**Global Reuse Business Model Best Practices Whitepaper**10 January 2023

Scope: **Global Reuse Business Model Learnings Whitepaper** (Phase 1)

"A retailer & eCommerce industry best practice guide to using & building reuse-based systems, global business model learnings, and resulting sustainability impact."

**Reuse Business Model Calculator toolkit, calculators, etc.** (Phase 2)

Audience: Retailers & eCommerce Industry

* C suite executives, including sustainability leadership
* Retail & mfg. supply chain partner executives & key decision makers

Title: TBD

Timeline: Jan. 10th Final Outline Approval

 Feb. / Mar. First draft sections submitted.

 Mar. 21st Consolidated version. (Promat, Chicago)

 Apr. 11th Final draft consolidated. Review & approval by R&E members.

 May / June Industry release.

Background:

As Retailers and eCommerce companies are increasingly considering reusable platforms for their supply chains to eliminate single-use packaging, there is a need to educate the retail industry on what “key considerations” and “learnings" to enable the “**HOW**” of reuse. This paper will include:

* Defining **successful reusable applications** and what key business model variables should be considered in evaluating a reuse-based investment.
* **Best practices & learnings** from global retailers when applying B2B reusable-based systems, and what learnings can be leveraged for B2C (refill, etc.) applications.
* What **sustainability framework** and variables should be considered when evaluating a reuse-based investments and resulting sustainability impact.

Global case studies and reusable examples will be included throughout this white paper from RPA Retail & eCommerce workstream member companies and their customers if possible. After reading this paper, retailers and their manufacturing & supply chain partners should have the tools, references, and resources to decide on "**HOW**" to use, implement or make investment decisions into reusable-based systems.

Table of Contents:

1. **Executive Summary** [RPA / Debus / Hoff]
2. **Introduction**
	1. Why the need for reusable-based systems in the retail & eCommerce industry is more important today in a retail environment focused on eliminating single-use packaging, improving their sustainable footprint, and improving their supply chains resiliency and costs. How reusable systems can contribute to achieving retailers’ sustainability goals)
	2. Acknowledgement of contributors (brief)
3. **Why Reusable systems in your Supply Chain are important today.** [RPA & TBD][Benefits to a key decision maker]
	1. Introduction
	2. Financial metrics
	3. Single-use packaging waste and the pressure to eliminate
	4. Sustainability metrics (waste, water, energy, recycled content)
	5. Food Safety & Emerging Regulations (RPA add EU regulation update)
	6. Supply Chain Visibility in uncertain times (RPA Technology workstream content)
	7. Opportunity to leverage embedded technology and data (RPA Tech. workstream)
	8. Other
4. **What is a successful reusable application and what key business model variables should be considered in evaluating a reuse-based investment.**

[IFCO, CHEP, TBD]

[How to make a good decision]

* 1. What makes an excellent reusable application
		1. Checklist
			1. Types of supply chains (general)
				1. Mfg. to Warehouse/Distributor
				2. Mfg. to Store
				3. Distributor to Store
				4. Mfg. to Fulfillment Center (eCommerce, …)
		2. Decision tree (used for an online version also)
			1. What is the right solution for the application?
				1. Differences in Owned (captive) vs. Pooling (open) Services
				2. Proof of value – does it add value to your business?

How does each reuse system add value?

* + - * 1. Considerations of mixed deployments
	1. Key variables
		1. Loss (Asset loss)
		2. Velocity (Speed of turns/cycle time)
		3. Damage (Repair considerations)
		4. Logistics
			1. Reverse logistics
			2. dedicated vs third party freight solutions
			3. consolidation nodes
		5. Additional services
			1. Inspection, washing, repair, recycling
			2. technology, etc.
		6. Design factors
			1. How does the design of the Reuse asset impact

the business model learnings. Ergonomics, features, etc.

* + 1. other
	1. Investment factors
		1. Recycled value of plastic materials
		2. Partnerships
		3. Technology investments (IoT, etc.)
1. **What best practices & learnings from global retailers**

 **exist using reuse-based systems.** [Schoeller Allibert, Rehrig, IFCO, TBD][How to learn from global retailers on both the opportunities & challenges]
[Target a range of retail examples, including food & beverage, white goods, fashion, …]

* 1. Reuse models overview
		1. Type of model
			1. Captive / owned
			2. Pooling service providers
			3. Other models; Refill, etc.
		2. Type of Reusable asset
			1. Pallet
			2. RPC
			3. Container
			4. Tote
			5. Other types
		3. Advantages / Disadvantages
		4. Existing packaging solution in use (incumbent)
		5. Changes in product damage
		6. Other considerations
		7. Emerging technologies & business models
		8. Industry case study examples – retailers & ecommerce
		(Captive, Open Pool, Closed Pool) & Different Reuse asset types
			1. Retailer
			2. Reuse solution
			3. Problem solved
			4. Solution benefits
			5. Learnings (Opportunity & Challenges)
1. **What sustainability framework and variables should be considered when evaluating a reuse-based investments and resulting sustainability impact.**

[Rehrig Pacific, Monoflow, TBD]

[How to make the right sustainability decision from a retailer’s perspective]

* 1. Retail & Sustainability
		1. Current state
		2. Challenge of future Scope 2 & Scope 3 requirements
		3. How to compare apple to apples versus single use solutions
		4. How to connect Reuse metrics into a ESG metrics
	2. LCA Framework
		1. Key variables for consideration
			1. Energy
			2. Reverse Logistics
			3. Raw materials
			4. Water
			5. CO2
			6. Waste reduction/elimination
		2. Comparison to non-reuse assets vs. single-use claims
			1. What questions should be asked.

1. **How to use the reuse data to develop & deliver insights & value
 to your business?** [RPA / Hoff]
[use from RPA Technology Working Group white paper]
	1. Why data & insights are critical to your retail supply chain & business?
	2. How to organize the insights process
	3. Data and Insights solutions
		1. Industry solutions – Types (genericized)
		2. Key considerations
			1. Amount of data
			2. Security
			3. Insights & decision-making process & speed
	4. Emerging technologies
	5. Industry case study example – data & analytics
		1. Why
		2. What solution applied
		3. Benefit
2. **How to Get Started with a Reuse-based system?** [RPA / Hoff / TBD]
	1. The Big Picture
	2. Business Case
		1. Key variables to be considered
		2. Time to value
	3. Business Case Development Process
		1. Financial
		2. Operational
		3. Sustainability, Regulatory, etc.
	4. Industry Learnings
		1. What has not worked in the past?
		2. What should be done differently?
		3. Cultural considerations
	5. Case Studies (2-3)
		1. Examples of strategy, development, implementation, and benefits.
3. **Appendix** [RPA / Debus / Hoff][shared from Technology Working Group whitepaper]
	1. Definitions for Reusable Transport Packaging
	(hyperlinked from text used the first time in sections above)
		1. Industry Terms
		2. Product Terms
		3. Technology Terms
	2. Industry References
		1. Industry Technology Standards
		2. Industry Associations
	3. RPA Technology member companies
		1. Company paragraph & hyperlink