

touch

What's next?

The future Role of Packaging

www.touchdesign.com



In the next 30 minutes...

1. Introduction to Touch
2. Sustainable change
3. Setting the scene in 2050
4. Three possible future directions for packaging

We are touch

Proven experts in structural packaging innovation. By harnessing strategic insights, we craft distinctive, sustainable solutions that drive future-proof growth for brands.

Shaping
things to
come.





**First, let's start by considering
where we are today...**

DECADE OF >>> ACTION



The packaging industry has a part to play...

12 RESPONSIBLE CONSUMPTION & PRODUCTION



9%

of plastic was recycled globally in 2021.

OECD Organisation for Economic Co-operation and Development

13 CLIMATE ACTION



1.8B

Tons of CO2 annually is the result of the plastic industry.

WRAP Waste and Resources Action Plan

14 LIFE BELOW WATER



9-14M

Tons of plastic entered the ocean in 2022

United Nations Environment Programme

15 LIFE ON LAND



10.1M

Acres of tropical rainforest was lost in 2022

Global Forest Watch World Resources Institute

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



**75% of
companies
globally**

Have made investments into sustainable packaging practices and innovation.

McKinsey Sustainability in packaging: Five key levers for significant impact

© Touch Design Ltd 2024

17 PARTNERSHIPS FOR THE GOALS



**Collaboration
throughout the value
chain is needed to
unlock real change**

James Pryor, Just now

© Touch Design Ltd 2024



Retailers

will delist brands and products that do not match their own sustainability goals.

Retailers are focusing on:

- Recyclability
- Reducing the amount of packaging
- Inclusion of recycled content
- Eliminating hard-to-recycle packaging
- Reduction/removal of empty headspace
- Carbon footprint goals

Consumers

expect brands and governments to take responsibility for addressing sustainability issues.

40% of global consumers think governments should be responsible for sustainability, while **34%** believe manufacturers should bear this responsibility.

Kantar's Who cares? Who does? 2023

Legislation, EPR fees and infrastructure are setting the direction of travel.

...With Europe leading the way with the most progressive initiatives, but other regions across the globe following in the same direction.



**Recyclability, and
compatability
with recycling
systems, will be
mandatory.**

**Inclusion of recycled
content will become
a standard practice.**



The background of the slide is a photograph of a workspace. In the foreground, a hand holds a pencil over a white sheet of paper covered in hand-drawn sketches of various geometric shapes and boxes. Some sketches include circular cutouts. In the background, several cardboard prototypes of different box designs are visible, some with circular or rectangular cutouts. One hand is holding a small, partially assembled cardboard box with a grey rectangular patch on one of its faces. The overall scene suggests a process of iterative design and prototyping for packaging.

**There will be
limitation on weight,
volume, wasted space
and superfluous
packaging.**

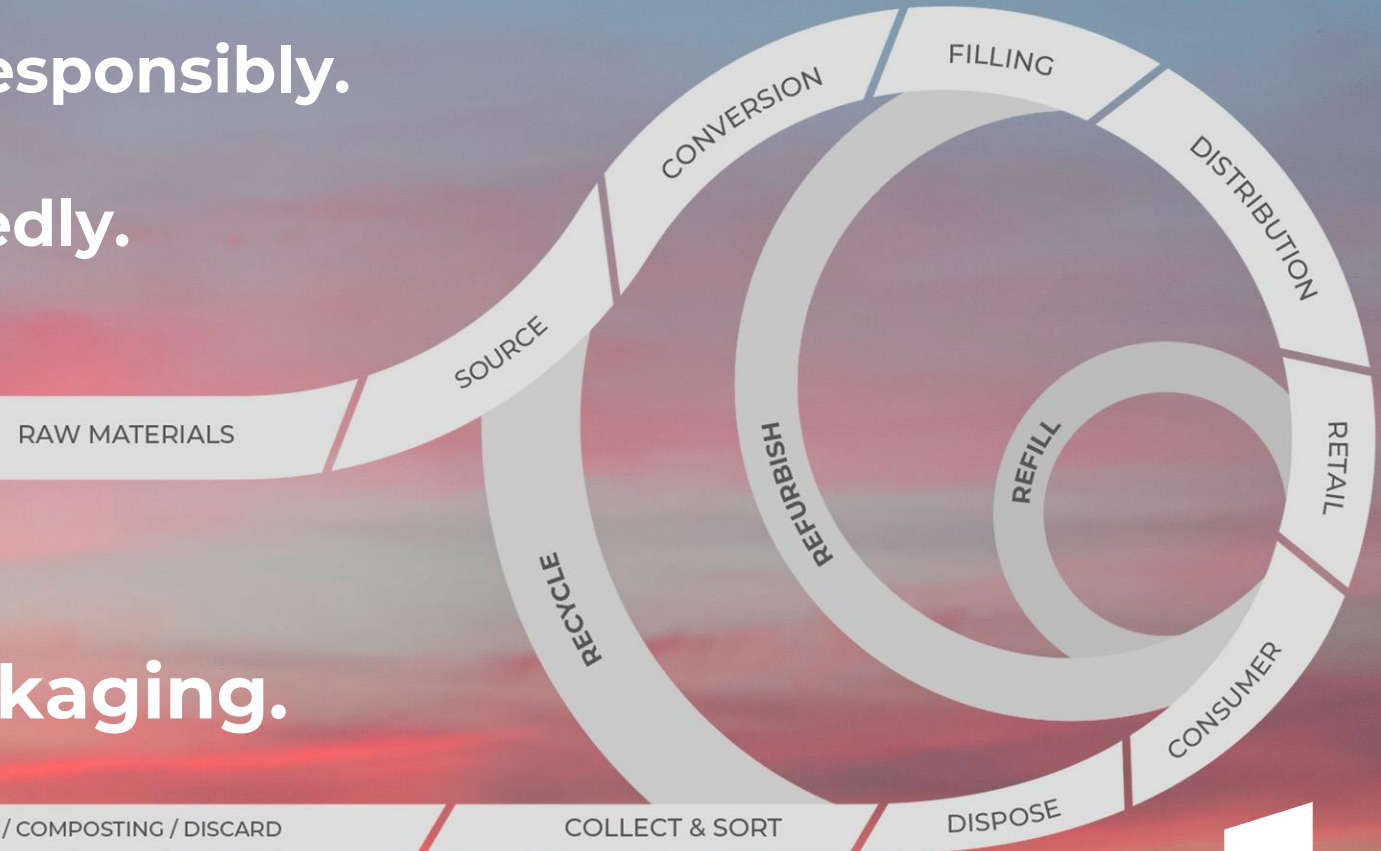
A switch will be required from single-use to reusable solutions across categories.



In Europe, by 2030:

- We'll create less waste.
- We'll use resources more responsibly.
- We'll use resources repeatedly.

To ensure a functioning
circular economy for packaging.





**This sets the foundation for longer
term packaging innovation**



**Let's consider what life
might be like in 2050**

The global population has risen to 9.7bn.

Advances in technology and healthcare will mean we are healthier and live for longer.

- Biotechnology and gene editing
- Cures for disease
- Diagnostic tools and wearables
- Tailored healthcare, nutrition and fitness plans



The world economy, and average GDP, has quadrupled.

Automation, robotics and AI will boost productivity, leading to greater wealth, and more free time.

- 50% of current jobs in the world unlikely to exist
- Working week is reduced and more flexible
- Purpose of work may shift to community building, entertainment and the arts

70% of the population live in urban areas.

Changes in urban design and infrastructure mean daily life and our appreciation of the world around us changes.

- Improved infrastructure and transportation
- Highstreets evolve from shopping to experiential destinations
- Wearable interfaces plus virtual and augmented reality transform physical surroundings

Individuals own an average of 25 connected devices.

Opening up possibilities for entertainment, connection, community, and convenience.

- Smart appliances facilitate automatic payment, reordering and waste reduction
- Self-driving cars
- Personalised entertainment
- Language and geography no longer a barrier



We are using double the volume of plastic and 80% more energy.

A growing population and economy means a larger drain on resource, but industry will increase renewable and regenerative practices.

- Materials and processes that clean the air
- Produced from waste, landfill and by-products
- Reliance on renewable wind, solar, and biofuel energy
- Digitised, AI and Cellular farming operations



**As a result of the foundations
we lay today and the changes
in society along the way, by
2050, the purpose of our
industry will evolve.**

Packaging will evolve to:

Fit seamlessly into a more connected world

Work for a broader, larger population

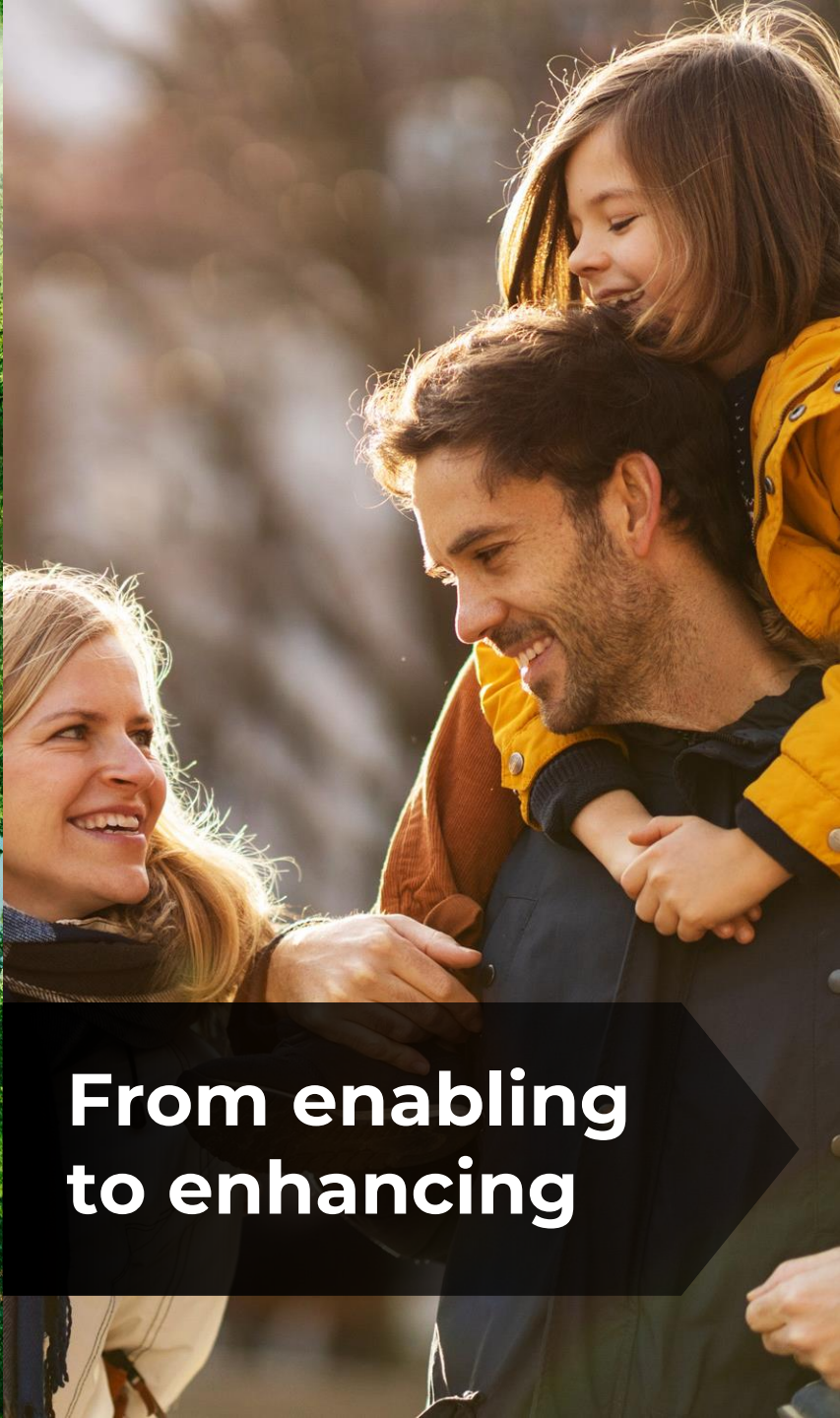
Give back to the planet

We foresee 3 future directions for packaging...



**From recycling
to regenerating**

© Touch Design Ltd 2024

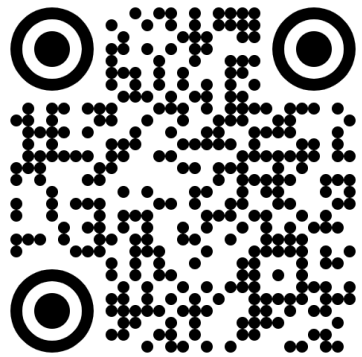


**From enabling
to enhancing**

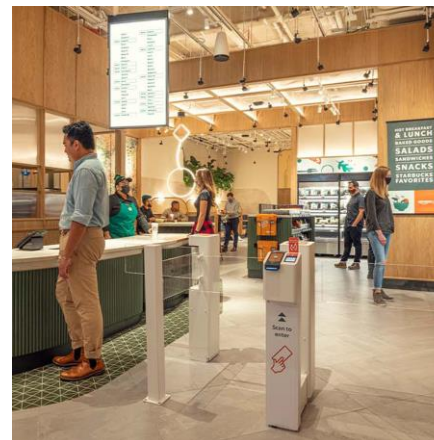
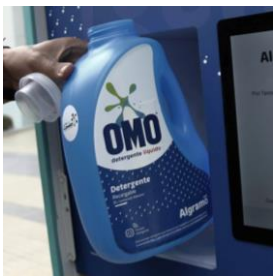


**From individual
to collaborative**

Exploring the future directions



vaultbytch.com



VAULT
by touch



From recycling to regenerating...

As recycling infrastructure improves, packaging materials are becoming a valuable, circular resource – reducing the need for non-renewable materials.

Once part of an established and thriving circular economy, packaging will no longer be a burden on our natural resources. In fact, perhaps, it will be a tool with which to renew and regenerate: lowering climate impact, cleaning the environment and supporting society and communities.

First PET bottles made from carbon emissions

LanzaTech and Plastipak have created the first PET resin from carbon emissions, used by Swiss retailer Migros in packaging for smoothies and cleaning products.

- The bottles are fossil-free and have a lower carbon footprint.
- They actively help reduce CO2 levels in the atmosphere.



Free Water and water projects funded by ads

On average, an American buys three bottles of water per day. Free Water offers bottled water for free by using packaging space for ads.

- Advertisers fund the water, and 10 cents per bottle is donated to global water projects.
- If 10% of Americans switch to Free Water, \$1.2 billion could be donated annually to fight the global water crisis.



Carbon capture vending machine

Asahi Group Holdings is trialling innovative CO₂-absorbing vending machines, equivalent to the carbon uptake of 20 Japanese cedars annually.

- 30 machines to be deployed in Japan's Kanto and Kansai regions.
- Captured CO₂ to be repurposed for industrial uses like fertilizers and concrete.
- A step toward Asahi's 2050 carbon neutrality goals, capturing 20% of their operational emissions.



Plastic waste into fertilizer.

The University of California, Riverside has developed a method to turn plastic and corn waste into bio-char, a soil additive.

- Non-toxic and safe for the environment, the process removes harmful polymers.
- Bio-char improves water retention, boosts carbon capture, and fertilizes soil as it breaks down.



From enabling to enhancing...

Packaging doesn't just contain and protect a product – it plays a key role in the way we physically interact with it.

As we seamlessly integrate technology into our daily routines, we expect the role of packaging to evolve from simply enabling the protection and use of a product, to enhancing the moment: with friction-free payments, automatic re-ordering and effortless connections, both real and virtual.

Seamless experience powered by the IoT

The reusable Vitamins.io platform is a smart new generation of connected packaging for supplements.

The bottle monitors when it has been opened & closed, reminds the user to take the next dose by blinking and playing a melody, and connects to an app for automatic re-order prompts and to unlock loyalty rewards.



Bottling a Hyper-personal Experience

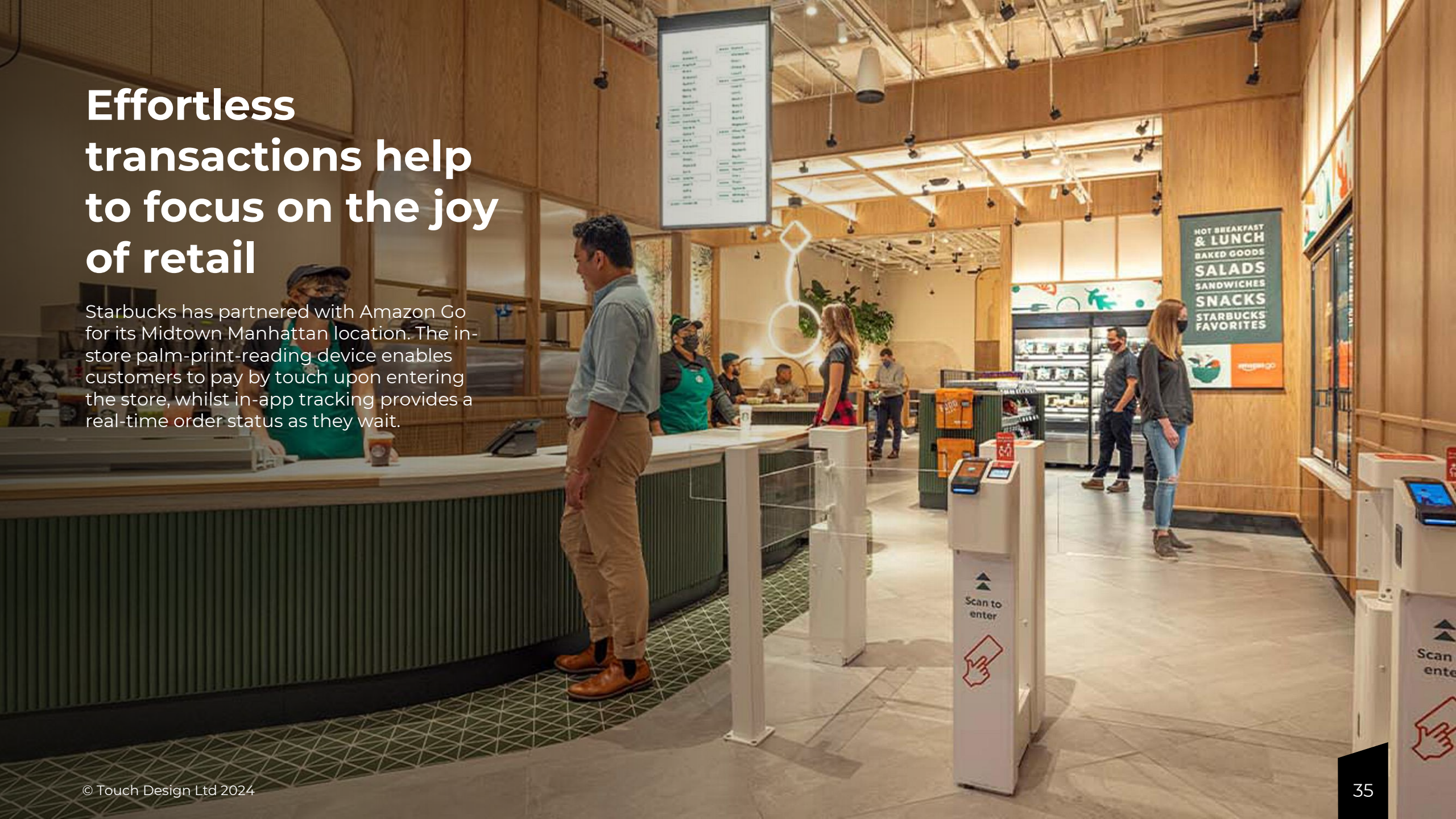
In celebration of its 50th anniversary, the Sierre-Zinal event went the extra mile by gifting each of its 5,800 runners a personalised refillable water bottle digitally printed with the runner's name and an embedded NFC chip.

When scanned, the NFC chip unlocks a treasure trove of personal race images and videos unique to the individual runner, making the digital content and physical bottle something to cherish forever.



Effortless transactions help to focus on the joy of retail

Starbucks has partnered with Amazon Go for its Midtown Manhattan location. The in-store palm-print-reading device enables customers to pay by touch upon entering the store, whilst in-app tracking provides a real-time order status as they wait.



Wearables will transform the way we browse

The advancement of wearable technology has opened the doors to new ways of shopping.

From augmenting another layer of content in-store to enabling a virtual shopping experience in the comfort of your own home. Spatial computing will change the way we experience brands and products forever.

Since the launch of the Apple Vision Pro multiple brands have created virtual shopping environments. Including:

- Elf Cosmetics
- Decathlon
- MyTheresa
- Alo Yoga
- Lowe's
- J.Crew



From individual to collaborative...

As regions around the world begin to adopt reusable packaging models, one thing will become clear: it is difficult to do this at the scale we need without collaboration across the value chain.

Rethinking reusable packaging as a shared asset that multiple businesses and brands can utilise will achieve the critical mass required for reuse to thrive: driving efficiency, profitability, consistency and consumer convenience.

Collaboration ensures success of Canadian returnable beer

The Beer Store, co-owned by Labatt, Molson Coors, and Sleeman, has run a refillable beer cooperative with a deposit return system since 1927.

- Near 100% return rate through competitive collaboration.
- Over 75 billion bottles recovered for refilling since inception.

Standardising to save space, time and money

På(fyll) is an e-commerce platform offering reusable, modular packaging for personal, laundry, and home care products.

- Stackable refill packs fit any container and are collected for sanitization and reuse.
- Standardized logistics and cleaning allow products to be offered at a discount.



Project refill, all bottles are welcome.

Project Refill™ is a nationwide scheme that enables customers to bring any empty 70CL bottle to be refilled from a bulk dispensary.

Not only does this stretch the life span of a spirit bottle beyond single use, but it also cuts out the need to purchase another new refillable bottle.



A brand built around an unexpected standard

Kankan redefines liquid soap refills by using beverage cans, turning disposable packaging into a stylish, everyday display.

- Utilizes industry-standard canning, from filling to multi-packing.
- Offers a refill format that consumers naturally know how to recycle.
- Made from infinitely recyclable aluminium, one of the most recycled materials globally.



Next-generation glass could unlock reuse

LionGlass is an innovative glass developed by Pennsylvania State University, offering key advantages for packaging:

- 10x stronger than traditional glass, allowing for thinner, lighter packaging, reducing material use and transportation energy.
- 50% lower carbon footprint, thanks to its carbon-free composition and lower melting temperature.
- Promising for reuse and sustainable glass applications, still under evaluation.



To sum up...

**The next decade will see us lay
the foundations for a thriving
circular economy...**

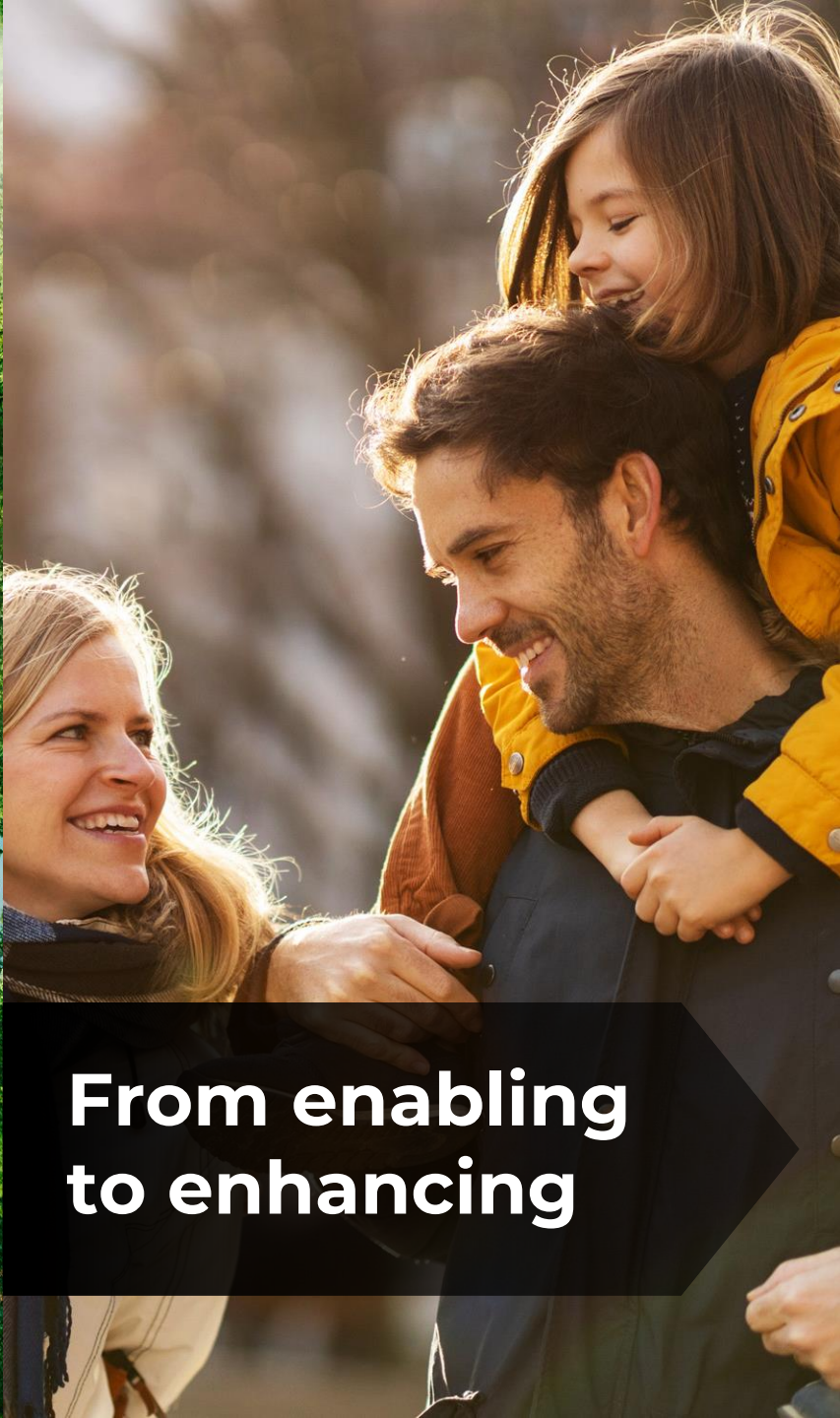


**...and the future changes in
society will mean that by 2050,
the purpose of our industry
will evolve.**



**From recycling
to regenerating**

© Touch Design Ltd 2024



**From enabling
to enhancing**



**From individual
to collaborative**



The world beyond 2030 may feel uncertain, but as an industry, the possibilities to shape a positive future are real.

Thank you

touch



www.touchdesign.com