



Driving Sustainability Through a Cognitive Digital Framework

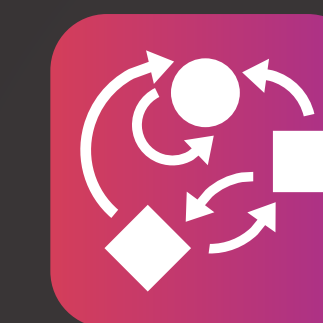
CPG AND DISTRIBUTION



PURPOSE-DRIVEN



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Abstract

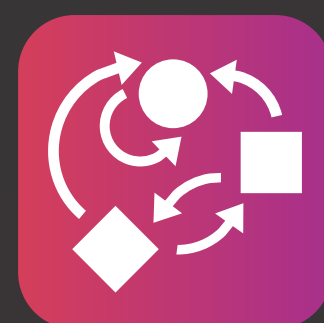
Products that are sustainably packaged experience nearly six times faster growth with consumers willing to pay a premium.¹ According to a recent Nielsen study, a majority, 73% would likely change their consumption habits to reduce their impact on the environment.² The new reality demands consumer packaged goods companies to anticipate change in customer behavior and create products with a carbon neutral or positive environmental footprint. It requires global firms to ensure product sustainability as a part of their core business strategy. Enterprises need to corroborate, recreate, offset and build a partner ecosystem to enable social responsibility (CROPS) as a part of their operations. This paper presents an action plan to leverage the CROPS framework for meeting sustainability targets.



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RESILIENT



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¹NYU, Stern, Sustainable Share Index, 2019,
<https://www.stern.nyu.edu/sites/default/files/assets/documents/NYU%20Stern%20CSB%20Sustainable%20Share%20Index%E2%84%A2%202019.pdf>,
 accessed on Sept 23, 2020

²A natural rise in sustainability around the world, October, 2020,
<https://www.nielsen.com/ca/en/insights/article/2019/a-natural-rise-in-sustainability-around-the-world/>, accessed Oct 12, 2020

CROPS Framework: A step closer to social responsibility

CPG companies are increasingly leveraging sustainable solutions to become carbon neutral. For instance, leading players in the fashion retail sector are now a part of the Sustainable Apparel Coalition that helps them measure and improve their social and environmental impact. During COVID-19, some CPG companies have created a positive brand image in the minds of consumers by engaging in activities that promote sustainability and social responsibility. Nike, has in fact, exhibited enormous social responsibility by donating 30,000 pairs of Air Zoom Pulse to medical workers, enabling them to stand for longer hours³. Similarly, companies such as Coca-Cola⁴, Diageo and Anheuser-Busch⁵ have tweaked their supply chains to manufacture hand sanitizers for medical workers whereas Unilever's Pepsodent⁶ brand has launched online virtual dental clinics to connect consumers with dental professionals to maintain their oral hygiene. As CPG companies turn the pandemic tide in their favor, devising a robust sustainability strategy is crucial (see Figure 1).



Figure 1: The CROPS framework of sustainability

³Nike News, Nike Joins with Athletes to Thank Frontline Healthcare Workers, , March 2020, <https://news.nike.com/news/nike-air-zoom-pulse-hospital-donations> , accessed on Sep 23, 2020

⁴The cocacola company Coca Cola supply chain pivots to produce hand sanitizer , April 2020, <https://www.coca-colacompany.com/news/coca-cola-supply-chain-pivots-to-produce-hand-sanitizer>, accessed oct 23, 2020

⁵FoodDive,Alcohol companies pivot to producing hand sanitizer as coronavirus intensifies, , March 2020
<https://www.fooddive.com/news/alcohol-companies-pivot-to-producing-hand-sanitizer-as-coronavirus-intensif/574537/>,accessed on Oct 23,2020

⁶Unilever, The behavioral science linking bedtime stories and brushing teeth, March 2020,
<https://www.unilever.com/news/news-and-features/Feature-article/2020/the-behavioural-science-linking-bedtime-stories-and-brushing-teeth.html>, accessed on Oct 23, 2020

Corroborating current CPG practices

Tracking wastage, greenhouse gas (GHG) emissions, energy savings, economic impact and recyclable materials is crucial to evaluate current CPG practices. These evaluations must be introduced at every level of the value chain to reduce carbon dioxide emissions. For example, for food and beverage companies, it is imperative to identify the volume of food wastage and its overall contribution to their carbon footprint. Similarly, apparel, footwear and fashion retail firms need to track the wastage of raw material in their clothing and footwear lines. Based on their industry segments, companies should identify the net contributor to environmental degradation for measuring carbon footprint. The internet of things (IoT) can act as an important facilitator to track relevant metrics at every level of the value chain, whereas blockchain technology can standardize the evaluations process.

Recreating processes

Once the processes have been corroborated and gaps identified, companies should re-create their current processes by engaging in unique recycling strategies and drawing insight from their cost to wastage ratio. This means CPG companies must not only look to sell sustainable products to consumers but also source product ideas and material from them. A closed loop ecosystem allows consumers to reuse, re-wear and recycle products and be more involved in the sustainability goals of brands. It also enables brands to understand the latent needs of consumers by gaining their trust, for more sustained brand engagement (see Figure 2).

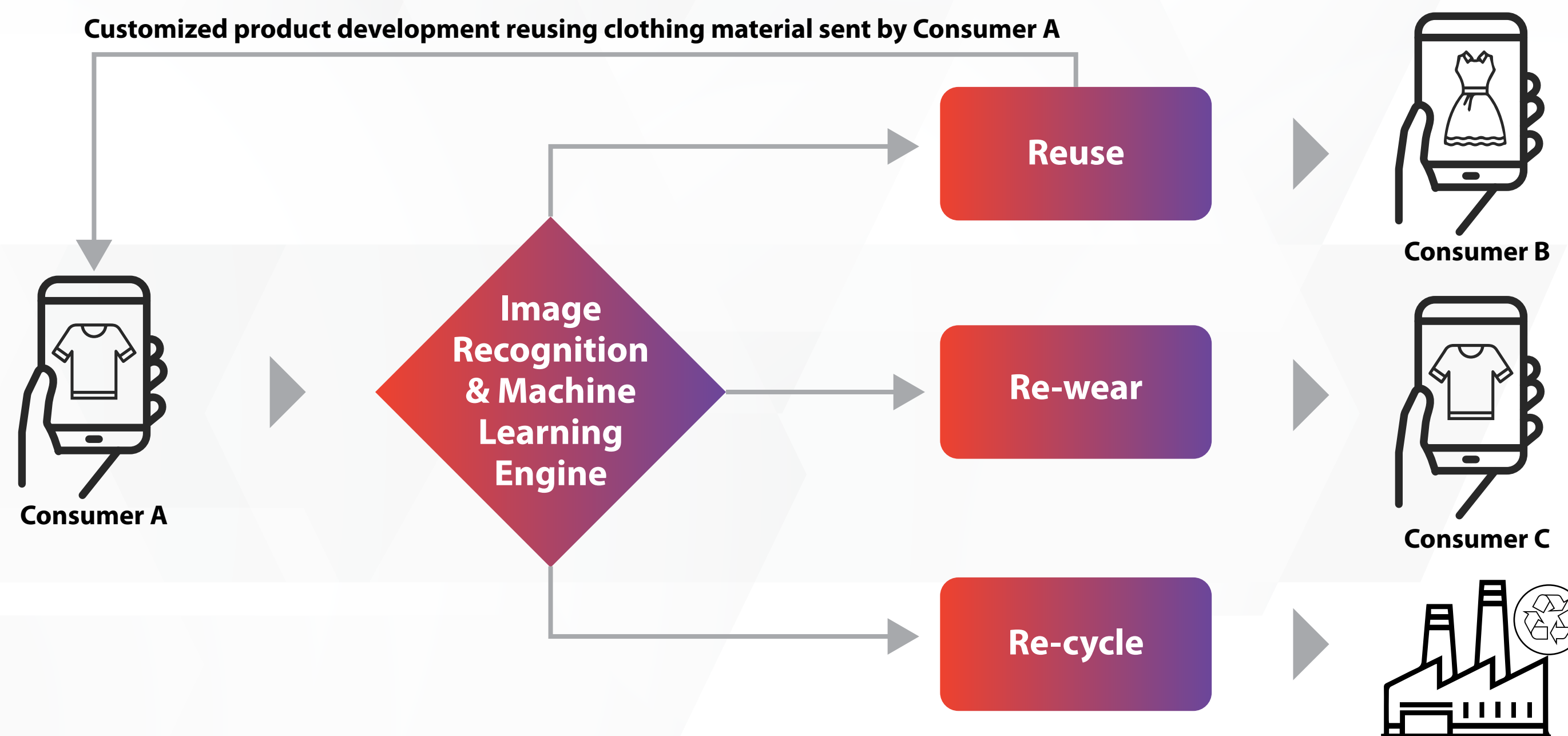
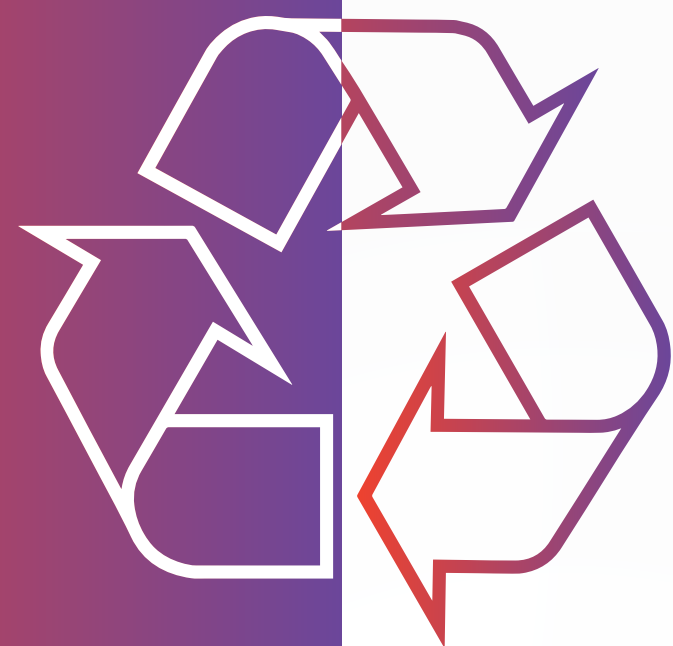


Figure 2: Closing the loop



Machine learning and image recognition capabilities can help companies categorize collected apparel and footwear into three wide buckets and customize products accordingly. For instance, with the market for re-wearing secondhand clothing and footwear expected to grow at compounded annual growth rate of 39% to \$64 billion by 2024, companies can target millennials as they look at creating new sustainable markets and segments.⁷ CPG companies can address this market by establishing direct to consumer channels or by partnering with resellers of secondhand clothing. Companies can also reuse material to make sustainable products. These can be sold back to the consumer who gave away the clothing in the first place, or to a new consumer. In addition, companies can send apparel and footwear to garment recycling companies for converting worn out clothing into insulation or damping material, furniture padding and panel linings.

Succeeding with a closed loop ecosystem requires understanding cost to wastage ratio. For most CPG companies, waste can come in many forms such as food, cardboard, plastic and metal, with each having a separate point of generation in the value chain. Once processes have been evaluated and waste generation points have been identified, a single view of the volumes wasted against the total costs can help companies meet their sustainability targets. This can be achieved by identifying the right KPIs. In addition, companies also need to correlate common losses such as raw material loss, finished goods loss and inventory loss for expired products with the associated cost. Digital applications and AI/ML can be leveraged to derive insights to understand these losses better and gain more visibility into processes. Plugging and playing around with KPIs in real time through machine learning dashboards that evolve over time can help identify hidden financial outflows that may have impacted the bottom lines. These dashboards not only help reduce financial costs but may also enable revenue generation through identification and redirection of wastage. For instance, a major yogurt manufacturer saved millions of dollars by identifying and transferring about \$46 million of wastage to animal feeding programs, assortment centers and recycling centers.⁸

⁷Thredup, 2020 Resale report, 2020, <https://www.thredup.com/resale/>, accessed on Sept 23, 2020

⁸Supply Chain Dive, Stonyfield saves on cost and carbon by reducing waste, tracking KPIs, 2020, <https://www.supplychaindive.com/news/stonyfield-yogurt-waste-reduction-packaging-kpi-sustainability/581788/>, accessed Sept 23, 2020



Building an offsetting strategy

While it is indispensable to reduce carbon footprint, an offset strategy is equally important. Once the above processes are complete, companies can capitalize on the insights derived and identify the areas where carbon emissions cannot be reduced. For CPG companies, this means focusing on activities that promote eco-friendly practices such as tree plantation drives, effective usage of electricity, reducing the usage of paper, and supporting work from home to reduce vehicular emissions. These carbon offset strategies help enhance employment opportunities for impoverished communities while improving biodiversity and reforestation. Companies can leverage machine learning and other digital applications to monitor and track these projects in real time.

Bolstering reputation with the right partnerships

Sustainability is a shared vision that needs to be undertaken by multiple stakeholders. This requires CPG companies to collaborate with governments, investors, local communities, non-governmental organizations (NGOs), and technology solution providers to reduce carbon footprint and bolster reputation. For instance, Microsoft recently joined hands with leading CPG companies such as Danone, Nike and Unilever to launch a new forum dedicated to share resources, tactics and strategies aimed at speeding up the business community's transition to net positive environmental footprint.⁹

Taking social responsibility for enhancing brand equity

In these turbulent times, CPG companies need to contribute to the welfare of consumers and communities and also of customers and suppliers. For instance, Unilever has supported livelihoods across its extended value chain by providing early payment to small and medium sized suppliers enhancing financial liquidity.¹¹ The company has also extended credit to small scale retailers whose businesses rely heavily on it.

CPG companies working with farmers can also pass on the insights on fields usage in an effective manner and educate them about sustainability practices that need to be followed to become a preferred supplier. Leveraging technology such as AI for sustainable land use, early detection of crop issues, precision agriculture and industrial waste management can help build a robust relationship with suppliers and enhance brand equity.

⁹Mint, Microsoft, Nike, Unilever announce global carbon-neutral group, 2020, <https://www.livemint.com/companies/news/microsoft-nike-unilever-announce-global-carbon-neutral-group-11595306770953.html> , accessed Jul 21, 2020

¹⁰Helping to protect lives and livelihoods from the Covid-19 pandemic <https://www.unilever.com/news/press-releases/2020/helping-to-protect-lives-and-livelihoods-from-the-covid-19-pandemic.html>

Organization Realignment an Imperative for Sustainable Ecosystems

A successful sustainability strategy and initiative must start with top managers aligning to the plan. Full commitment from all C-level executives and the chief sustainability officer (CSO) becomes instrumental in driving the change. This requires embedding sustainability efforts in the organization's roadmap for achieving business objectives, evaluating partnerships and calculating ROI and its impact on the bottom-line.

Once the priorities are set, it is necessary to formulate and adhere to process guidelines and conduct regular reviews of project performance. It is also crucial to communicate the value of the sustainability program to internal stakeholders and consumers to enhance brand equity.

The implementation of the CROPS framework enables companies to collaborate at scale, adhere to a zero waste policy and cut back on the use of toxic substances. It ultimately will be the core platform to power a companies' commitment to reduce their carbon footprint, enable sustainability and create awareness.

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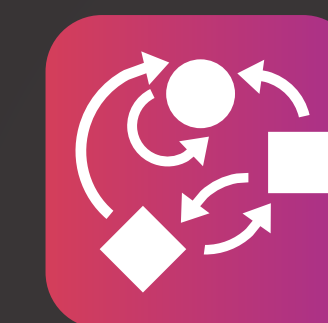
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