

2020 FMCG OUTLOOK

In this issue, we partner with IRI to bring you a detailed insight into the FMCG sector in 2020. Daniel Bone, insights director at IRI, shares advice on how to bolster your business for the changing landscape.

THE CHANGING FMCG BATTLEGROUND

A new decade of retail.

A seismic shift in global retail is occurring amid profound changes in consumer culture and technology advancement. The race to keep pace is fast and furious, while executing new product innovation is tough.

The ability to meet the growing expectations of consumers is even tougher because of:

- a low growth FMCG marketplace influenced by a soft macro-economic backdrop
- complex paths-to-purchase amid intensifying omnichannel experimentation
- profound generational shifts in consumer preferences
- market fragmentation and entrepreneurial disruption
- personalisation being an impactful but challenging industry imperative.

FORCES DRIVING GLOBAL CHANGE

Consumer packaged goods (CPG) manufacturers have been struggling in a low-growth marketplace for several years now, although pockets of significant growth certainly do exist. In the financial year 2018–19, IRI recorded a 2.4 per cent dollar increase in FMCG sales. Without tobacco, the growth subsides to 2 per cent – well below the 3.1 per cent increase across all Australian retail reported by the

Australian Bureau of Statistics (ABS) in the same timeframe.

An increasing number of technology-enabled touchpoints have cropped up along the path to purchase, giving consumers virtually unlimited options of where to shop and what to buy. Demanding customers seek instant gratification; they want to purchase what they want, when and where they want it. The rapid adoption of e-commerce, mobile payments, delivery and pickup adoption reflect this reality.

Categories once solely available instore are now as close as one's fingertips. There is also increasing usage of mobile devices for managing all aspects of daily life – personal wellbeing, work, home and social. These changes are a driving force of market fragmentation and channel blurring.

The battle for omnichannel buyers is evolving between Amazon's vision of e-commerce (order and delivery) and retail's vision (order and pickup). As marketplace dynamics continue to shift, digital touchpoints will create more opportunities for more direct contact with consumers.

Meanwhile, competition for the consumer's attention and wallet is rapidly intensifying as the lines blur between discovery, research, shopping and entertainment. For example, YouTube's 'Beauty Try-On' feature allows beauty product trial in real time

during video playback with augmented reality.

STAYING RELEVANT

Instore purchases of CPG products remain the preferred method by most consumers but, as the level of omnichannel experimentation intensifies, suppliers and retailers will be forced to find new ways to stay relevant with their key consumers and shoppers, particularly around new omnichannel touchpoints.

For example, from 26 November 2019, Morrisons became the first UK supermarket to offer discounted perishable food past its "best before" date via the "Too Good To Go" app in all of its 494 supermarkets nationwide. This touchpoint connects users (1.8 million in the UK) with unsold food that might otherwise have been thrown away by European retailers and foodservice operators.

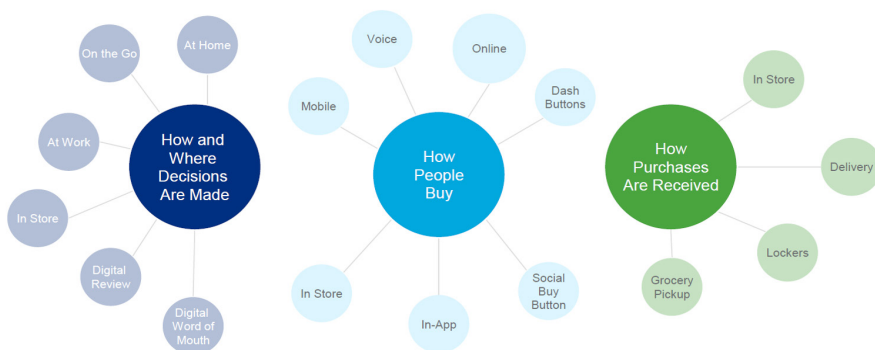
Such concepts will play a role supporting industry players in meeting their quotas around waste. For Morrisons, it is to halve food waste by 2030. Meanwhile, customers will be incentivised by the prospect of "grabbing a bargain" while also "doing good".

SHIFTING LOYALTIES

FMCG consumers are less predictable and less loyal (to both brands and stores) than previous generations. Indicative of the curious and promiscuous shopper mindset characterising today's consumer culture, less than a third of IRI's Australian shopper panellists say they perceive that "the name of the brand I buy is important to me". Younger consumers are device-obsessed multichannel shoppers with different preferences in terms of where they shop and what they buy. They eat out, shop online, and think green more than other generations. Meanwhile, ageing populations are redefining the lifestyle



The industry must think holistically by considering digital and physical pathways



norms of older age.

Size has been less of a competitive advantage when the opponent is fast and nimble. Everywhere there are examples of smaller, disruptive companies winning hearts and minds through fast thinking and innovation. Global FMCG giants, unable to move at the pace of start-ups and small businesses, have missed out on millions of dollars in sales to these more nimble players.

We observe this in Australia with independently-owned craft brewers growing dollar sales by 26 per cent year-on-year, and local craft distilled spirits gaining share in high-performing segments like gin (where sales are up a whopping 33 per cent annually). In 2019, IRI again observed that smaller suppliers delivered disproportionately high growth to Australia's supermarkets.

Industry fragmentation and the emergence of high-performing small and mid-size players offering products that anticipate consumer needs have spawned a flurry of mergers and acquisitions by larger players looking to place high quality bets on future growth opportunities. A telling recent local example is brewing giant Lion acquiring a 50 per cent stake in Victorian-based Four Pillars Gin in 2019.

Personalisation is here to stay, because consumers value personalised curation and experiences from companies (when done well). Amplifying personal relevance enhances engagement and satisfaction at a time when individualised preferences are becoming stronger and more forcefully expressed. In response, CPG brands must gain better insight into the individual consumer of a given brand.

But this imperative is challenged by widespread concern over data privacy, security and intrusiveness remaining

pervasive. Highlighting this, 75 per cent of IRI's Australian shopper panellists say that the statement "I don't like it when websites ask me for personal information" describes them "very well" (45 per cent) or "somewhat well" (30 per cent). The amplified focus on the source and use of consumer data will not subside anytime soon.

DATA AND TECH ENABLE COMPETITIVE ADVANTAGE

In a constantly changing marketplace where larger companies are still losing share to smaller ones, the need to move faster and with more precision is increasingly imperative. For global brands and retailers, the question is whether they can be both big and fast.

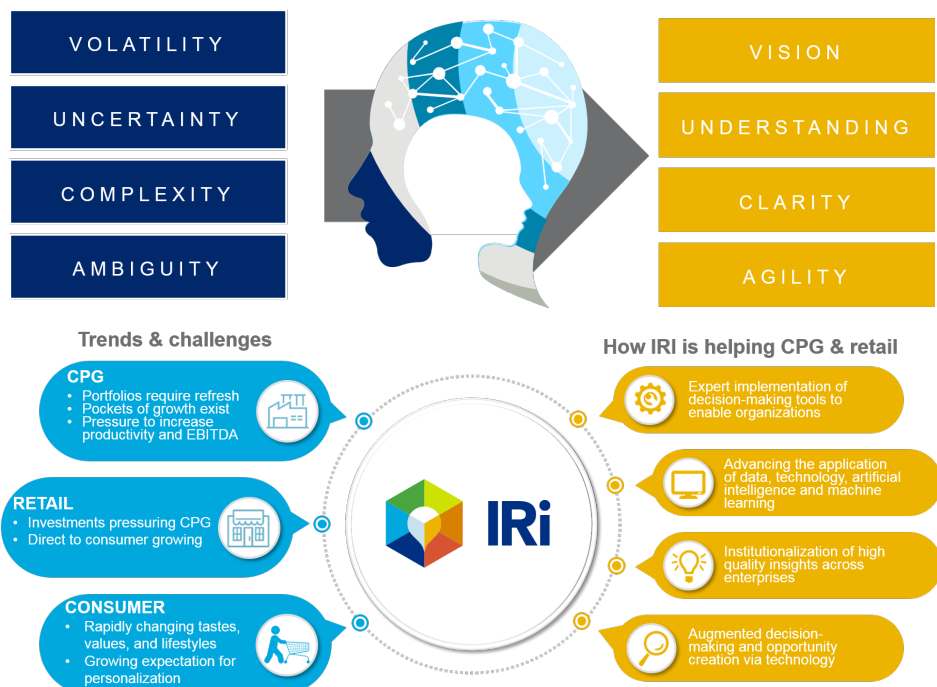
IRI's experience internationally reveals that harnessing data and real-time analytic insights is one of a few opportunities for retailers and suppliers to leverage scale and speed. In his

opening remarks at IRI's 2019 Growth Summits held in the US and Europe, IRI CEO Andrew Appel asserted that the FMCG industry used to be about "the big eating the small". Now, it's "the fast eating the slow" in an era of "fast, faster, fastest". Retailers and brands should take risks and do it at speed in order to take the next step in their evolution.

The way in which consumers access content and buy products – and the rise of big data, artificial intelligence (AI) and machine learning (ML) – are arming CPG marketers with new tools for understanding and serving their customers. In fact, FMCG is among the leading industries with the potential to benefit from analytics and AI. Winning FMCG suppliers and retailers will be those that most effectively harness big data and technology as an enabler of competitive advantage.

Embracing new innovations in data analytics, such as AI, will enable companies to identify what really matters to customers, and ultimately move faster and predict more accurately. It will create process effectiveness, optimising consumer intimacy through personalisation, and increasing speed to insights and action. IRI has already invested significantly in AI and ML enhancements that are changing the way clients gather insights and prescriptive analytics from IRI's leading suite of data solutions. ■

Data-led evolution is necessary amid major shifts within the consumer landscape



COLLABORATIVE GROWTH THROUGH DATA

For retailers and suppliers to benefit from true collaboration, access to fully integrated data is a must.

To win in this complex FMCG marketplace, retailers and suppliers must tap into deep and broad consumer insights and work together to make mutually beneficial business decisions. Future industry winners will be those embracing the big data collaboration approach and the latest technology that puts customers at the heart of their strategies. In fact, internationally, we've seen suppliers drive more growth with key retailer partners by using robust collaborative technology platforms that generate new insights.

For true collaboration to occur, both partners must have real-time access to fully integrated and harmonised data. However, a major challenge is that in traditional retailer-supplier relationships, each partner has a separate view of the customer via separate data sets. There are also different performance goals and differing ways of measuring impact. These siloed views limit the ability to understand all the influences that sway shopping and purchasing behaviour.

IRI AS A COLLABORATION AGENT

IRI holds a unique position in the FMCG ecosystem. Our independence in the marketplace enables us to act as a true collaboration (and change) agent. Recognising this, IRI has created a highly robust and internationally-proven "Collaborative Gateway" program enabled by the IRI Liquid Data platform.

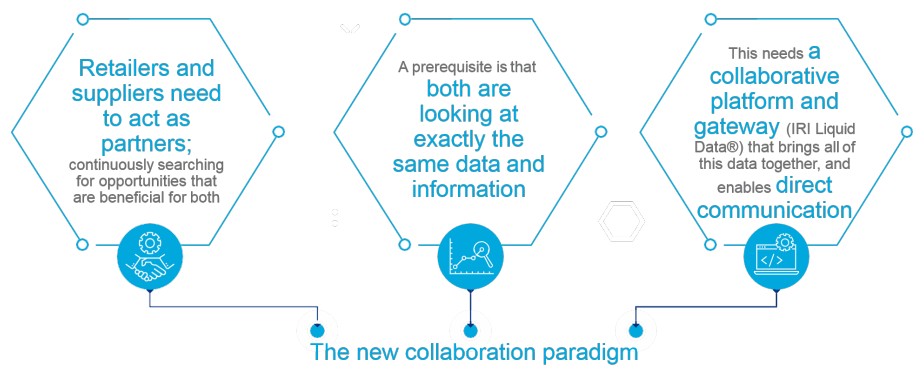
Through this scalable and flexible program, partners can quickly integrate disparate data without sacrificing security and control, creating a simple and consistent way to access the data and insights. This harmonised data pool can be used in all internal decision-making processes, including joint business-planning sessions – driving significantly easier and more effective collaboration with joint decisions.

Users have more meaningful metrics and reports on hand to allow supplier and retailer partners to make faster, better, smarter decisions together. These

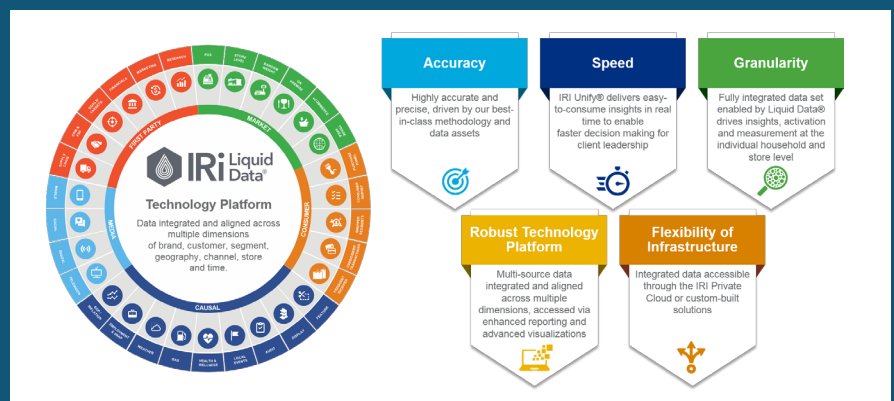
harmonised data sets alleviate the need for manual efforts, and they significantly increase speed to insights. Further, integrated data provides a more efficient

link between market demand and actual market behaviour, keeping users aligned against category focused and customer-centric efforts. ■

One version of the truth: data platforms drive collaborative communication



IRI's proven data solutions drive client growth for five key reasons



Retailer and suppliers **using technology and data to create personalised experiences** will be key to optimising growth

It will be supported by **new, faster and innovative ways of accessing data** to generate impactful **WIN/WIN/WIN insights**

PRICING, PROMOTION AND PERSONALISATION

How to integrate the three Ps – pricing, promotion and personalisation – of growth with effective data.

Effective and efficient purchase and loyalty data is key to optimising growth strategies for the new decade against a backdrop of factors ranging from margin pressure and logistics, to soft wage growth and fragile consumer confidence. Integrating the latest technologies and analytics to influence pricing, promotion and personalisation is critical to customer experience and delivering what the consumer wants, and where and when they want it. Every step along the shopping journey delivers an opportunity – pricing, promotion and personalisation data will serve to enhance that share of wallet and, in turn, loyalty.

REALIGNING PRICE GROWTH WITH INFLATION

Australian FMCG suppliers, especially in the food industry, have been eager to push through price increases in recent years. This intent has intensified due to factors such as drought, general logistics and the increasing costs of raw materials, labour and packaging.

Nevertheless, a backdrop of supermarket margin pressures and their fixation on winning price perception – combined with soft wage growth and fragile consumer confidence – has made price rises extremely hard to realise. This was apparent when 90 per cent of Australian grocery suppliers surveyed in 2019 by the Australian Food and Grocery Council and UBS reported that it is “very hard” to achieve price increases.

In the financial year 2019, IRI recorded a +0.9 per cent annual price per unit increase in both packaged food and packaged non-food merchandise sold in Australian supermarkets (as shown in image on top right). This is well below what is already a low inflation rate of 1.6 per cent over the same timeframe. Looking across channels, price per unit growth of food and beverage items sold in petrol and convenience stores was even lower (+0.4 per cent); while non-food recorded a notable price deflation of -5.6 per cent year-on-year.

This is not a scenario necessarily unique to Australia. IRI’s US team reveals that the CPG industry has spent the last three to five years focused on slashing costs and merging, zero-based budgeting, and other cost reduction strategies. This has resulted in significantly streamlined manufacturing operations and is a scenario that many Australian FMCG industry stakeholders will be familiar with.

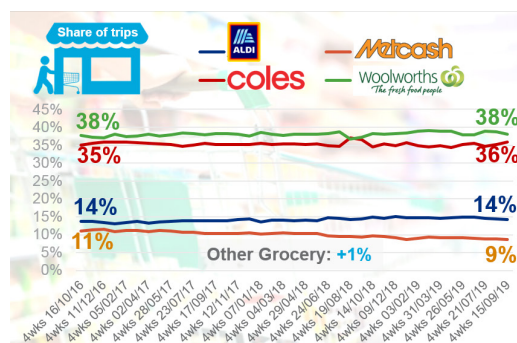
The recognition of rising input costs for

Australian suppliers, as well as slowing sales and market share gains for Aldi (we have observed a broadly static share of shopping trips for the last three years), may lead to reduced retailer pushback in 2020. Indeed, there have been clear signs of prices creeping up in Australian supermarkets in Q3 of the 2019 calendar year – the upswing no doubt providing relief for those who have pushed for price adjustments for several years.

In the food-centric FMCG category, price advances are tracking well below inflation



A plateauing in Aldi’s share could give license for the big two to reduce pricing pushback



THE PSYCHOLOGY OF PRICING: RESHAPING THE ELASTICITY CURVE

It is natural that manufacturers gravitate towards price to claw back some of their lost margins. But price increases alone are incapable of fully offsetting margin losses related to the underlying spikes in costs. Any manufacturer pursuing a price increase still needs to be mindful of any potential risks to demand.

In US analysis, IRI demonstrates that in several key categories, most products still experience considerable volume loss – even when the entire market shifts up in price. For example, if a major manufacturer is alone in raising prices for its bottled water, it would lose 21 per cent of unit sales. But if all others in the category raise prices, the aforementioned manufacturer would lose 11 per cent of unit sales, cutting the loss nearly in half.

ELASTICITIES NOT AN ENDPOINT

Ideally, a manufacturer should determine what price is right due to financial, branding, positioning and competitive considerations, then see if it is feasible under the current elasticity and the potential trade-offs involved.

A high price elasticity among non-triers of a given brand might be attributed to a lack of appropriate claims on the packaging (either design or framing of those claims). New messaging can drive up the willingness to pay and thus actively shape the price elasticity curve. The logical series of questions therefore becomes:

1. What does the elasticity have to be to make a more acceptable trade-off in volume?
2. How do we go about changing it?

Question 1 is entirely doable under the current capabilities, but answering question 2 is where the true value comes in. In IRI's work with a premium shampoo brand, we found a very loyal but small base of shoppers who loved the product once they tried it, but a vast majority of shoppers were turned off by its high price tag. The high price elasticity among non-triers was attributed to claims on the bottle. There was no marketing of the product, and any point of differentiation or attributes that loyal consumers gravitated to were not called out on the package.

IRI recommends a three-phased approach for any manufacturer seeking to change its product elasticity, with or without changing the underlying product itself. Price increases should not be automatic, but rather a condition of continually revisiting the product for marketing messages, benefit tweaks, packaging upgrades and line extensions, etc.

After all, promiscuous Australian shoppers are still heavily drawn to compelling features and benefits. A total of 76 per cent of IRI panellists perceived they would "switch to a new brand if it offers new product features/benefits that appeal to me". The value of the product should be continually exercised, with the goal of seeing elasticity evolve as desired. With only minor tweaks to product positioning and attributes, brands can compete across multiple forms/types and thus be part of the shopper's consideration set more frequently.

Determining elasticities is only a starting point to optimised pricing



FMCG promotions play a significant role in brand choice



Optimising the depth of discount ultimately drives profit outcomes



MAKING BEST USE OF PROMOTIONAL DOLLARS

Today's FMCG marketplace still generally relies heavily on periodic price promotion to move volume – even if there has been an overall shift towards everyday low pricing (EDLP) in the last two years. Given the significant role that promotions play in driving trial and basket spend (something our shopper panellists consistently acknowledge) it is crucial to routinely evaluate the effectiveness of trade promotions processes, the structure of the funding program and overall go-to-market strategy.

Understanding which groups to promote at what depth is the first step in building a trade plan that drives profitable growth for both manufacturer and retailer alike. The work of IRI's Australian analytics consultants reveals that promotions drive volume sales and that shoppers also respond differently to promotions across, and even within, categories.

However, the majority of promotions – particularly as you move deeper – do not make a profit (i.e. what the manufacturer makes after they fund promotions). That is, suppliers commonly spend more in funding promotions than they make in sales gains. Shallower promotions are intuitively more efficient with one in every four PPGs. But as you move deeper, the majority of promotions begin to make a loss, with nine out of every 10 promoted groups making a loss when they run deep discounts (50 per cent). ■

OPTIMISE INSTORE PERFORMANCE FOR GROWTH

Getting the right promotional displays in the right stores is key.

After first ensuring a firm pricing strategy is in place that makes sense and delivers, suppliers and retailers must then turn to the critical element of merchandising and develop an equally firm and strong program. With FMCG manufacturers and traditional retailers under intense competitive pressure, the need for finely tuned, highly impactful instore activities is critical to growth.

But diminishing response from merchandising vehicles – feature, display and temporary shelf-price discounts – are creating less efficient spending. All of these factors are impacting margins and trade program ROI, both for the manufacturer and the retailer.

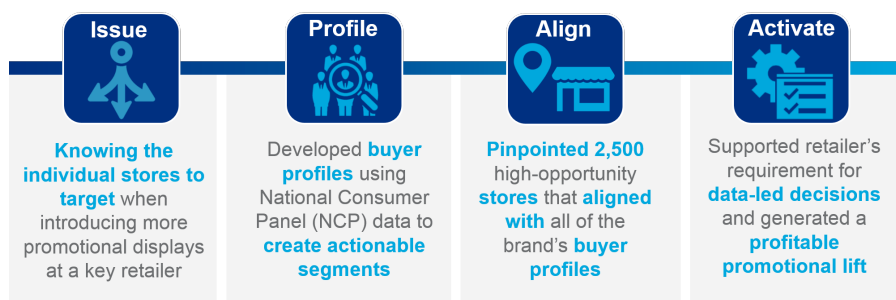
Recognising these challenges, a leading global beverage manufacturer partnered with IRI to introduce additional promotional displays at a key retailer. IRI integrated a variety of data assets to identify the highest-opportunity stores including shopper behaviour, point-of-sale and spatial data sets. The targeted recommendations led to 2500 additional highly relevant displays being added to a promotional program, which subsequently led to a significant unit sales increase.

A COMMON PROBLEM: OVERLOOKING INSTORE EXECUTION

Branding and innovation are commonly prioritised as key factors to growth, with strategies developed to manage both. Execution, though, has been an afterthought, and thus has been “handed over” to the field with little to no direction and/or consistent follow-through. Instead, collaboration with retailers around thoughtful and directed metrics, and the resulting insights, is powerful and can translate to new opportunities for growth.

An optimised display has greater value than any number of half-hearted display concepts. To get it right, retailer

Granular data can optimise instore promotional programs



Real innovation + strong branding + retail execution = maximised growth



and supplier partners must factor in the following:

- type of store
- period of the year
- number of displays
- location of displays
- what is placed on displays.

These questions beget even more detailed considerations. For instance, if points of interruption are key, what location is best for which brands or packs?

USING DATA TO IMPROVE POP DISPLAYS AND PROMOTIONS

By understanding sales lift by location, partners can focus efforts against those locations that will bring the greatest impact and eliminate less-than-ideal locations, reducing instore clutter, enhancing the shopping experience and increasing return on merchandising investment.

Analysis of key metrics against shelf allows retailer–supplier partners

to customise linear footage within a particular retail location. By identifying this imbalance and making the appropriate shift, the retailer was able to make near real-time adjustments to the shelf, increasing category performance.

ENSURE SHELVES ARE STOCKED

Today's shoppers are laser-focused on accomplishing their mission — buying the product they want, where and when they want it. And with more shoppers demanding and spreading their purchases across more retailers (including online), bricks and mortar retailers must ensure a flawless instore experience.

This leaves retailers with a challenge: they must ensure that shelves are stocked properly so that shoppers find the products they are looking for quickly, easily and consistently. Failure to deliver at the “zero-moment of truth” is a fast-track to the bottom. Our research reveals that US consumers

PERSONALISATION AND LOYALTY

Gaining true insight into the customer and their journey aids personalisation and fosters deeper understanding of brand loyalty.

encounter at least one out-of-stock item during one out of five trips to a food, drug or mass-merchandise store. These situations cost CPG retailers more than US\$47 billion annually. Worse still, efforts to reduce out-of-stocks often creates over-stock situations, thereby costing retailers even more. This is also a commonly cited frustration among Australian shoppers across a range of studies.

The good news is that technology is bringing more powerful science to solve this age-old conundrum. In the US, IRI has developed a proprietary on-shelf availability (OSA) optimisation capability that quickly and inexpensively provides near real-time analysis of first- and third-party big data sets. They use AI and ML algorithms to pinpoint problems in the store, all the way down to the item level. With this system, daily item-level alerts are delivered directly to instore personnel, identifying the exact products that have OSA challenges. It allows for rapid remediation and provides the foundation for an enhanced customer experience, higher top-line sales, and maximum customer lifetime value. ■

Out-of-stock situations are costly – both financially and to the shopping experience



Personalisation is all about knowing who the customer is and using that information to create a meaningful and relevant shopping experience – whether a targeted price incentive or a curated (preference-led) suggestion. It should be guided by what the individual wants and when they want it – maybe even before they know exactly what they want (although issues of intrusion arise here). Every step along the shopping journey is an opportunity to build a personal engagement that drives sales and loyalty.

Kroger (a long-term IRI partner) is a leading exponent of “personalising with precision” in global FMCG retail. Kroger’s “Customer First” strategy is anchored by providing precise, targeted communications that reward shoppers and drive incremental purchases. Data from 60 million customers enables Kroger to “personalise value” with over 75 per cent of items purchased influenced by personalisation. Deep data insights have enabled Kroger to stay focused on the four key areas of its “Customer First” strategy: people, price, product and shopping experience.

Knowing who has purchased a particular brand (recently, in the past, or never) is valuable knowledge to help design relevant marketing interactions. Equally, personalisation is key to attracting, retaining and growing high-value customers. By identifying and connecting with highest-value shoppers (those who spend the most) on a personalised level, brands can tie together household-level behaviour across store, online and pickup to capture increased share of wallet today and enhance customer lifetime value.

Kroger is at the forefront of industry progress. Although 11 million US households shop with Kroger every single day, the retailer has identified that 30 per cent of households are loyal, and are eight times more valuable because they generate 70 per cent of total spend.

RELEVANT, CENTRALISED AND HARMONISED (LOYALTY) DATA

The average CPG brand captures some CRM, brand affinity and engagement data from its website, social and digital paid media. It may also purchase point-of-sale (POS) data to

Increasingly fragmented ad addressable media



- Ad format explosion
- Migration to mobile
- Social and chat
- Voice as the next platform
- Inefficient media ecosystem
- Media migrating to personalisation
- Complex path-to-purchase
- Lack of transparency



Rapidly changing purchase format



- Retail disruption
- Format changes
- e/m-commerce
- Shrinkage of time
- Amazon
- Discounters
- Private Label

Rapidly changing consumer behavior



- Social networks
- On demand convenience
- Brand indifference
- Millennials
- Health & wellness
- Ethnic demand

get insight into product movement within the retail environment. However, these data sets are not tied to actual purchase behaviour – the data does not tie the product to the person. To deliver more personalised experiences, CPG brands must gain better insight into the individual consumer of the brand, along with the brand-specific customer journey and shopper context.

Enabled through advances in technology and keen analytic know-how, today's leading-edge market information and technology firms, such as IRI, are integrating traditional purchase data with other available data sources. These include loyalty and transaction data, data from digital platforms, national and specialised consumer panels, brand sites and social media. They are integrated in a secure, simple and consistent manner to provide brands a granular, 360-degree view of their most important shoppers.

LOYALTY DATA: PROVIDING TRANSACTION-LEVEL DETAIL AND INSIGHT

You can understand shopper behaviour and trip trends within a particular retail banner. Basket analytics, also based on loyalty data, allow suppliers and retailers to work together to hone assortment to highest-potential customers – all the way down to the store level. IRI has found that suppliers that participate in collaborative portal programs that include POS and shopper loyalty data, experience annual

sales growth that averages 4.6 points higher versus non-participants.

Purchase data also provides critical insights that allow CPG marketers to overcome the three challenges of personalisation.

- **Understanding the right level of personalisation.** Focusing on a core consumer segment – but not going too narrow – is the best way to take advantage of personalisation for CPG brands.
- **Finding the right point in the purchase cycle.** Granular purchase data refreshed frequently provides the ability to know when a consumer is about to be in market.
- **Nailing the context.** It is not enough to know what a consumer prefers to buy; you must deliver advertising in the right context. It's now possible to target a shopper who purchases Tamar Valley yogurt for her kids, for example, but an ad won't resonate if she sees the ad while she's at the gym or not in a shopping mindset.

One regional US grocery retailer wanted to increase cross-purchasing behaviour in the beauty aisle through improved aisle layout. By mining the retailer's loyalty card data, category penetration, cross-purchasing rates, trip frequency and purchase cycle across beauty and personal care aisles were identified. These analyses were completed across the retailer's own customer segmentation profiles, which clearly illustrated purchase and buying patterns for the highest-value customers at each store location.

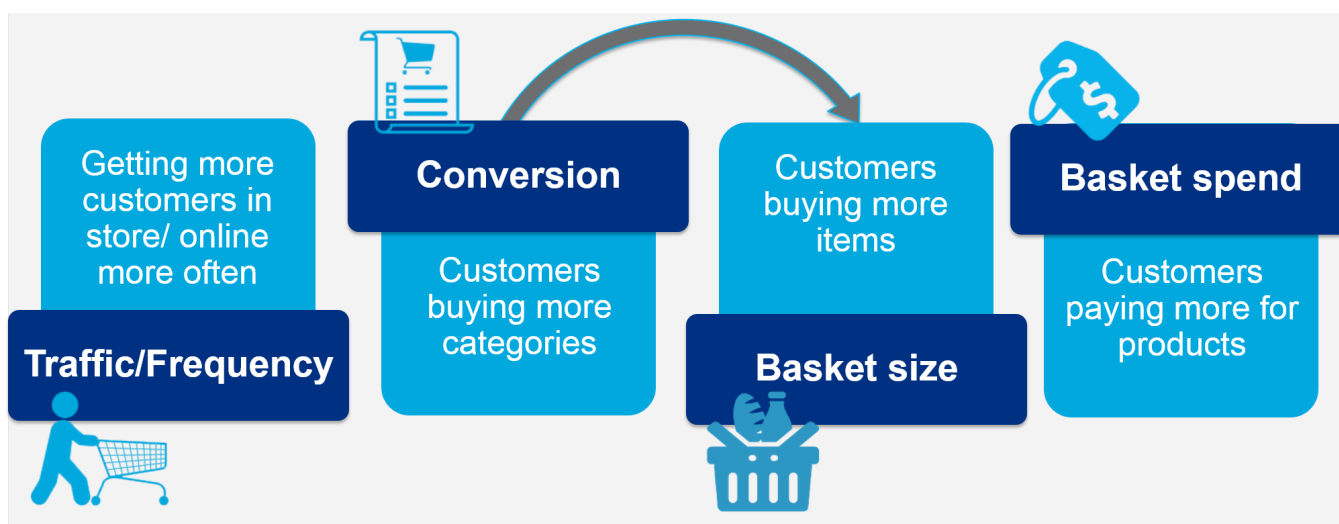
Overlaying those results on store maps quickly illuminated how existing space and

store fixtures could be used to maximise the likelihood of customers purchasing across categories. Aisle recommendations were also customised based on store clusters and the mix of customers within each of those clusters. By customising the store layout to the needs and wants of its highest-value customers, the retailer ensured that those customers would be met in the aisle with relevant products organised in a convenient manner. The new aisle layout was expanded across all new and remodelled stores, driving incremental category cross-purchase growth of 18 per cent, and boosting the retailer's top-line sales by US\$25 million.

In another example, the IRI team worked with a bacon supplier to analyse performance. The preliminary analysis revealed that the supplier and the bacon category were losing households and trips following the de-listment of four of the supplier's items at a large retailer. The dollar impact of these losses was significant – a US\$1.6 million decline for the supplier and a US\$900,000 decline for the retailer during a 12-week period.

Using loyalty data to understand more about the loss and how to reverse the trend, IRI analysed one retailer specifically and found that supplier's penetration and trips at this retailer were down 76 per cent, with one-quarter of those households purchasing nothing from the retailer during the latest 13-week period. In other words, de-listment of the bacon was also resulting in many lost baskets at the retailer – not just lost bacon sales. ■

Customer data is intrinsically connected to the four main levers to grow sales



HOW AI CAN HELP DRIVE GROWTH IN FMCG

Automating standard processes will foster the evolution of “decision automation”.

Change will never be this slow again, so the need for FMCG businesses to get their data in the right place to make fast decisions will ultimately transform their companies. Yet as big data continues to grow, it has become more difficult and time-intensive for a decision-maker to manually test enough hypotheses to find the most relevant and impactful insights that drive sales and marketing decisions. In other words, we've reached the limit of the traditional query-based approach – especially when data-driven decisions are so often confined to a few experts.

By automating standard processes, AI makes it possible for retailers and manufacturers to make smarter decisions faster and more effectively. That's why IRI has invested nearly US\$1 billion in its technology over the past several years. We have integrated AI and ML into our full suite of analytic solutions so that the technology does the heavy lifting automatically. We advocate that recurring insights should be 100 per cent automatically created and distributed.

AT THE TIPPING POINT BETWEEN “INSIGHT AUTOMATION” AND “AUGMENTED DECISION-MAKING”

But as we take one-off analysis and both automate and institutionalise it,

IRI anticipates the eventual evolution into “decision automation” will radically accelerate speed to execution and therefore drive the future of our industry in positive ways.

Imagine your focus being solely on finding the meaning in the data and deciding action. Making faster and better decisions is the only way to gain an edge or, in some cases, just keep up. With the assistance of AI-enabled tools, insights professionals can save time discovering insights and shift their role to offer their organisations a true competitive advantage.

LEVERAGING AI TECHNOLOGY THROUGHOUT AN ORGANISATION HAS THE POTENTIAL TO UNLOCK GROWTH

These are growth opportunities not normally identified and solved for specific business problems. By making data and AI a core part of employees' workflow, organisations will net value across many areas, such as pricing and promotions, product innovation, supply chain and media buying. The outcome? Improved profitability in a challenging market environment.

Pricing and promotions are one of the most powerful levers to generate sales. By exploiting the full capabilities of AI,

retailers and brands can identify and activate the correct strategy at speed. The algorithms help to identify not only the timing and type of promotion that will be most effective to a specific audience, but also the language to use.

Product innovation is another area that can be totally transformed by the application of AI and ML processes. The benefits of AI are such that product innovation processes will almost innovate themselves to keep up a continuous cycle of development and improvement.

VOICE TECHNOLOGY: REVOLUTIONISING RETAIL

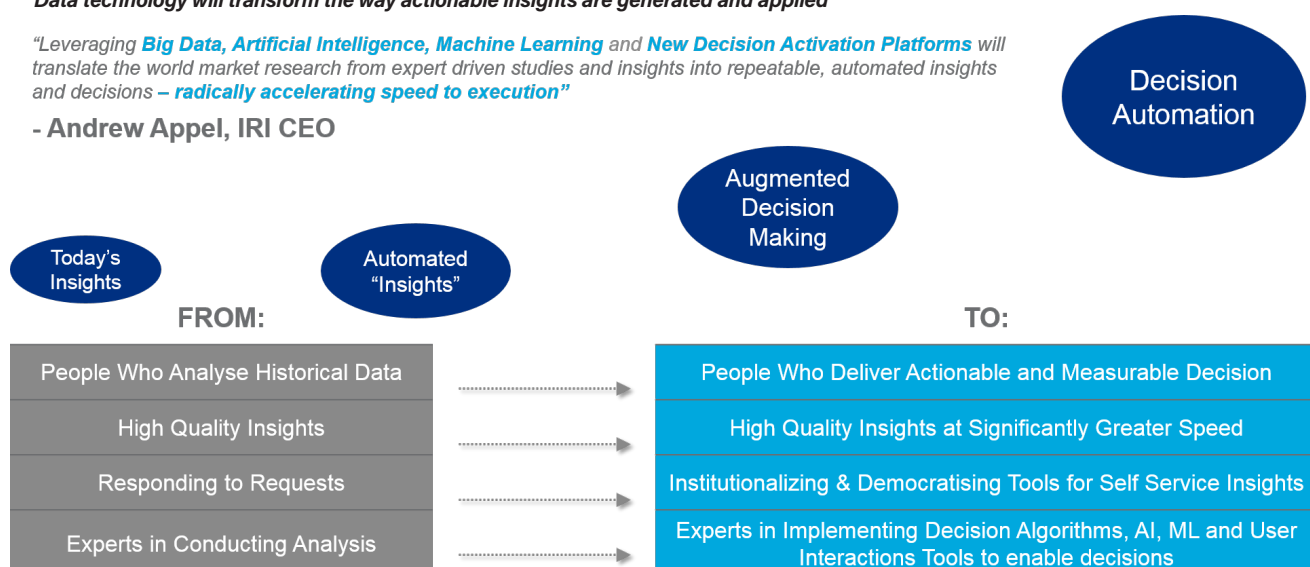
IRI is a big believer in the transformational impact of voice. The many known and yet-unknown applications of voice technology will increase business efficiency, improve information accessibility, and simply make everyday life better for people.

One-quarter (23 per cent) of IRI's Australian shopper panellists use a voice-operated assistant (i.e. Amazon Alexa, Apple Siri, Google Home, etc.). Google Home (55 per cent) and Apple Siri (51 per cent) are the clear standouts among the technology adopters. In this nascent phase of the technology, usage is largely anchored to checking the weather, listening to music and setting alarms/

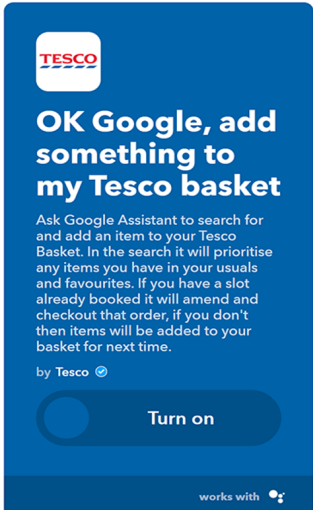
Data technology will transform the way actionable insights are generated and applied

*“Leveraging **Big Data**, **Artificial Intelligence**, **Machine Learning** and **New Decision Activation Platforms** will translate the world market research from expert driven studies and insights into repeatable, automated insights and decisions – **radically accelerating speed to execution**”*

- Andrew Appel, IRI CEO



Tesco is testing Google Assistant to enable customers to “talk to Tesco”



Integrating customers' online accounts with Google Assistant

Add milk on Thursdays

by tescolabs 2 0

Add salmon to your basket if it falls in price

by tescolabs 3 1

If it's warm tomorrow, add burgers to your shopping basket

by tescolabs 1 0

if then

Add eggs to your shopping basket if

DO TESCO

With just a tap, add doughnuts to your

if then

Receive an email if nappies change

Dietary requirements can be added for better curation

Will personalise based on previous shopping choices

reminders. That said, 10 per cent of those using a voice-operated assistant claim to frequently use the functionality to shop and order items.

In 2020, we will likely see further investment among retailers tapping into the burgeoning role that virtual assistants and voice search will play in the consumer journey.

A recent example of impending change is UK supermarket chain Tesco launching the open beta of its new voice shopping service, which lets customers complete the entire shopping experience on a Google system. The service automatically integrates customers' online accounts with Google Assistant to enable them to “talk to Tesco”. It will personalise the customer experience based on their previous shopping choices, suggesting products and offers that are likely to appeal. Customers can also add any dietary requirements to ensure they're offered the most suitable products. Voice-

enabled solutions such as this suggest that the need to feature in a consumer's consideration set will be superseded by an obligation to exist in their (automated) preference profile.

Emerging voice technology is set to revolutionise how retailers make decisions about category optimisation, pricing, product assortment and managing stock levels.

Voice is the most natural interface, offering the ability for anyone to ask simple questions and get straightforward answers and specific and actionable advice from complex data. And by using voice, retailers can democratise data analysis and decision-making.

For example, a store manager looking for recommendations on category management or a list of the best-selling products that are low on stock can get specific and actionable advice. In doing so, they would basically be having a conversation with IRI's Liquid Data

platform. For the retailer, it could mean the recovery of lost sales on a huge scale or better management of labour costs.

Even though voice tech is relatively new in the industry, one leading retailer that IRI is working with is recovering millions of dollars in lost sales by using the technology to find out the most likely out-of-stock items in every store.

THE GREATEST CHALLENGE? CHANGE MANAGEMENT

People who have always made decisions based on experience and gut feeling will never trust “a machine”. But with the new generation of workers fed on a diet of Siri and Alexa, it will be instinctive. As with any disruptive technology, voice is evolving, and should be a combination of machine (AI) and human (IQ) to deliver more accurate results as they continue to learn based on feedback and machine learning. ■

How we will realise our vision for AI driven insights via Liquid Data

Human-Machine Interface

| | | |
|---|---|---|
| Automated Insights Unify™, Unify Pro, Unify Office, Unify Mobile, Unify Voice, Unify AI, Unify Extracts | Augmented Decision Making Alerts, AIRA and Opportunity Finder Delivered via Text, Email, Web, Mobile and Voice | Automated Execution Straight-through processing, connected ecosystems, self-learning and exception management |
|---|---|---|

Knowledge Management

| | | | | | | |
|--|-------------------|-------------------------------------|--|---------------------|-----------------------|------------------|
| Content Management Personalised • Curated • Ad Hoc • Automated | | | Consumer and Economic Recommendation Engines Predictive • Prescriptive • Personalised • Impact Centric | | | |
| Best Practices Library | Analysis Creation | Story Configuration | Collaboration Initiated | User Criteria Based | Analytic Model Driven | AI/ML Identified |
| Dashboarding and Visualisation | | Narrative Science and Collaboration | | | | |

Apps

| | | | | | | | | |
|----------------|---------------|--------------------------|----------------|------------------|--------------------|------------|--------------|------------|
| POS | eCommerce | Consumer & Shopper | Loyalty | Pricing | Promo/Trade | Assortment | Supply Chain | Innovation |
| Media Insights | Marketing Mix | Audience Personalisation | CRM Activation | Lift Measurement | Media Optimisation | | | |

Science

| | |
|---|--|
| Built-in by IRI: 2,000+ algorithms and analytics (AI/ML) | Bespoke by Client: IRI Machine Learning Cloud (AI/ML) |
|---|--|

Data

| | | |
|---|--|--|
| IRI Data Cloud On-demand access to IRI's curated datasets | IRI Enterprise Integration Structured integration of client proprietary datasets | IRI Integration Cloud Connectors, Transformers & Transporters automate ETL |
|---|--|--|

Infrastructure

| | | |
|--|---|--|
| IRI Cloud Single/Multi-Tenant, Secured | IRI Private Cloud Behind Client Firewall / Cloud Tenant | Hybrid Cloud Connected Instances |
|--|---|--|