy, where we take, make, then waste.

We need to realize that this throwaway culture is not part of our local heritage. In Hiligaynon and Bisaya, the words wala usik means wasting nothing. It is something our elders would say when they remind us that everything we eat, drink, and use come from valuable resources and hardwork, and that we should not waste anything, not even a grain of rice.

> This is the first insight we have to share: We should translate the principles of circular economy in

our local language and context. Filipinos can relate to the wala usik philosophy, and they will not find it foreign, alienating, or overwhelming to practice. A wala usik economy is circular and sustainable; it mitigates the modern problems of climate change and plastic pollution, but it is also a call for behavior change rooted to our indigenous wisdom that the Earth is not finite.

In a wala usik economy, products are produced and consumed more mindfully. Resources are managed efficiently and with sustainability in mind. The modern 3Rs (reduce, reuse, recycle) have economic benefits to the local value chain.

As a localized expression of a circular economy, wala usik also aligns with the three core principles:

- Design out waste and pollution
- Keep products and materials in use
- Regenerate natural systems

Our goal is to practice these principles, and to be inspired by nature's inherent circular design.

Think of a coconut tree.

A coconut tree best illustrates the concept of a circular economy. Other than consuming the coconut kernel and water, every part of the coconut tree serves a purpose and doesn't end up as waste. After these items have served their purpose, they will biodegrade and complete a circular system.

At this point, any advocate for the environment would be nodding in agreement towards the obvious way to go. Yet on the business side of things, we must probe, does it make business sense to reduce waste? What business merit is there to building a circular economy?

Now, each of us might have a different answer to that question just as each of you are reading this toolkit with a different motivation for your business. But ultimately, one common denominator we have is that designing out waste in our systems will always be a win for everyone — and every living thing — involved.



WHERE DO WE BEGIN?

Design thinking as an approach to innovation

Empathy is the first step in our journey leading to this toolkit.

We have adopted it from design thinking, an international collection of methods, which we have simplified into a three-part process in our language, making it more inclusive for communities to participate in. Our design thinking approach allowed us to co-design, innovate, and iterate business models with the very sectors we want to build a circular economy with.

We are sharing this approach with you because it is how we learned what we are presenting in this toolkit. You may use it as you innovate further with the knowledge you gain from this document.



1. INTIENDEHON 'TA (Let's understand)

To understand production and consumption patterns causing waste problems, we have to begin with empathizing with business owners and their consumers and identifying their needs and limitations. With the knowledge we gather from empathy, we could better define the problems we want to find solutions for. We do our research - auditing waste generated in our business operations and in the value chain, analyzing statistics and trends, surveys, community consultations, focus group discussions, but most of all empathy exercises such as role-playing for specific stakeholder personas. It is very important to ensure representation of diverse sectors - e.g. businesses, consumers, producers, government agencies, waste workers - right from the beginning of the design thinking process.



2. IDEYAHAN 'TA (Let's think about it)

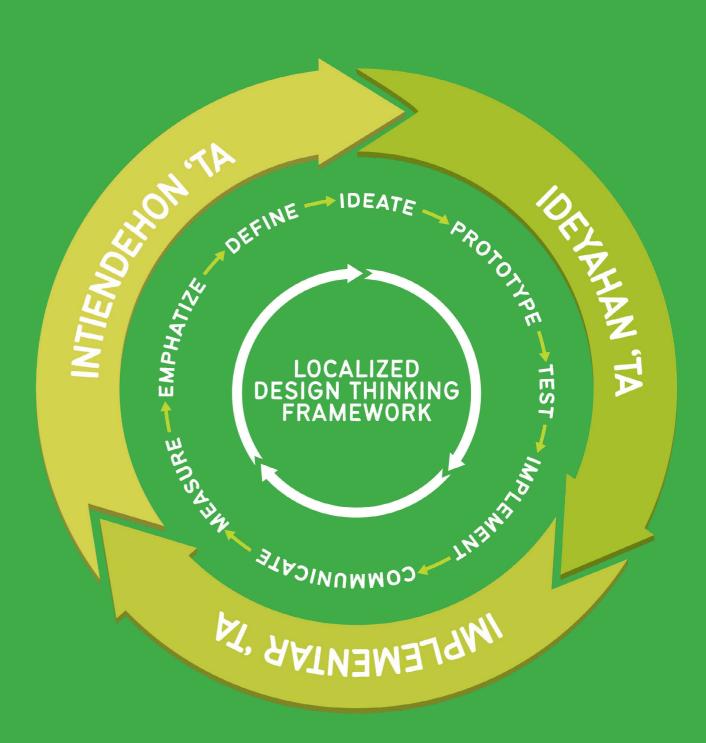
This part harnesses the collective creative energy of the community. It allows us to look at problems from different perspectives - always striving to be inclusive and participatory - while

ideating for innovative solutions. It involves brainstorming and ideation exercises, prototyping and modeling, as well as testing and getting feedback. In the case of the first batch of Wala Usik sari-sari stores, they evolved from miniature model prototypes designed in an intensive workshop with store owners, entrepreneurs, government agencies, industrial designers, scientists, distributors, consumers, and waste workers as participants. After every test, prototypes are iterated to adapt with any finding or recommendation.



3. IMPLEMENTAR 'TA (Let's do it)

Before we deploy an innovation for a pilot test in the community, we collaborate with the business owners to lay out plans for (a) building and financing the innovations, (b) communicating the innovations to stakeholders of the business, and (c) measuring or monitoring the results of the pilot test. This phase required capacitybuilding, business development and technical support with capital, grants and subsidies. And as the design thinking process is iterative, any results will circle back to empathy, allowing us to discover how else we can address the problems we have identified.



WHAT DOES IT TAKE TO BE A WALA USIK BUSINESS? TELEVISION OF THE TAKE TO BE A WALA USIK BUSINESS?

Transform the physical space, layout and form of the business to aid



WHAT DOES IT TAKE TO BE A WALA USIK BUSINESS?

A technical implementing framework to reduce waste in the MSME sector

From our first-hand experience and consultations with stakeholders, we have identified the following key areas and top enabling actions, to implement zero-waste and circular business ideas in sari-sari stores, carinderias (eateries), cafes and restaurants:

Cir		Design out waste and pollution, keep materials in use and regenerate natural systems.
	CIRCULARITY GOALS	Identify and measure waste materials generated by the business, then plan how to reduce, reuse, recycle, or divert waste volume.
		Actively learn from case studies and models for circular business.
		Increase customer loyalty.
		Reduce costs.
(Q)	BUSINESS GOALS	Improve affordability and accessibility of circular products and services.
		Empower with the 'triple bottomline', that aside from profit margins, there are also social and ecological benefits that businesses and their consumers can put significant value on.
		Prepare the community by raising awareness on circular businesses, with strategic social marketing comparable to conventional above-the-line and below-the-line advertising.
3	COMMUNITY	Identify the target market that aligns with the goals of the business, and that has the purchasing power to support circular products and services.
3/10	RECEPTION	Develop physical presence as a center for information, education and communication (IEC) on better waste management, circularity and sustainability.
		Survey consumer convenience and acceptability or responsiveness to circular products and services.
Supply Chain	Map out the supply chain - from raw materials, manufacturing, warehousing, distribution, logistics and sales - and identify gaps and opportunities in building circular businesses.	
	READINESS	Cathor and chara cumplior information for products and corvices

aligned with circular businesses.

Gather and share supplier information for products and services

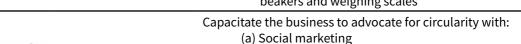
the promotion, exhibition and adoption of circular innovations. Optimize the physical presence of the business in terms of location, architecture, capacity to store or display stock-keeping units, and its regulation of temperature, humidity, pests, dust, and exposure to sunlight - as these can be critical to circular products or services. **PHYSICAL** Procure systems, technology and/or design that will enable businesses **REQUIREMENTS** and consumers to reduce, reuse, recycle or divert waste. These may be



- (b) Renewable materials
- (c) Alternative packaging

(b) Public speaking

- (d) Reusable containers for consumers
- (e) Associated utensils and tools, e.g. cups, ladles, measuring beakers and weighing scales



services.



SKILLSET REQUIREMENTS

(c) Technical knowledge to support the goals of waste reduction

Strengthen business management skills e.g. procurement, bookkeeping, profit and loss analysis, inventory monitoring. Data from business operations contribute to the evolution of circular products and services.



REGULATORY COMPLIANCE

Set quality (and dosage) control standards for circular products and

Register the business with local government and national government

Comply with food and materials safety regulations from DTI and/ or FDA, and protect consumer welfare by eliminating risks of contamination. Negotiate but aim to self-regulate.



FINANCING NEEDS

Identify funding sources, e.g. grants and subsidies, to cover or mitigate upfront costs of transitioning to circular products and services.

Access capital for inventory and operations.

As you explore offering circular products and services with the menu of innovations presented in this toolkit, find the considerations and recommendations categorized under the same key areas that we have pointed out in the technical implementing framework above.

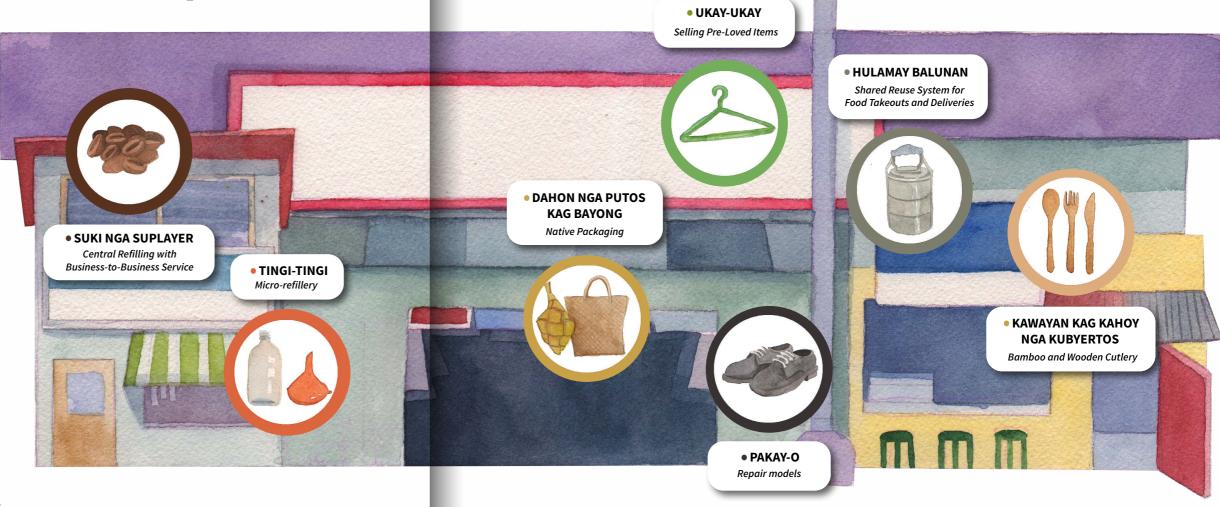
WHAT CAN WE DO TO REDUCE WASTE?

Menu of Innovations: Technologies, schemes and mechanisms to build on with business development

In this menu, we curated 12 circular innovations for you to explore and build upon as you take on the "business of reducing waste". These innovations are not new per se, but they are spotlighted here in their relative disruptiveness and freshness to the status quo of Philippine MSME operations that are most likely generating waste especially from singleuse plastics.

We will illustrate what we know about the products, services and systems used for circular business ideas, based on our experiences and interactions with subject matter experts. We assigned them local phrases that best invoke our own cultural context.

We hope that this menu, with its framework for considerations and recommendations in implementation, will help you weigh the feasibility of each innovation as you sift through case studies, risks and rewards, and how the innovations can support your circularity and business goals. Ultimately, we want you to find whatever suits your business best, and take it into further iterations, testing and learning.







Tingi-tingi MICRO-REFILLERY

HOW DOES IT WORK?

A micro-refillery makes use of dispensing mechanisms and reusable containers to hold and refill food condiments, cosmetic and home care products ranging from dishwashing liquids, shampoo, conditioners, down to necessities such as cooking oil, sugar, salt and vinegar. Our society heavily relies on sachets (also known as small-format or multi-layer flexibles) due to its accessibility and effectiveness in product quality and dosage control. As a result the number of plastics that have accumulated for decades is unimaginable. There is overwhelming interest in the micro-refillery model to remedy the problem of sachets, and it has become the central concept for a zero-waste business. However it requires more innovation and collaboration to address challenges in adopting a micro-refillery at the sarisari store environment.

TECHNICAL CONSIDERATIONS AND RECOMMENDATIONS

CIRCULARITY GOALS

With this model. customers can buy their essentials in small quantities - just like in sachets, but with less

waste.

An estimated total of 2.3 million tons of waste (without recycling) from 1.3 million sari-sari stores can be significantly reduced if this model is scaled successfully.





This practice hones the communities' consciousness on how they consume products.

Waste reduction is demonstrated as the top priority in the waste hierarchy.

Circularity becomes more inclusive with this model as it could service low-income households.



BUSINESS GOALS

This will target the mass market (D&E) living in populated housing areas, providing foot traffic, in search for their daily needs in small and affordable formats.

It is best that this becomes an additional / alternative product line to an existing sari-sari store, rather than as a standalone business due to the risks of losing the very customers it targets due to the added steps (and possibly, costs) in accessing products.

The novelty of this business model will attract new interest and support from environmentally conscious customers who are more mindful and potentially loyal.

It can enable regular / repeat customers.



COMMUNITY RECEPTION

The community needs to be prepared and their buy-in strengthened and aligned with the mission to reduce waste at source, through their purchasing choices.

Customers new to this model will need to adjust to added steps and/or costs, e.g.:

- · cleaning/bringing their own empty containers for refills,
- waiting time/weighing and measuring during refilling, and
- potentially higher-priced items because of higher landing costs to the storeowners

Social marketing is a crucial component that needs to be funded / rolled out with the support of other stakeholders in the community (local government, civil society organizations, academe, media) so that the necessity for this model is realized.

Below-the-line and targeted advertising at par with the conventional advertising for sachets will be important for conversions in the community. This can be in the form of promos, freebies (e.g.

acquiring reusable containers without or with less cost to the customer) or local ambassadors in house-to-house campaigns.



SUPPLY CHAIN READINESS

The conventional sari-sari stores offering sachets rely on well-established logistics and distribution all the way from the producers, i.e. fast-moving consumer goods (FMGC) companies. The micro-refillery will require establishing an alternative supply chain, and this can be a struggle to a new or transitioning business.

Building a supplier or distributor database is still a challenge because of the scarcity of circular / zero-waste options nationwide. Some suppliers are not able to respond quickly to orders compared to the vast FMCG network.

Shipment costs can be higher if zero-waste options are not available locally. Shelf life of these products will also affect how often they are transported.

It is recommended that a business owner begins with investing time and energy to scope for local sources or suppliers. Local government, producer associations, and agencies like DTI, may support this aspect.

Bulk sourcing still has a single-use plastic footprint, so to minimize this, negotiation with suppliers for customized packing / delivery will be necessary.



PHYSICAL REQUIREMENTS

Display and storage for micro-refillery products may require renovation of physical space or architecture. White, light-colored or transparent shelves and cabinets are the most common features.

Technologies to dispense - in the form of mechanical or electricity-powered dispensers and vending machines - are crucial. Ranging from 5 to 20 liters, these can be jars with faucets, customized cylinders with nozzles, or bulk containers made from glass, hard plastic or stainless steel. There is an opportunity to innovate in terms of the dispensing mechanisms.

Dosage control - meaning the ability to regulate the volume of product being dispensed will require other tools for measuring such as:

Measuring cup or beakers

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- Spatuals or ladles
- Funnels
- Weighing scales

It is recommended to set up a space to wash or clean with running water. Sanitizing equipment will be helpful.

Resilience to the elements is important to ensure quality and protect micro-refillery products from being contaminated. Strongly consider how to regulate:

- Exposure to sunlight
- Humidity and moisture
- Temperature
- Dirt and dust
- Pests (rats, cockroaches, house flies, ants)
- Human contact

Marketing and informational materials and signages will have to be factored in the design of the physical space. Murals are shown to be effective in raising awareness for the business.



SKILLSET REQUIREMENTS

Before attempting to begin a micro-refillery, business owners need to internalize standards for hygiene, sanitation, and food and materials safety. They will become top concerns for operating a micro-refillery.

Daily tasks will involve cleaning of containers, nozzles and other components of the microrefillery. Business owners will need to learn costefficient sanitation methods or techniques.

Business owners will need to train themselves with their own process flow to operate a microrefillery. Compared to a conventional sari-sari store using sachets, a micro-refillery will require more actions from the store owner and the customers.

Business skills need to be updated or strengthened, in the areas of:

- Inventory management
- "Sales talk" or educating / onboarding customers to patronize the micro-refillery, so this involves messaging for awareness on plastic pollution, climate change and other environmental issues
- Monitoring profit and loss as the business will not depend on number of sachets/ packaged products but through the volumes sold



REGULATORY COMPLIANCE

The regulatory environment for refilling is still evolving with the times, especially that the pandemic has resurfaced concerns on contagi

Participate in forums or consultations with other zero-waste or circular businesses o advocates (e.g. the network that launched the Mainstream Refilling Petition) to get updated with the Food and Drugs Administration (FDA licensing and procedures. However, remembe not to be overwhelmed or feel alone as there v be an adoption curve for innovations in this st

In the absence of clear governance guidel to operate a micro-refillery, start with self-regulation for sanitation, hygiene, and food materials safety, ensuring that products disperare safe for consumption. Document your standards in case of review by authorities.

Containers need to be food-grade if they w be used for food products. And they need to be recognizably different from containers to be u for non-food products.



FINANCING NEEDS

Upfront and transition costs for the physic requirements and inventory for a micro-refille can range from Php 50,000 to 150,000 dependi on the size of the sari-sari store.

Grants and subsidies supported the first prototypes of micro-refillery businesses. Thes can be accessed from NGOs that have active projects on reducing plastic waste or promotir zero-waste or circular economy. Scope for a local NGO in this space, reach out to them for opportunities.

Loans from microfinancing institutions or banks that have sustainability campaigns or agenda may help with lower interest rates or a valuable technical support. As with other loan pay attention to the fine print and clarify term

Check local government or DTI / Go Negos offices for programs on MSMEs or BMBEs (barangay micro business enterprises) for any support, subsidy, exemption, capacity-buildin training that they may be able to extend, align with promoting a circular economy.

WALA USIK SARI-SARI STORES

transition of sari-sari stores to adopt microrefillery mechanisms with financial and technical support from USAID and in another cycle with the Rethinking Plastics project of the European Union and the German Federal Government. This involved improvising dispensers and containers for consumers. We first worked with 8 sari-sari stores in coastal communities in 2019, and attempted to address the operational requirements of becoming Wala Usik, while studying the amount of singleuse plastics prevented from potentially entering nature by recording the purchased volume of different products through the micro-refillery. The early prototypes revealed the gaps in the supply chain and barriers for adoption of both business owners and consumers, amplified by concerns of the COVID-19 contagion during the pandemic. Although the business model remains to be

In Negros Island, we have supported the developed further before scaling and replication, sition of sari-sari stores to adopt microther with the Wala Usik experience presented possibilities and learnings critical for the country's more than a port from USAID and in another cycle with developed further before scaling and replication, the Wala Usik experience presented possibilities and learnings critical for the country's more than a million sari-sari stores to reduce plastic at source.

[O] JACKSON GROVES





DUL-ONG SUGAT

CENTRAL REFILLING FACILITY WITH BUSINESS-TO-CONSUMER (B2C)
DOOR-TO-DOOR DELIVERY SERVICE

HOW DOES IT WORK?

Traditionally linked to the "milkman" in a closed-loop business model where goods are delivered in reusable containers and once the product is consumed, the container will be picked up at the consumer's door to be washed, reused, and refilled for another batch of deliveries. The service can be made regular in terms of frequency, volume of products, and delivery routes. This model largely improves both economic and environmental goals simultaneously.

TECHNICAL CONSIDERATIONS AND RECOMMENDATIONS



CIRCULARITY GOALS

It aims to revolutionize the way we reuse packaging by primarily getting rid of disposable containers. The model revolves around circular principles, which therefore cuts out disposable waste. It encourages reuse, recycling, and sharing of goods instead of adhering to a single-use culture.



BUSINESS GOALS

Captured market and loyal customer base with regular and frequent orders sustaining the business.

Convenience and accessibility for the consumer when their needs are delivered at their doorstep.

Diversification of the business is possible with this model.



COMMUNITY RECEPTION

Most customers have experience with this model (i.e. pickup and delivery system of purified drinking water stations) and so it could be easy to market.

Convenience is attractive since the consumer does not refill the product on their own.



SUPPLY CHAIN READINESS

It faces challenges of sourcing products in bulk like all refilling models.

This model may be more effective if the business is manufacturing or producing the product themselves.



PHYSICAL REQUIREMENTS

A space for the central refilling facility needs to be set up where there is a system for collecting, washing, sanitizing, refilling and sealing the containers.

A significant stock of reusable containers made from glass or stainless steel will be necessary. Breakage or loss of containers need to be factored in.

A vehicle for delivery is essential. Nonmotorized vehicles may be an option for lesser carbon emissions but this will affect delivery efficiency.



SKILLSET REQUIREMENTS

Business owners need to be prepared and capacitated in operating systems that effectively process and service orders with deliveries. This may be aided by technology but consider the digital divide in low-income communities. Paper-based recording may still be reliable.

The central refilling operations require skillsets in quality control.



REGULATORY COMPLIANCE

Standards for sanitation, hygiene, food and materials safety should be set up for the refilling process.

It is best practice to use tamper-proof stickers indicating that the container has been sanitized, product is safely refilled and sealed with standards to avoid contamination, and to include the product batch information (manufacturing and expiry dates).

Licensing may be patterned after water refilling stations regulated by the local government.



FINANCING NEEDS

This central refilling model requires significant capital as it will involve acquisition of several equipment including the delivery vehicle, the space for the facility itself, trained personnel for refilling and delivery, as well as the systems to process orders and fulfill the deliveries.





BALIK BASIYO

CENTRAL REFILLING FACILITY WITH B2C BOTTLE EXCHANGE AND DEPOSIT-RETURN SCHEME AT THE STORE

HOW DOES IT WORK?

A glass bottle containing soda often serves its purpose the moment soda is consumed and its container disposed of or destined for the landfill. In the bottle exchange system, a bottle is only borrowed (usually with a pondo— a small deposit fee) and then immediately returned (the pundo will then be given back to the customer). Your store can then gather these glass bottles and fill them up again with the same product— and the cycle goes on.

TECHNICAL CONSIDERATIONS AND RECOMMENDATIONS



CIRCULARITY GOALS

Glass is one of the most sustainable materials to use. It follows an endless loop of full recyclability because its material can be melted and re-melted without sacrificing quality. Recycling glass waste, called cullets, saves more energy because it melts at a lower temperature compared to raw materials. It is also a resource-efficient material because it is made of natural materials that are readily available, such as sand, cullets, soda ash, and limestone.

The impact this creates within the community will shape their behavior towards recycling, ultimately for the purpose of waste management.



BUSINESS GOALS

Customers develop behavior of going back to the store when they return the bottle, which encourages loyalty.

Eliminating costs of delivery and waiting time when the customers themselves approach the store and empty bottles are quickly exchanged with pre-filled bottles.

Innovating to adopt this model for a diverse product line has the potential to attract new market segments.



COMMUNITY RECEPTION

This model is already widely used in the Philippine setting, where sari-sari stores would require an empty bottle of the soft drink or beer at the point of purchase. Those empty bottles would then be returned to the manufacturer for them to reuse.



SUPPLY CHAIN READINESS

Glass bottles are widely available, however their costs (compared to PET) may be prohibitive for some business owners.

There is most likely already a business in the nearest highly-urbanized city that supplies glass bottles. Prepare to negotiate prices when ordering in bulk





PHYSICAL REQUIREMENTS

Aside from the central refilling facility requirements already mentioned in the previous model, emphasis is necessary for the safe storage of glass bottles. It will require more space that is away from potential causes of breakage or loss.

A vehicle for delivery is essential. Nonmotorized vehicles may be an option for lesser carbon emissions but this will affect delivery efficiency.



SKILLSET REQUIREMENTS

Aside from the usual business skills to operate any central refilling model, the financials behind the deposit-return scheme need to address potential breakage or loss of the glass bottles.

Collection and handling of broken bottles will require safety training, as well as establishing an end-of-life process that may connect to the nearest glass recycling facility.



REGULATORY COMPLIANCE

Glass remains safe for food-grade packaging, but standards for sanitation and hygiene in refilling, sealing and labeling them will have to be



FINANCING NEEDS

Capital is needed for a steady supply of glass bottles. Costs can also be anticipated in forwarding glass for recycling in case of damage to the container.



Using glass bottles for products like cold brew coffee, kombucha, and even coffee beans may not be revolutionary in itself, but business owner Paul Javellana saw the benefits of their refilling programs to encourage repeat purchases and customer loyalty. Aside from business-toconsumer promos/discounts and deposit-return schemes at his Kapipat Cafe, he also innovated a design for a motorbike delivery bag that has partitions for the glass bottles, strengthened his business-to-business strategy as a regular supplier of coffee beans, and maximized sanitizing equipment to efficiently ensure the hygiene standards of the returned and reused bottles.







SUKI NGA SUPLAYER

CENTRAL REFILLING WITH BUSINESS-TO-BUSINESS SERVICE

HOW DOES IT WORK?

As the name suggests, goods and services are circulated from one business to another. Suppliers provide a constant source of goods and services to another business or a distributor, oftentimes at a competitive market price for resale. This is translated as encouraging "suki" or businesses loyal to the service. Suppliers can range from manufacturers, sub-contractors, distributors, and importers. They play a huge role in keeping products available and in circulation.

TECHNICAL CONSIDERATIONS AND RECOMMENDATIONS



CIRCULARITY GOALS

Suppliers play an integral part in reducing waste at source. When goods and services are rethought and redesigned at production, this creates a ripple effect throughout the whole economy too.



BUSINESS GOALS

Taking the role of a regular supplier of products to be re-sold by another business can be a steady source of income and a means to promote your products with a wider range.



COMMUNITY RECEPTION

The community of MSMEs appreciates diverse supplier options and thus presenting as a zerowaste supplier will be welcome in the midst of rising consciousness on sustainability.



SUPPLY CHAIN READINESS

In this model, the business is helping build a local supply chain for circular businesses.



SKILLSET REQUIREMENTS

PHYSICAL REQUIREMENTS

Requirements are the same with the central refilling model with a delivery service, but emphasis is on skills aligned with sales or when you negotiate deals with other businesses as their trusted supplier.

Requirements are the same with the central

refilling model with a delivery service, although

the containers are not limited to bottles.



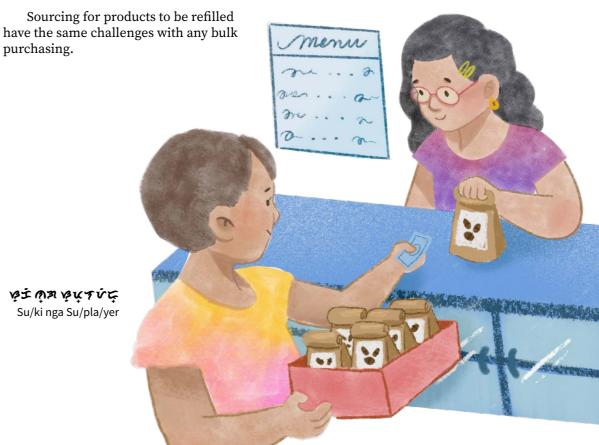
REGULATORY COMPLIANCE

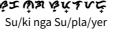
Standards remain the same for any refilling model.



FINANCING NEEDS

Suppliers need to prepare to roll their funds as they may handle large volumes of orders and have to wait before they get fully paid.









HULAMAY BALUNAN

SHARED REUSE SYSTEM FOR FOOD TAKEOUTS AND DELIVERIES

HOW DOES IT WORK?

Hulamay Balunan translates to a borrowed lunchbox, or "bento". Japanese in origin, the concept of a "bento" is a multicompartment box used for containing the different courses of a meal. Bento boxes usually take the forms of reusable containers with different compartments protecting one course from another. With a shared reuse system, these containers are owned by many customers. The model ushers a possibility of being integrated into existing takeout and delivery services, across multiple businesses, evolving with our pandemic experience. Businesses can even implement a return-receive-return system to "suki" or loyal customers.

TECHNICAL CONSIDERATIONS AND RECOMMENDATIONS



CIRCULARITY GOALS

Takeout and delivery orders are notorious for its dependence on single-use packaging. This innovates food delivery as we know it through the use of *balunan* or bento boxes, or any other reusable food containers, as an alternative to single-use plastic containers.



BUSINESS GOALS

The business can fill in the needs of a more environmentally conscious market for non-disposable food packaging, and encourage loyalty when there is an established relationship due to the borrowing of the shared containers.

Meal plans and subscriptions are viable services that can be attached to this model.



COMMUNITY RECEPTION

Behavior change is still necessary for a shared reuse system. It will require customers to wash the containers and prepare them to be returned, which are added steps that may cause inconvenience.

During the pandemic, concerns on the sanitation of the boxes were highlighted. This can be mitigated with a strict sanitation process.







SUPPLY CHAIN READINESS

Containers appropriate to the food products may need to be sourced or shipped from international manufacturers.

An ecosystem or community of circular businesses can be established for agreements to co-shoulder costs of a shared reuse system across several businesses.



PHYSICAL REQUIREMENTS

The right food containers, bento boxes or *balunan* need to be appropriate to the market profile, and they are usually made of hard plastic or stainless steel.

Storing containers requires ample space and sanitizing equipment.



SKILLSET REQUIREMENTS

Systems have to be paired with trained personnel to be able to service takeouts and deliveries with an shared reusable containers. This model may also be aligned with digital platforms or apps, so technological skills may come into play.



REGULATORY COMPLIANCE

Food safety is key in this model, and thus the use of food-grade containers is required. It is best practice to process sanitary permits to operate the business.



FINANCING NEEDS

Capital is needed to source and maintain the shared reusable food containers, as well as their collection and sanitation.

Q ZENIA CARINDERIA

Carinderias are food stalls or eateries with a limited seating area, usually found at the roadside, and significantly accessible in terms of location and pricing. Many people pass by them for takeaway food in small and affordable portions of dishes, usually packed in thin, clear plastics. Through the Rethinking Plastics pilot, Zenia's Carinderia at the Talisay City Public Market stocked small stainless steel containers (or 'balunan') that can be loaned by her regular customers for their takeaways, which are on a written record to track returns of the containers. The practice allowed her to step up her marketing strategy to build her 'suki' or loyal customers database, at the same time, reduce the plastic packaging of her food.

AESON BALDEVIA





DAHON NGA PUTOS KAG BAYONG

NATIVE PACKAGING

HOW DOES IT WORK?

Resurfacing the good old traditional ways, this innovation refers to packaging made from native and indigenous materials that are readily available and can be sustainably farmed. They come in forms of woven-leaf baskets or bags, *bayong*, and food wrappers that are made from banana or palm leaves. Instead of using single-use plastics or non-biodegradable packaging, native materials can provide better (and more aesthetic) alternatives.

TECHNICAL CONSIDERATIONS AND RECOMMENDATIONS



CIRCULARITY GOALS

Native packaging if produced or sourced sustainably can also contribute to the component of circularity on regenerating natural systems. Since these materials can be easily composted, they can significantly cut the use of disposable plastic wrappers or bags.



COMMUNITY RECEPTION

The materials are not new nor alien to the consumers who actually appreciate their aesthetic and cultural aspect.

In purchasing native packaging such as bayong, you are also contributing to the growth and security of the local weaving communities in your area.



BUSINESS GOALS

Supporting local communities weaving or producing these materials also build and grow the local economy. The social aspect of this innovation adds more value to the business.

Business opportunities lie in modernizing native packaging materials, e.g. producing pre-cut shapes or formats that can be easily used by MSMEs.





SUPPLY CHAIN READINESS

The supply chains for native packaging materials are local by nature. There is an opportunity to organize, capacitate and support local producers, with the buy-in of local government, civil society, national agencies and stakeholders developing social enterprises.



PHYSICAL REQUIREMENTS

Sourcing and storing native packaging materials will have to address challenges on their shelf life. Banana or palm leaves or woven food takeaway packaging can wilt, darken, gather molds, or emit a smell.



SKILLSET REQUIREMENTS

Identifying the shapes or formats of native packaging, as well as learning how to fabricate and treat them, will be helpful to the business adopting these materials.

Building relationships with the local producers will also be essential.



REGULATORY COMPLIANCE

For native packaging that will be wrapped around or contain food products should be checked for food grade compliance.



FINANCING NEEDS

A wider investment - for the community of producers, and not just the businesses sourcing native packaging - is necessary to develop the supply chain for a local circular economy. These investments can be in the form of grants or subsidies extended by agencies like DTI or the local investment office to the producers, which are usually people's or women's organizations.



TIMPLADA RESTAURANT

Starting as a delivery-only, virtual restaurant during the pandemic, Timplada Restaurant gained local attention because all their food takeaway containers used woven baskets, banana leaves, and even the delivery package is in the form of a bayong or bag made of pandan leaves. All these are natural, not treated with synthetic substances, and sourced from women's and producers' associations in the community. The aesthetic and philosophy of their packaging added to the value of what they were offering. Since then the restaurant owners Rica Bayhon and Chef Jairus Cambeliza have successfully launched a physical restaurant that still uses native materials for their dining preparation and presentation.

TIMPLADA RESTAURANT





KAWAYAN KAG KAHOY NGA KUBYERTOS

BAMBOO AND WOODEN CUTLERY

HOW DOES IT WORK?

Wooden and bamboo cutlery can be used as tableware in preparing, serving, and eating food. This cutlery can be in forms of spoons, stirrers, forks, straws, and the like. Businesses transitioning to more eco-friendly practices often switch to these materials because it is easier to change the materials being used by consumers, rather than changing their behavior. Bamboo and wood can be farmed sustainably, can be engineered, and can remain compostable, and thus they present a wide range of opportunities as alternatives to single-use plastic cutlery.

TECHNICAL CONSIDERATIONS AND RECOMMENDATIONS



CIRCULARITY GOALS

Compared to the single-use plastic utensils, bamboo and wooden cutlery can be manufactured using less energy and without chemicals, making it non-toxic and a more sustainable option. Because they're made out of wood, which is a natural material, wooden cutlery will biodegrade on its own and return to the ecosystem, whereas plastic ones will break down into microplastics.



BUSINESS GOALS

For the least amount of adjustment among customers, this model just replaces single-use plastic cutlery with alternative materials. This may be easier to adapt to than models that require a change of behavior or added steps in consumption.

It will be necessary to constantly look for suppliers that bring down costs of production and shipping.



COMMUNITY RECEPTION

Consumers have already been exposed to this kind of material for cutlery, and thus they are not resistant. However, there are observations that if not treated properly, these cutlery have a specific smell or taste that can impact consumer experience.



SUPPLY CHAIN READINESS

Bamboo and wood cutlery are easy to source since there are already options for these in the supermarket, albeit with higher costs compared to their plastic counterparts.

As with native packaging, building a local supply chain for these materials is possible and desired by many sectors.



PHYSICAL REQUIREMENTS

As with native packaging, storing these materials will require provisions for them to be away from humidity or moisture to avoid molds and other undesired effects.

A model composting station is recommended so it can be demonstrated for post-consumption behavior.



SKILLSET REQUIREMENTS

It is best practice to build technical knowledge on the process of composting, and the ability to educate consumers with this topic, since compostable cutlery should be handled separately from other disposable products.



REGULATORY COMPLIANCE

Quality, traceability and sustainability certification of these materials will emerge as necessary as the regulatory environment evolves.

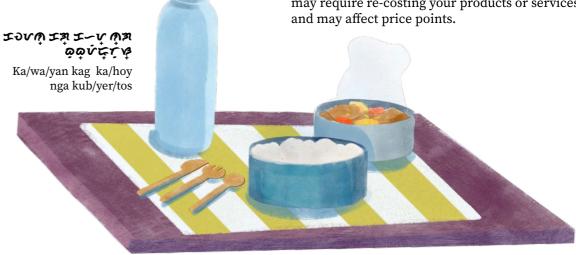
Although bamboo is said to have natural antiseptic properties, they still need to be treated. The standards for this process need to be set.



FINANCING NEEDS

A wider investment - for the community of producers, and not just the businesses sourcing native packaging - is necessary to develop the supply chain for a local circular economy. These investments can be in the form of grants or subsidies extended by agencies like DTI or the local investment office to the producers, which are usually people's or women's organizations.

For businesses using disposable cutlery, switching to this material will increase costs. This may require re-costing your products or services and may affect price points.



Q WOODEN UTENSILS FROM PACKAGING LAB PH

We have observed a shift with many mainstream suppliers of disposable packaging and utensils - important players in the food and beverage sector's value chain - as materials like wooden utensils are now more readily available as options. Economies of scale bring down the costs and so we do see recent pricing matrices that make wooden utensils competitive with their plastic counterparts. This development is nuanced because not only that the utensils' compostability will have to be closely monitored, but it may not address the throwaway culture of consumption that is a main driver of waste, whatever the material may be. However, we see it as a win that suppliers like Packaging Lab PH and many others have made these options more common and accessible.









GAKADUNOT KAG GAKATUNAW:

BIOPLASTICS AND COMPOSTABLE, SOLUBLE OR EDIBLE PACKAGING

HOW DOES IT WORK?

The category of innovations using alternative polymers, usually plant-based, remains controversial since there are technical challenges in defining and ensuring true compostability. However, business models using bioplastics and compostable, soluble or edible packaging will continue to grow in popularity because they have the least resistance from consumers not yet ready to change behavior to adapt to reusables. As a result, most business owners find these materials acceptable, especially if it has the messaging of being harmless when being dissolved, ingested or composted.

TECHNICAL CONSIDERATIONS AND RECOMMENDATIONS

STEWL TH NILLWO

Ga/ka/du/not kag Ga/ka/tu/naw



CIRCULARITY GOALS

There is a camp in the circular economy space that says compostables are not circular; that they are still following a linear way of thinking since the end-of-life is disposal to nature, even if they break down harmlessly. Therefore it is important to note that these materials will continue to

be studied in terms of their

because contheir patter retained an learn more

There is these mater worldwide.

a lesser carbon footprint.



BUSINESS GOALS

This category of innovations is usually quickly preferred by businesses being presented with options. Compostable bioplastics, as well as soluble and edible packaging, are easy to adopt because consumers need not a huge change in their patterns of consumption. Customers can be retained and even further educated when they learn more about the materials.

compostability, but also whether the raw materials

for them can be renewable, or if they indeed have

There is a trend of decreasing costs for these materials because they are being scaled worldwide.



COMMUNITY RECEPTION

These materials can still be novel in the context of the Philippines, but consumers have low resistance towards them. Materials labeled as 'compostable' have positive perception.

There often is low or no differentiation between truly compostable and questionable materials such as oxo-degradable plastic, and this can create confusion and challenges.



SUPPLY CHAIN READINESS

The Philippines now has manufacturers of bioplastics and other packaging made from cassava and sugarcane, so this significantly brought down supply chain challenges from the time they were still being sourced from outside the country.



PHYSICAL REQUIREMENTS

Sourcing and storing these materials present a multitude of challenges, because bioplastics, solubles and edibles can quickly break down or dissolve when exposed to the elements such as sunlight, water or moisture. They also attract animals and insects that may eat them. Specific storage has to be established before incorporating these materials into the business.

Setting up a model composting station in the premises of the business is a best practice.



SKILLSET REQUIREMENTS

Technical knowledge on handling these materials, as well as explaining them to stakeholders, will be a major factor.

Characteristics of these materials will have to be communicated by business owners, for the education of their consumers.



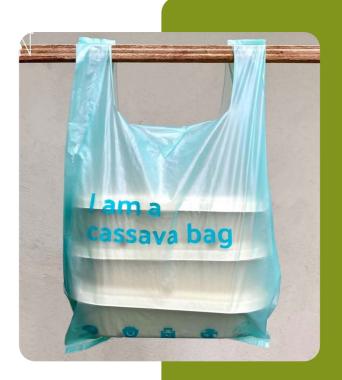
REGULATORY COMPLIANCE

In the Philippines, compostability is not yet being regulated since standards for its production and labeling are still being developed. However, there are international certifications already available that can be checked against so that businesses can determine whether the materials they obtain are truly compostable, soluble, or safe to be ingested.



FINANCING NEEDS

There is considerable cost for switching packaging to bioplastics as they can be 3 to 7 times more expensive than regular non-biodegradable plastic.



CASSABAGS FROM ECONEST PH

We have observed a shift with many mainstream suppliers of disposable packaging and utensils - important players in the food and beverage sector's value chain - as materials like wooden utensils are now more readily available as options. Economies of scale bring down the costs and so we do see recent pricing matrices that make wooden utensils competitive with their plastic counterparts. This development is nuanced because not only that the utensils' compostability will have to be closely monitored, but it may not address the throwaway culture of consumption that is a main driver of waste, whatever the material may be. However, we see it as a win that suppliers like Packaging Lab PH and many others have made these options more common and accessible.







REPORMA:

REDESIGNED FORMATS AND SHAPES

HOW DOES IT WORK?

This category of innovations involve changing the format or shape of a certain product so it reduces packaging waste. One illustrative example is the shampoo bar - which is a solid and concentrated form of shampoo. Since it is no longer in liquid form, it does not have to be contained in sachets or bottles, and it can use minimal or no packaging. There are also toothpaste tablets and solid feminine wash that are out in the market. This innovation may be applied to other products, especially when local production is being encouraged for alternatives to branded, imported products that use more packaging or resources for transport.

TECHNICAL CONSIDERATIONS AND RECOMMENDATIONS



CIRCULARITY GOALS

Packaging is reduced by design.



BUSINESS GOALS

The novelty of the products attract new markets.



COMMUNITY RECEPTION

Consumers new to the products need to adjust, and may not find the same level of satisfaction they had with the products they are used to.



SUPPLY CHAIN READINESS

Although there are already local producers of shampoo bars, their accessibility for shipping is still limited.



PHYSICAL REQUIREMENTS

Redesigned formats will require containers that do not compromise their quality. For example, shampoo bars can be placed altogether in a glass jar, but attention has to be placed if their characteristics change with conditions such as sunlight, humidity and temperature.



SKILLSET REQUIREMENTS

Especially if the business itself is experimenting with redesigning formats and shapes of their products, knowledge of chemicals and their safe handling is the top priority.



REGULATORY COMPLIANCE

There will be a steep process in licensing new products, especially with the FDA for food, personal and home care product innovations. Researching regulations will be constant.



Q KINTAB TOOTHTABS

Aiming to reduce the plastic tubes of toothpaste used day to day, Kintab is one of the first local brands of oral care tablets. They utilize refillable bottles or refillable/compostable boxes or packets, and the formulation of the product follows the principles of redesigning formats and shapes to reduce packaging waste. The Filipino market may still be catching up with the international trend of solid oral care products, but Kintab is popularizing and scaling them so that more consumers adopt and thus bring down price points. They have also begun to partner with hotels and resorts to provide these to guests and tourists as a standard.







ARKILA:RENTAL MODELS

HOW DOES IT WORK?

The rental business model refers to any goods rented to a lessee, who then pays the lessor a fixed sum periodically for a time-limited use of the product. Lessees gain access to the rented asset for the time they need it, instead of having to own one. In this model, the lessor takes care of any maintenance, insurance, and other costs of the physical assets. This model particularly applies to sectors where the market price of goods is consequent (e.g. clothes/costumes, vehicles, equipment, furniture, real estate).

TECHNICAL CONSIDERATIONS AND RECOMMENDATIONS



CIRCULARITY GOALS

Renting encourages an economy of sharing and the mindful behavior of focusing on the practical use rather than impractical possession of goods. A great example is renting a costume that will be used for a one-time occasion instead of buying it and letting it gather dust afterward. Through the circularity of the rental model, the idea of excessive consumption is discouraged. Reducing the need for consumption reduces the waste and carbon footprint attached to manufacturing these goods as well.



BUSINESS GOALS

This model is one of the oldest systems of trade, which dates as far back to the Roman Empire. It expanded vastly at the beginning of the industrial revolution, specifically with rental cars and printers. A study by FATbit Technologies reported that the rental industry was valued at \$19 billion in 2017 and predicted to reach \$59.4 billion in 2022.

Digitalization is fast-tracking the expansion of the rental industry by providing opportunities and relevant platforms for entrepreneurs.





COMMUNITY RECEPTION

Trust is a major consideration in a rental business. A successful rental model thrives in a mutual relationship of trust between the lessor and the lessee. The latter must trust that they are renting a product in working/mint condition, while the lessor must also trust that the lessee will keep and return the asset in the condition they rented it.



SUPPLY CHAIN READINESS

In the Philippines, it can be recalled that rental services were popular with formal wear such as barongs and gowns that people use only for certain occasions. A rental model in the present time will be interesting to build a supply chain around.



PHYSICAL REQUIREMENTS

To rent out anything, a display whether physical or digital will be the center of the operations. This could mean acquiring a space fit for this purpose, or maintaining an online platform.



SKILLSET REQUIREMENTS

Visual merchandising will improve presentation of items up for rental.

Clear financial analysis is also needed to ensure the model will be profitable.



REGULATORY COMPLIANCE

The lessor is accountable for maintenance on the product that covers all safety and sanitation protocols to ensure its safe and hygienic use for the next customer.

The lessor technically pays tax twice: first when purchasing the goods, then second during the regular payments paid by the lessee.



FINANCING NEEDS

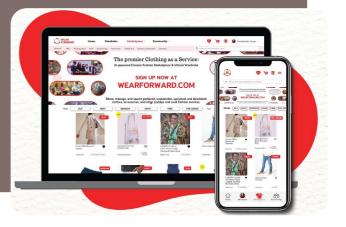
The unused value of the asset means wasted value. Meaning, when a product is used only once in a week, its value is used for merely 14.28%, while 85.72% of it goes to waste. Consider that there are some assets, such as cars, that still require regular service and maintenance even when not in use. Consider the maintenance cost of the goods, such as but not exclusive to repairs and logistics costs.

Q WEAR FORWARD

Emerging as one of the winners of the Wala Usik Challenge: A Circular Economy Hackathon in 2021, and supported by other incubators, Wear Forward is a clothing-as-a-service platform that champions circular fashion and collaborative consumption through their Al-powered fashion marketplace and virtual wardrobe. The platform is envisioned as a one-stop shop to buy, rent, borrow, swap, grab for free, repair, and donate preloved, sustainably sourced, upcycled, and deadstock clothes, accessories and other textiles as well as avail fashion and refashion services. Textile waste is interlinked with plastic waste as many fashion materials have plastic microfibers. Wear Forward shows promise for rental and repair models as well as efforts to circulate

resources that would otherwise end up in landfills, not just for clothing but for many other consumer products.

(O) WEAR FORWARD





HOW DOES IT WORK?

The repair model is practiced by repair shops, repair stalls, service centers, or other third-party businesses that specialize in conducting repair and maintenance. This model ranges across many sectors — shoes, vehicles, appliances, furniture, you name it. Basically, for any item that can be fixed, a repair business is possible.

TECHNICAL CONSIDERATIONS AND RECOMMENDATIONS



CIRCULARITY GOALS

Repair encourages longevity instead of single-use product life. Prolonging the lifespan of a product reduces the need for purchasing a replacement, which typically costs more. When items are designed to stand the test of time, there is less waste accumulated and carbon footprint accumulated over time.



BUSINESS GOALS

There is a perception that repairs are counterintuitive to a business. However, there are

brands like Nudie Jeans which offers premium quality jeans for a long life cycle. Their stores are called "Repair Shops" where you can fix or sew jeans, or they can send you a repair kit. The premium they put on their product creates financial sustainability and customer loyalty.



COMMUNITY RECEPTION

Filipinos are receptive to repair models because before the fast-paced consumption of the present, there were always repair services for anything from shoes to watches. Nostalgia, and the value of frugality, creates a positive perception of repair models.



TECHNICAL CONSIDERATIONS AND RECOMMENDATIONS



CIRCULARITY GOALS

This model promotes sustainable fashion, because it reduces the environmental impact by limiting CO2 emissions and reducing the waste of billions of liters of water that would have been needed to generate new clothes, bags or other materials.



BUSINESS GOALS

There is a perception that repairs are counterintuitive to a business. However, there are brands like Nudie Jeans which offers premium quality jeans for a long life cycle. Their stores are called "Repair Shops" where you can fix or sew jeans, or they can send you a repair kit. The premium they put on their product creates financial sustainability and customer loyalty.



COMMUNITY RECEPTION

Retail customers targeted can generate enough revenue to sustain the business.

This model can be innovated with an online platform for high quality finds.



SUPPLY CHAIN READINESS

3IV - 3IV U/kay-u/kay

Low-income or middle-class Filipinos are very accepting of the ukay model, as long as they can sanitize their purchases.



PHYSICAL REQUIREMENTS

Location of an ukay business needs to have heavy foot traffic. The physical space and the display of items being sold need to be curated to increase interest.



SKILLSET REQUIREMENTS

Studying the ubiquitous *ukay-ukay* stalls will yield more knowledge and skills in operating this kind of business.



REGULATORY COMPLIANCE

Commercial importation of secondhand clothing is actually prohibited by RA 4653 since 1966, but that does not deter the sprouting of *ukay* shops nationwide, so there are already have been moves in legislation considering more regulations of this business model.



FINANCING NEEDS

Setting up a retail shop will require significant inventory, but this can be started with a collection of items that do not necessarily require huge capital.



UKAY-UKAY:

SELLING PRE-LOVED ITEMS

HOW DOES IT WORK?

Selling pre-loved items (also known as ukay, referring to being dug up) refers to selling clothes, bags & other materials that have been used previously by someone else. This is a popular business model of re-circulating resources so that the life of materials is being prolonged.



SUPPLY CHAIN READINESS

PHYSICAL REQUIREMENTS

SKILLSET REQUIREMENTS

specific products are crucial to this model.

items.

community needs repair services for.

Scoping has to be done to see what items the

A repair shop would need a workshop-like

space or kiosk with tools needed to repair different

Technical skills and dexterity needed to repair



KIV-3

Pakay-o

REGULATORY COMPLIANCE

There are no concrete regulations on repair models, except registering the business with DTI and the local government.



FINANCING NEEDS

Capital is needed to set up a repair station's workshop, equipment and tools.



WHAT DOES A WALA USIK FUTURE LOOK LIKE?

Imagining a world that is ecologically, socially and economically sustainable

For a circular economy to be possible from the ground up, the huge MSME sector will need to draw from their collective experiences and insights striving to be accessible and inclusive for their customers. They will also need to turn a profit, while being conscious of their impact on the environment.

The triple bottomline of people, planet and profit can only be achieved if there is an enabling environment for entrepreneurs to innovate in their context. In the building of this toolkit,

the challenge of building a strong business case for circular and zero-waste practices even at the level of a sari-sari store or a carinderia.

We offer to this community our topmost recommendations from this entire endeavor, and we hope that you build on these.

1. Local, circular supply chains have to be established or strengthened. Franchising models may help so that these supply chains are built systematically, and so that MSMEs can easily

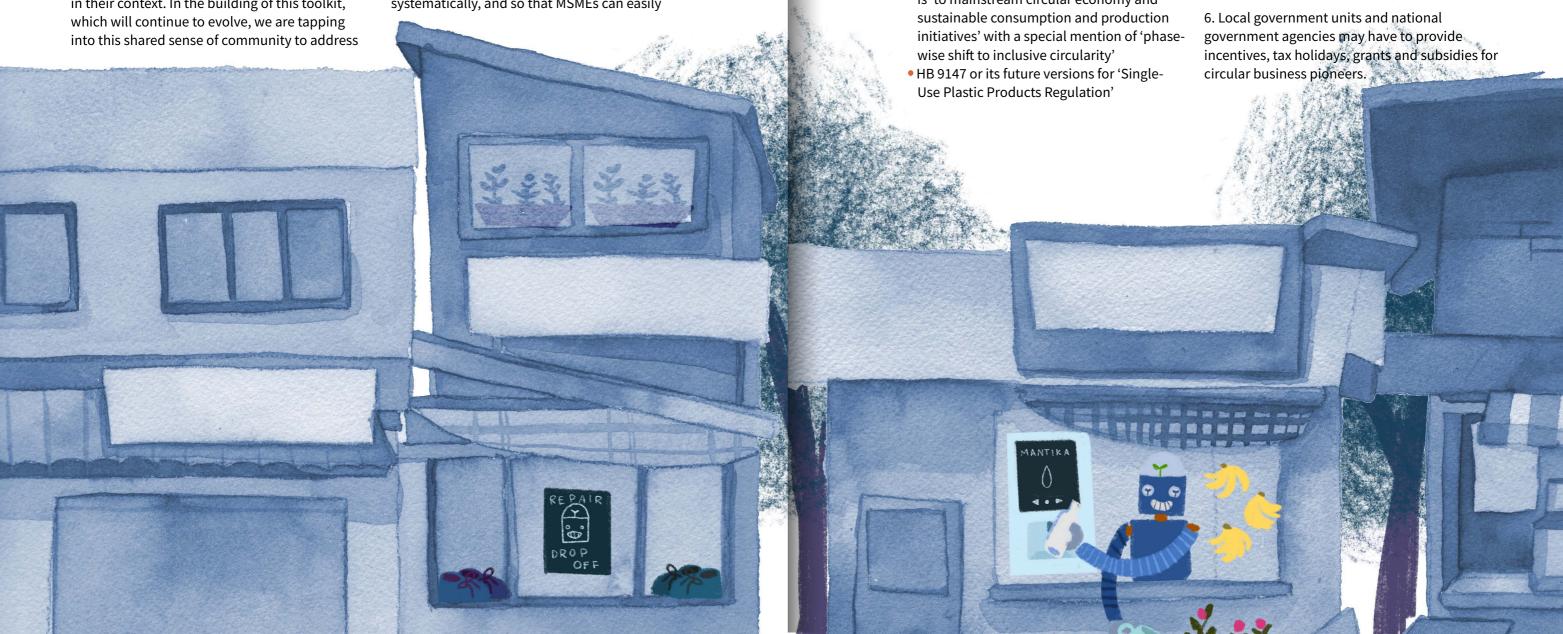
adopt circularity without the worry of doing it

- 2. Technology may enable many circular models - these may involve the use of mobile apps, vending machines, GPS tracking of reusables shared across multiple business establishments, online platforms for rental and repair services but utmost care must be given to those who may
- 3. Future circular economy endeavors need to align with the public sector's agenda and targets, being developed with the following:

be excluded because of the Digital Divide.

- The Department of Trade and Industry's **Greening Businesses program**
- The National Plan of Action on Marine Litter, especially on its Strategy 2, which is 'to mainstream circular economy and sustainable consumption and production wise shift to inclusive circularity'

- RA 11898 for 'Extended Producer Responsibility' and its formation of its Implementing Rules and Regulations
- Eco-labeling standards such as that of Green Choice Philippines
- 4. Circular economy needs to be communicated in the local language and context, and messaging should be promoted with the same vigor and resources as conventional advertising for branded products.
- 5. Since compostables, including bioplastics, soluble and edible packaging, remain to be highly preferred by MSMEs for further innovation and adoption, regulations and standards need to be set without turning them away as alternatives to single-use plastic.



We have attempted to depict a Wala Usik future

with the insights shared in this toolkit, often trying

entrepreneurs. But we always go back to the spirit of

Circularity is in the heritage of our past, and we

Imagine with us this kind of future - where we

prosperity and with a healthy planet to sustain us all.

Feel free to add more insights and share your experiences, too! As this is a living document, you

We appreciate you being part of this Wala Usik

may annotate it and send the file to us at prrcfi@

danjuganisland.ph. You may also join the 'Wala

thrive as a community with inclusive economic

this effort: How do we bring back wasting nothing?

not to be too technical so we can reach more

invoke it for our future to be possible.

What does it look like for you?

Usik Community' Facebook group.

future. Thank you!

ACKNOWLEDGMENTS

Team Wala Usik Economy would like to thank all the individuals and organizations who have actively shared their insights and experiences for the development of this toolkit, and for co-building the Wala Usik Community

- - Timplada Restaurant
 - Kapipat Cafe / Esstoria Coffee
 - Eleven11 Shawarma Station
 - Bihome at Camp Learning Recreational Center

 - Leoning's Store
 - Jean Anne Store
 - Zenia Carinderia
 - Franzane Carinderia
 - C&C Foodcart
- Negros Women for Tomorrow Foundation
- Negrosanon Young Leaders Institute
- Save Philippine Seas
- Carlos Hilado Memorial State University
- City of Bacolod
- City of Talisay
- Department of Science and Technology-Technological University of the Philippines Visayas-Hub for Innovation and Value Engineering
- Department of Trade and Industry-Negros

- Department of Environment and Natural Resources-Provincial Environment and Natural Resources Office of Negros Occidental
- Department of Tourism Region VI
- Digicast Negros
 Association of Negros Producers
- Araal Natural
- Maayo Farms
- Econest PH
- McDonald's East
- Rosene Store
- El Raza Restaurant
- Happy Earth Store
- Sip / Loop.
- Humble Market
- Zero-Waste Refilling Station
- The Design Thinking FactoryBacolod Barter Community
- Barangay Villamonte Sangguniang Kabataan
- Dr. Josh Vargas

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IBALIK ANG WALA USIK: THE BUSINESS OF REDUCING WASTE

A TOOLKIT FOR MSMES IMPLEMENTING ZERO-WASTE AND CIRCULAR BUSINESS IDEAS

Written by Dave Albao with Claudia Gancayco Illustrations by Andie Gamboa **Design and Layout by Ruer Torculas**

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