

A company-based newspaper focused on packaging and emerging technology

BULLETIN

Augmented Reality, unleashing the potential of Packaging Communications



Augmented Reality used on a ketchup bottle (http://www.idgconnect.com/)

Augmented Reality (AR) is the bridge between actual and virtual reality. Where computer generated, virtual objects are simulated over a real world environment.

With Google stating that they have a bigger focus Augmented Reality on than Virtual Reality (VR) (9to5google, April 2016) and Digi-Capital predicting that AR will be a \$90 billion industry by 2020 (compared to \$30 billion for VR,) it's easy to see why AR has been voiced as one of the rising trends of packaging for the past few vears.

As the Internet of Things grows rapidly along with the use of social and digital means to increase brand engagement, AR is certainly a key method that can be utilised to enrich the user experience. Here's our view on where with the greatest potential exists for implementing AR:

Agrochemical packaging for training in stewardship - AR has the power to make the information provided in booklet leaflets more accessible and relevant via diagrams and animations, thoroughly enriching experience. the user For example, with AR, customers simply hold up their smart phone to a pack to be shown images of the required PPE to wear and video instructions on how to use the product and then triple rinse the pack. Much more convenient

than searching and reading through lengthy information booklets. AR has a further advantage, breaking language barriers if animations and images are used.

Pharmaceutical packaging increased for patient safety and adherence -Non-adherence is a huge and costly issue within pharma and the wider health service. AR could grow to be an extremely valuable tool in alleviating this problem. For example, diabetic patients could hold their smart phone up to their body and the correct areas to inject insulin would be mapped onto an image of their body, removing any uncertainty about the process. AR features, on tablet cartons for example, could also be used to supplement and replicate information from the PIL in a more user friendly way. PIL's contain vital safety information, but often go unread or become separated from the pharmaceutical pack; using AR ensures that the information remains with the product throughout its life.

FMCG packaging to increase customer engagement - With global brands like Snickers, Heinz, Cheerio's and Heineken already having utilised AR packaging via the app Blippar, other FMCG companies will certainly want to be jumping on this bandwagon. Heinz's AR tomato ketchup recipe book is a great example providing increased of product and brand information in way а that's useful and novel for the customer. Although AR use within FMCG has vet to be fully exploited, even these 'gimmicks' can increase consumer touch points, cementing a brand connection and driving repeat purchases in an increasingly competitive market. There's also the potential for brands and supermarkets to boost sales through AR, for example, the customer scans a pack of steak while shopping - a bottle of wine that complements the steak could be suggested for the consumer to purchase additionally.

There are of course some barriers to AR - these include the requirement for the app and a 'smart' phone. This may suggest a younger target audience, however, with 75 billion iOS and Android App downloads in 2015 and 2billion approximately smart phones worldwide, this may not be such an obstacle going forward.

Positive Packaging



Shrink wrapped cucumber (http://www.independent.co.uk/)

61% of consumers think fruit and vegetables "go quicker when in bad" packaging. This statistic highlights from EPA some of the negative connotations associated with packaging. The vital benefits of protection preservation that and provides packaging often ignored or are misunderstood and instead packaging is frequently viewed as the enemy to sustainability.

The reality is that environmentally responsible packaging is something that is certainly attainable. In fact, in many cases it's actually better to increase the packaging to reduce food waste or product damage, creating a system which is holistically more sustainable than if less, or no, packaging was used.

Although packaging may require resources and energy, the energy and resources required manufacture to and transport the product are invariably greater than those required for the packaging. This is where use of Life Cycle Analysis invaluable, becomes enabling the entire system to be understood and evaluated. In many cases packaging designed to protect and preserve the product actually helps utilise resources by preventing product waste.

Within the food industry there are countless great examples of the benefits of packaging to reduce waste:

 Consumers may guestion why their cucumber shrink wrapped in is unnecessary seemingly plastic, but these packaged cucumbers last around 5 times longer than their non-packaged counterparts. Apples sold loose lead to 27% produced more waste when compared to those packaged in trays and wrap.

• The used of Modified Atmosphere Packaging (MAP) - filling a pack with gasses, such as nitrogen, carbon dioxide and oxygen - requires thicker materials to provide sufficient barrier however; use of MAP significantly reduces food waste by prolonging shelf life both in distribution and in customer's homes.



Modified Atmosphere Packaging (http://paulonpackaging.com/) • Portioned packs and

snack packs may seem to use excessive packaging

but overall may be a more environmentally beneficial option to purchasing one large pack which can't be resealed effectively and causes food to spoil. It also provides portion control when cooking or serving the contents helping to prevent excess being



Chicken Breast fillets in MAP portion packaging (http://www.foodmanufacture.co.uk/)

cooked and then thrown away as leftovers. Hopefully the above examples highlight that packaging when used correctly is not the barrier to sustainability it is often portrayed as. Drawing on this shouldn't we be asking where we can alter packaging to prevent product waste rather than focusing solely on minimisation?

"Solving your product and supply chain challenges through effective design and pragmatically engineered packaging solutions."

pac

We are able to achieve this through a great team, with high levels of technical expertise and broad industrial experience. This wider experience allowing us to look at issues innovatively and from more diverse perspectives.

Our belief is that by innovating around your brief we are able to deliver excellence in thinking; our contributions to a number of patents bear testimony to that ability. As Packaging and Supply Chain experts we understand the diverse needs, and as a consequence see opportunity when others may not; driving efficiency, reducing costs and creating business benefit for you.

Our client base demonstrates that the combination of in-house expertise, our wider industry knowledge and the service we deliver is valued and that our clients can rely upon us to look after their reputations through great solutions that we can all take pride in.

t +44 1420 538055

www.idipac.com

office@idipac.com