

zappar

# Guide to Connected Packaging



**Zappar** is the world's leading augmented reality platform and creative studio for mobile and web apps. Since 2011, Zappar's mission has been to democratise AR and get it into the hands and lives of as many people as possible, unlocking value for businesses and end-users alike. Zappar's award-winning AR platform and creative consultancy, enable brands, businesses and license partners across the world to deploy innovative and market-leading AR solutions across the mobile web and native apps.

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## 2021 update: The 'How Connected Packaging works' report

In 2021, we carried out research in collaboration with Experience is Everything and System1, which investigated the efficacy of using AR campaigns for packaging.

This research found that...

AR delivers a scan rate between **2-4%** for CPG brands, as well as **90+ seconds** average dwell time, and around **2.9 scans per user**

AR advertising outperforms traditional advertising by **55%** dwell time, and around **2.9 scans** per user

Levels of 'happiness' and 'surprise' reported by users were **55%** higher for AR campaigns than the advertising standard (non-AR) scans per user

Based on benchmarking carried out in this study, CPG brands could expect a **3% growth** in market share by using AR in packaging campaigns than the advertising standard (non-AR) scans per user



**1. Context**

**2. WebAR**

**3. Planning your connected pack campaign**

**4. The Evolution from AR to Always On Strategy**

We are now living in an age where smartphones dominate our personal and business lives. As one of the era's most transformative / disruptive technologies they have become the one accessory it seems we cannot survive without.

Packaging represents one of the brands most undervalued owned media channels but in many cases it is an analogue proposition in an increasingly mobile first world.

What really excites us about the concept of connected packaging is that it surrounds us in our everyday lives. It's on our kitchen tables, on our desks at work, in our kids school bags. The humble pack is a brand's most vital communications channel but until now it's been sat there silently. Now, thanks to the ever present smartphone and the power of Zappar's augmented reality platform, product packaging can be transformed into a multimedia portal that can deliver value to both the consumer and the brand - and this is a vital value exchange which we will cover later.

# 1 Context

What is important is to put connected packing and augmented reality into context and as an experiential technology, there is no better way than trying it for yourself.

This **Bombay Sapphire experience** is a great example of how a brand can drive the enjoyment of a product by teaching the consumer how to successfully use the product at a critical moment of assistance.

By scanning the QR code on the neck tag and aiming the camera at the label's beautiful floral animation grows from the bottle itself and 3 cocktail recipe videos give the consumer easy and inspiring tutorials.



While driving enjoyment and therefore use is a great example, further commercial value could be extracted from such an experience by encouraging consumers to share their cocktail creations on social media as part of a competition or registering their email address in exchange for a discount coupon to drive the next purchase.

There has been a lot of research conducted into the changing consumer landscape and the demand for AR which has turned up some interesting findings.

66%

of millennials are prepared to spend more on sustainable products (Nielsen 2015)

78%

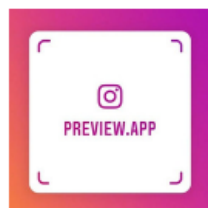
want more information than just appears on the pack (digimarc Harris Poll 2016)

50%

want to scan for product provenance (stylus Packaging Futures 2017)

93% of Gen Z want to connect with brands for unique experiences

We also need to understand that scanning the world around us to unlock a digital layer of information or experience is no longer a new and little understood action. Just look at the many major platforms that have been investing heavily in teaching us to scan visual codes to unlock content.



When an app download was the only way to access AR content these platforms offered a huge audience with the app pre-installed on their devices. This audience provided a solution to the friction caused by the need for on-the-spot app download - especially if they were in a retail environment or on the move without WIFI.

The advent of **WebAR** however, has removed the need to download an app as the majority of smart devices can now run an AR experience on their web browser. Therefore, unless your brand is specifically using these platforms, there is no longer a need to pay the attendant media fee or lose the important user data from your campaign - problems typically associated with working through these apps.

From a brand's point of view the value of AR needs to be proven in metrics that show that value has been delivered back to the business. This can be measured in a number of ways: for instance total impressions and hours spent in the AR experience as a proxy of active brand engagement or dwell time and therefore media value. We can also work with a brand's own analytics to attribute sales uplifts or increases in consumer lifetime value back to the AR experience. Augmented reality can also be used to help drive data collection, social media shares or downloads of a brand's app.

The figures listed below all represent live AR projects from across packaging and retail campaigns.



## 2 WebAR

Welcome to the tipping point for mass adoption...

**WebAR** is probably one of the most exciting and important developments in the history of AR to date and is proving to be a major tipping point in both consumer and brand adoption of the technology.

By definition mobile WebAR is the art of using the smartphone's native web browser to run the AR experience. By native we mean the normal Safari (for iOS devices) and Chrome (for Android devices) that arrive pre-installed with the devices.

A recent survey by one of Zappar's partners in the US revealed that **89%** of those surveyed understood what a QR code was and how to access it.

**82%** of devices now support QR code scanning





With **Zappar's solution** brands can customise the entire experience including the WebAR launch page.

Activating an AR experience is as simple as accessing a web page which can be done by entering a URL or scanning a QR code to reach the page. Now when you consider that with the fact iOS 11 and the Android 9 operating systems, smartphones now have a QR code reader inbuilt into their native cameras, this makes onboarding consumers to your AR experience from your packaging almost universally accessible and super easy. With the opening Bombay Sapphire for example, you experienced WebAR first hand by simply scanning the QR code and aiming your device at the bottle.



*\*82% of devices support QR code scanning is based on media reports estimating the number of devices running iOS 11 and Android 9 operating systems and upwards.*

### 3 Planning your Connected Pack Campaign

*So, you have secured buy-in from your internal stakeholders, you've allocated the budget to activate your on-pack AR campaign, the next step is to start thinking about the fun creative concept, right?*

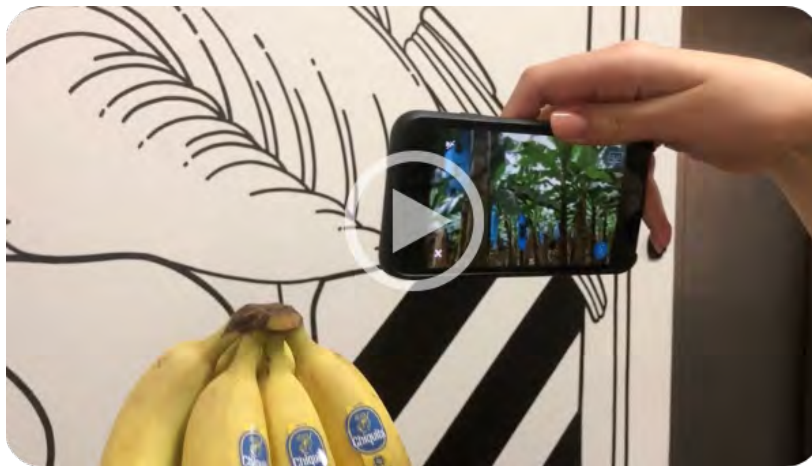
Well not quite yet. To make sure you are creating a campaign that truly delivers value back to the business you need to start by setting your objectives.

This chart is not the definitive list of the value that AR can deliver from on pack campaigns but it does represent a good selection of the most popular objectives our partners aim to achieve.



## Brand Purpose and Sustainability

We have reached a new age of consumerism where sustainability and brand story matter more than ever. However, the incredible work a brand may be doing behind the scenes to support their communities or reduce single use materials and CO2 footprint of their packaging can get left buried on brand websites to be read by only the most determined of consumers. With AR these brand stories can be brought to life where it matters most at the point of sale, to all consumers holding your packing through an easily accessible and engaging experience. Chiquita Bananas used AR to tell their story of how they committed to investing in looking after the farmers in their supply chain.



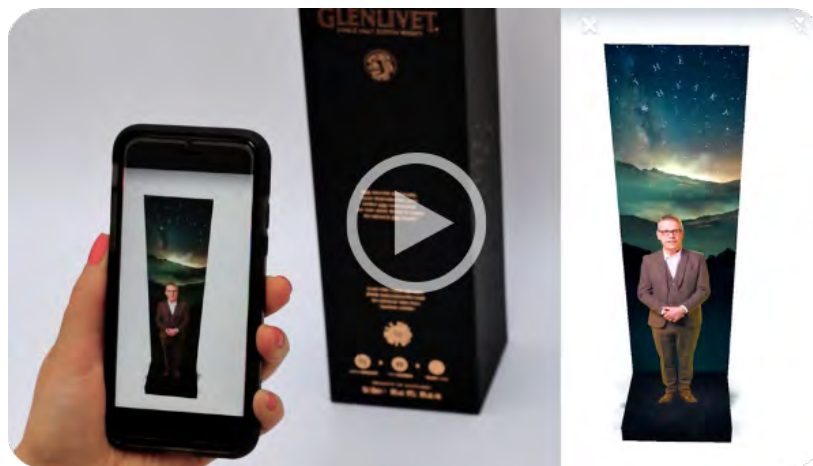
## Brand Provenance & Ingredients

Similarly, in the world of the more conscious consumer we're ever more aware and interested in the story behind our products, their provenance, authenticity and ethical values. People want to know what goes into their products and want this information in an easily digestible format. Alpen-Salz used AR to tell the story about their alpine origins.



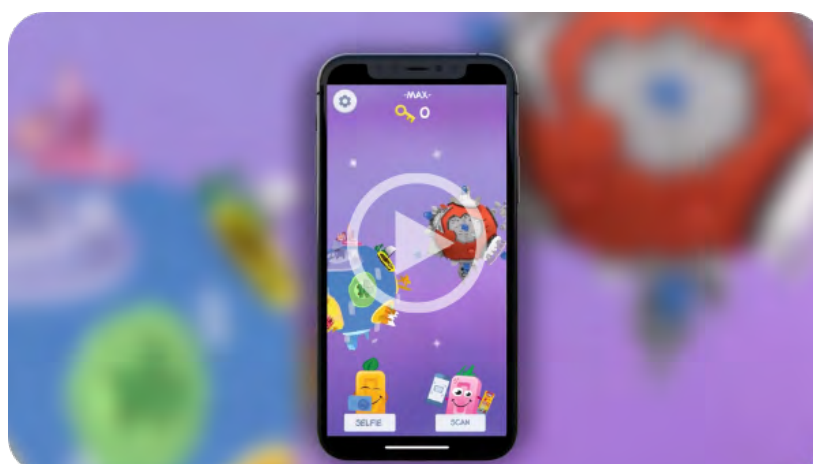
## Inspiring Brand Use

As we demonstrated with the Bombay Sapphire experience at the beginning of this guide, teaching consumers how to use your product more effectively is a powerful way of increasing use and the consumer lifetime value. Product tutorials are a powerful tool for consumer education in industries such as food and beverage or cosmetics. With recipe ideas but also makeup tutorials and upcoming trends. Another example from the food and beverage is our Glenlivet campaign.



## Sales & Loyalty

Adding value to packaging via digital rewards is a cost effective way to incentivise purchase as it doesn't require margin eroding discounts or buying expensive and environmentally damaging plastic premium gifts - think old school toys in cereal packs. Our partners PEZ were one of the leaders in this area and while this is campaign first launched in 2016 it still stands out as a best in class example of a using digital rewards to drive sales and long term consumer value



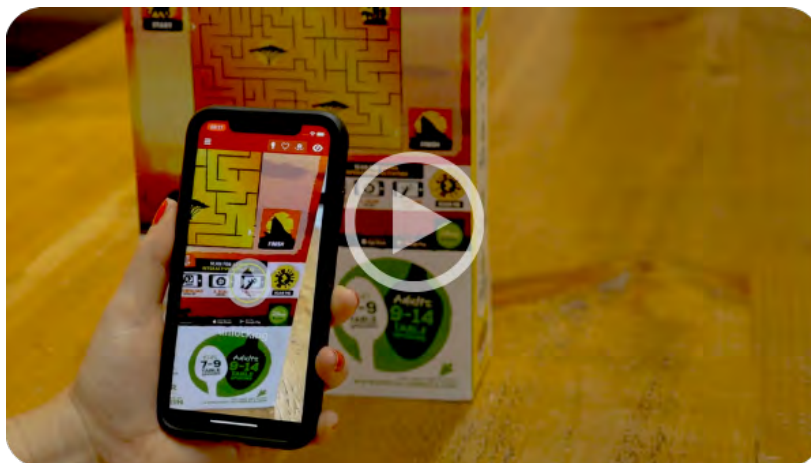
## E-commerce

Once we have got your product in the hands of the consumer and they are inspired by your AR experience this is a great opportunity to encourage the next or additional purchases. For example by linking them to a chosen e-commerce platform, to buy a companion product from your range.

This concept becomes even more compelling when brands are launching their Direct To Consumer propositions.

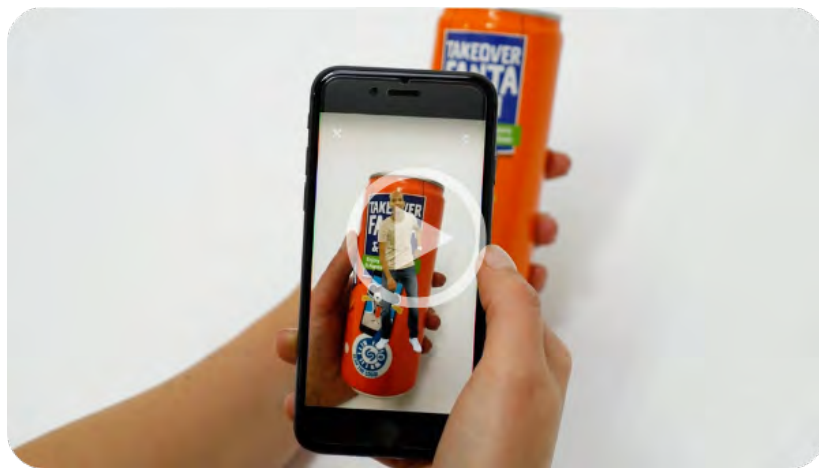
## Brand Partner Promotions

For many brands who have invested heavily in sponsorship and promotional opportunities around a consumer passion point (art, music, film, sport for instance) or brand ambassador or endorsement program traditionally the pack has been a means of distributing and displaying this partnership. With AR that often 'title sponsor' partnership can be enhanced to offer greater value for the brand, licensor and therefore end user through more in-depth experiences. Nestle have successfully leveraged their partner promotions with Disney's The Lion King and Universal Studios with Minions for their breakfast cereal brands. Taking a known on-pack marketing tool and delivering deeper levels of engagement and interaction through AR.



## Social Media Sharing

Most consumers are connected to at least one social media network and seek out experiences that enable them to stand out on others newsfeeds. Brands can harness this need through delivering an AR experience that meets this criteria and gives the consumer the chance to share this on their platform of choice. Fanta and their Teen Takeover campaign was a great example of this, they used social media influencers to drive sales of the drinks and then turned the consumers into social media influencers themselves with a range of fun face filters.



## Data Collection

Knowing more about consumers is vital to many CPG brands and quite often this information, whether it be email addresses, consumption habits or opinions about the brand, or pack design itself, can be very difficult to come by. We have found that through building an engaging AR experience you can create an environment where the consumer is more likely to scan the pack and share their details.

## AR and the Customer Journey

While in this guide our focus is the benefits of AR on packaging, we must acknowledge that this is only a single slice of the consumer journey. There are multiple stages in the consumers decision making process that begins well before they have the product packaging in their hands.

To keep this section brief, at a very high level the consumer journey can be broken down into 3 key stages



**Consideration**  
Press, Digital Adverts



**Point of Purchase**  
E-Commerce  
Contactless Retail



**On Pack**  
Engagement

Awareness & Consideration the consumer is either researching for a product to suit their need and this could include press or online advertising, websites, influencers etc

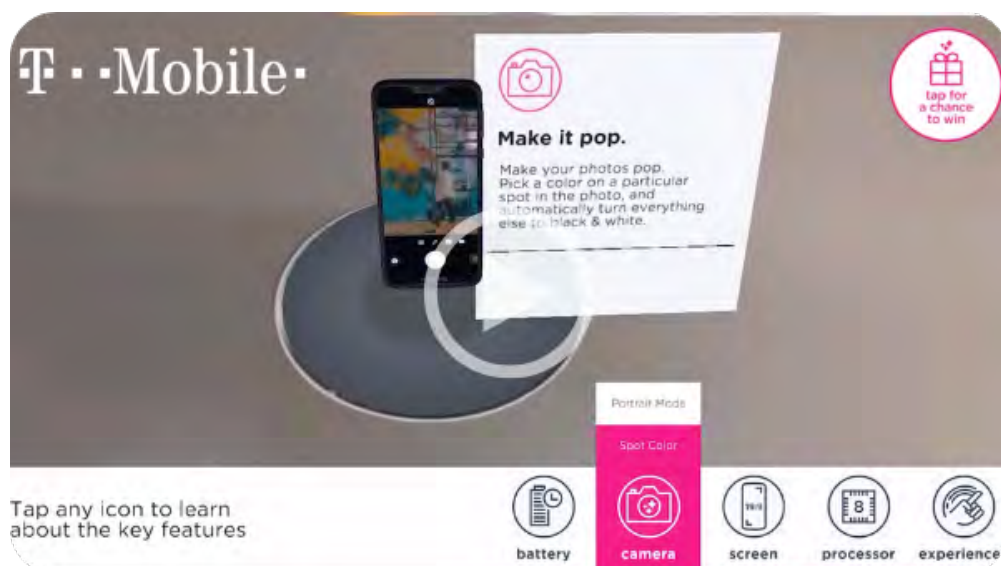
The point of purchase at either a bricks and mortar or e-commerce retailer and then finally when they have the product in their hand

Finally when they have the product in their hand. This moment of assistance is where we have the opportunity to deepen the brand experience, drive loyalty and future sales or cross-promotional opportunities.

When we are working with partners in planning their AR campaigns we always review where else in the consumer journey the AR content could be used.

An interesting use case has appeared as a result of COVID and consumers reluctance to touch the physical products within stores. A phenomenon the marketing industry has already dubbed 'contactless retail'. However, with the power of AR, consumers can use their own devices to scan a product display or other point of sale material to learn more about the ingredients, performance etc without needing to make physical contact with the packaging.

The team at Motorola did exactly this for their handset launch in T-Mobile stores a couple of years ago. The user could scan the in-store display to learn more about the new handsets without touching any physical product.



# The Consumer Value Proposition

AR is most powerful when used to solve a problem, deliver value or offer assistance at your consumers' point of need.

When planning your AR campaign you need to think about your consumers' persona, the context they'll be in when holding your product and how scanning can offer them something educational, fun or useful or ideally a combination of all three.

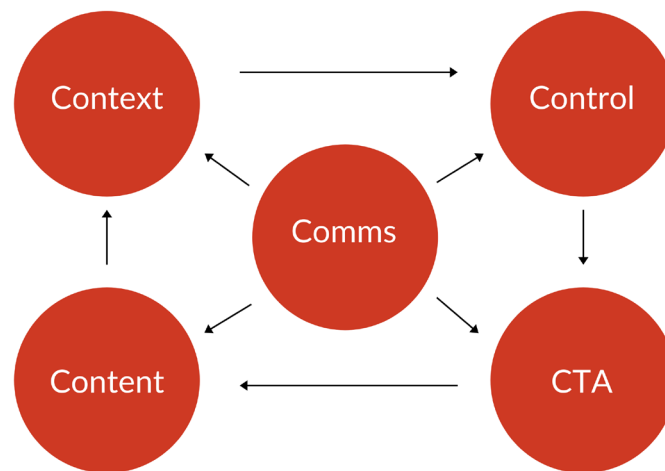
In order to deliver any kind of commercial return to your business through AR, first you need the consumer to scan and become engaged in your narrative. If you do this successfully and build a connection with the consumer through a genuinely useful or engaging experience they will be more inclined to entertain your commercial ask of them - whether this is sharing an email address, buying the product again, sharing on social media or any of the options we have listed.



## The 5 C's for Success

What you quickly learn is that success has little to do with the technology and everything to do with the process and communication. When thinking about your connected packaging you need to consider the 5 C's.

The order of considering these five C's is also important starting with the Context. Let's look at the five C's in turn.



**Context** - Put yourselves in the shoes of your end user in the exact moment of assistance and ask yourself what that moment would feel like: do you have a hand free at the moment, good network connectivity and the dwell time to make it a positive scanning experience?

**Control** - How well can we control this context: the lighting, the image itself being scanned, the distance of the user from it, occlusion, the acoustics, file size etc. The more control we have in that context the better the end user experience. Remember that when it comes to AR, the experience will only be as good as what the camera on the device can see at that scanning, detection, initialisation and tracking moment.

**Content** - Make sure the content you are delivering is valuable to your users and could not have been more easily accessible or better delivered by just going to your website or YouTube channel! Reward them for their participation with digital value add or real world value (sweeps, coupons etc.) and offer levels of immersion, engagement and interaction that make AR so powerful.

**CTA** - Make sure the Call to Action clearly tells people HOW to scan and WHAT they are going to get for their efforts. Make sure the CTA is connected to the image or place you're asking people to scan. The greater the distance from CTA to scanning moment the greater the drop off in activation. Getting the CTA right is crucial. This is the C that on the surface seems the simplest to get right but 9/10 is left too late or not thought about deeply enough. Remember that no-one is looking for (or cares about!) your AR experience so be very clear about what you are asking them to do and what they're going to get.

Now a CTA is often a tough piece to pull off for many CPG brands due to lead times, manufacturing costs and the issue of legacy products in market. New improvements in digital printing are offering up new opportunities here for limited edition runs and initial test & learn prior to full implementation. It remains the case that the more permanent and linked to the primary product design the CTA can be, the better the long term results. However secondary options are available (that still have cost and logistical implications) from neck collars, hang tags to stickers and sleeves. But the reality is that these ambient extensions lack permanence and can be discarded and removed, impacting the potential for ongoing usage in that secondary moment of assistance post purchase and at point of consumption. If you are using a secondary and ancillary mechanism on pack generally you need to ensure that the message is even more single minded, eye catching and clear to demand attention.

**Communications** - Make sure to leverage your other comms channels to tell people about this new camera capability (through POS, Print, TVCs, social, online ads, influencers, PR, internal comms etc.). This is a new behaviour for your audience so help them understand the benefit and how they can participate. Remember, beyond your core consumers, your internal audience and sales staff are your most powerful advocates for spreading the message.

We find that when there are failures or shortcomings in a campaign, going back and revisiting how everyone collectively performed against the five C's is instructive to improving for the process going forward.

## Omni channel call to action

The Call to Action needs to be prominently displayed on the packaging that the consumer needs to scan, and we need to sell the benefit of scanning. This example from Carlton Dry beer in Australia shows how the Call to Action was promoted onpack, at retail, online and via their social channels



On Pack



Point of Sale



Online

## 4 The Evolution from AR to Always On Strategy

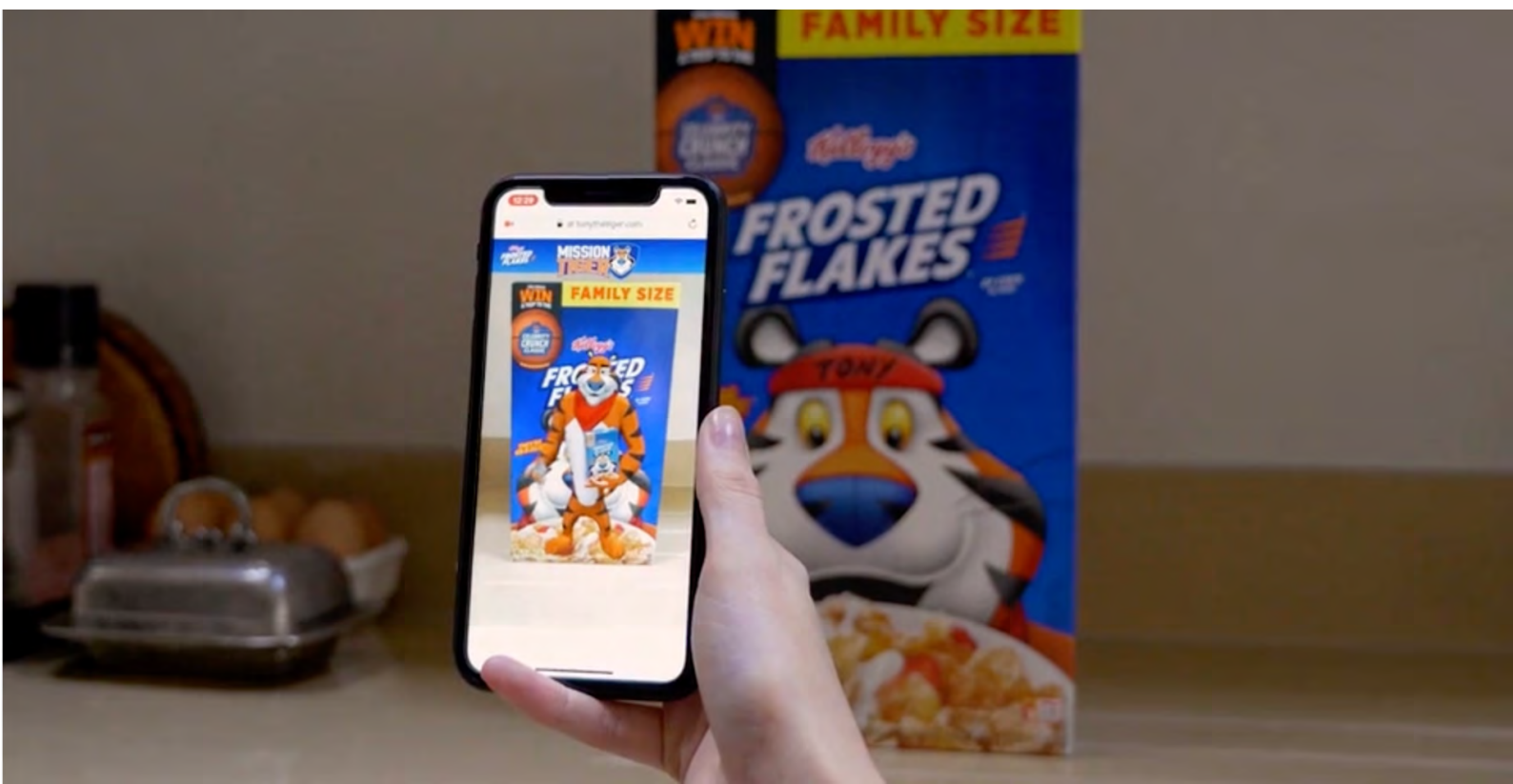
The majority of AR campaigns tend to be marketing lead and often released to coincide with packaging design updates. However, changing pack design comes with a price tag and can be a lengthy internal process.

For these reasons we are seeing a growing trend for what we call 'Always On AR'. This is where a code and Call to Action is permanently designed into the label or pack to deliver a regular stream of content which can be updated seasonally without changing the design. This series of content updates can be designed to deliver major promotions around annual events such as Christmas and then more practical information at other times of year.

Forward thinking brands like Nestle, Beiersdorf, Coca-Cola, Unilever, Reckitt Benkiser and Kellogg's are all embracing this new approach to connected packaging. Kellogg's in the US have made digital discovery central to their on-pack strategy to connect their customers to the brand purpose behind their various products: from Special K to Frosted Flakes.

Nestle's team in Mexico permanently connected their products (Carnation milk, Media Crema, La Lachera, Maggi) to video recipe content to inspire their consumers.

These brands and businesses are thinking about their camera strategy and how they can deliver practical, everyday value and more contextually relevant experiences to their users. Augmented reality and connected packaging are becoming part of their omni-channel planning strategy and not simply a one-off campaign amplification tool.



Indeed there are thought leading brands who have even taken AR further upstream and into their New Product Development and consumer research departments to trial and rapidly prototype new concepts with consumers at a fraction of the cost whilst also delivering higher response and completion rates from these surveys to derive better data and insights.

It would be wrong to underestimate the level of effort and the importance of buy-in at the most senior level within an organisation for a truly effective connected pack strategy to work. This necessarily takes time, close collaboration and cross-departmental coordination to execute flawlessly. It involves multiple stakeholders from marketing, brand and product teams, design, innovation, IT and procurement alongside attendant agency partners. There's upfront thinking required to consider lead times, localisation, data security/ integration and of course legal requirements. Systems for digital project management, permissions, approvals, adaptive design and data analytics all need to be taken into account. Creating a robust, scalable, efficient and therefore affordable system from day one is important for connected pack to scale within an organisation, across regions and agency groups. The benefits of building the right system from day one is what we've spent the last decade understanding and implementing for our brand partners. Our approach to the AR ecosystem allows the right level of customisation at each level of the required tech stack (from scanning, tracking and detection through content authoring, hosting & serving to distribution and data analytics). We'd always advocate a 'crawl, walk, run' approach: identifying the right product and test market(s) to pilot the process and inspire the business through evidential learning. This will also iron out the inevitable kinks in the system and establish the best practice moving forward for further rollout.

All our learning and research point to the fact that it is worth the effort. Leading to higher than average scan rates, registration, sign ups, dwell time and purchase intent than other digital media.

We'd go as far as to say that connected packaging in the digital age currently being accelerated by the trends in no/low touch and contactless shopping in a post-pandemic era is an inevitably and corporate imperative. The status quo of passive products and analogue packaging will soon feel antiquated.

We'd encourage brand owners to start the journey now as this most certainly is a marathon rather than a sprint.

**Caspar Thykier CEO, Zappar**

**Looking to add AR in your packaging?**

**Get in touch today >>**

