



WHITEPAPER

Reclaiming CPG growth with analytics and insights

The growing influence of advanced analytics
and AI in an era of retail digitization



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Executive Summary

Analytics and insights: The state of play and the road ahead

Connie Cheng, Executive Vice President Global Strategic Initiatives, Trax

In our conversations with key analytics and insights (A&I) professionals in leading consumer packaged goods (CPG) companies, it's clear that deep analytics capabilities are a crucial differentiator in an industry that is struggling to deliver growth. As the rate of adoption and evolution of analytics accelerates, a few common themes come to light.

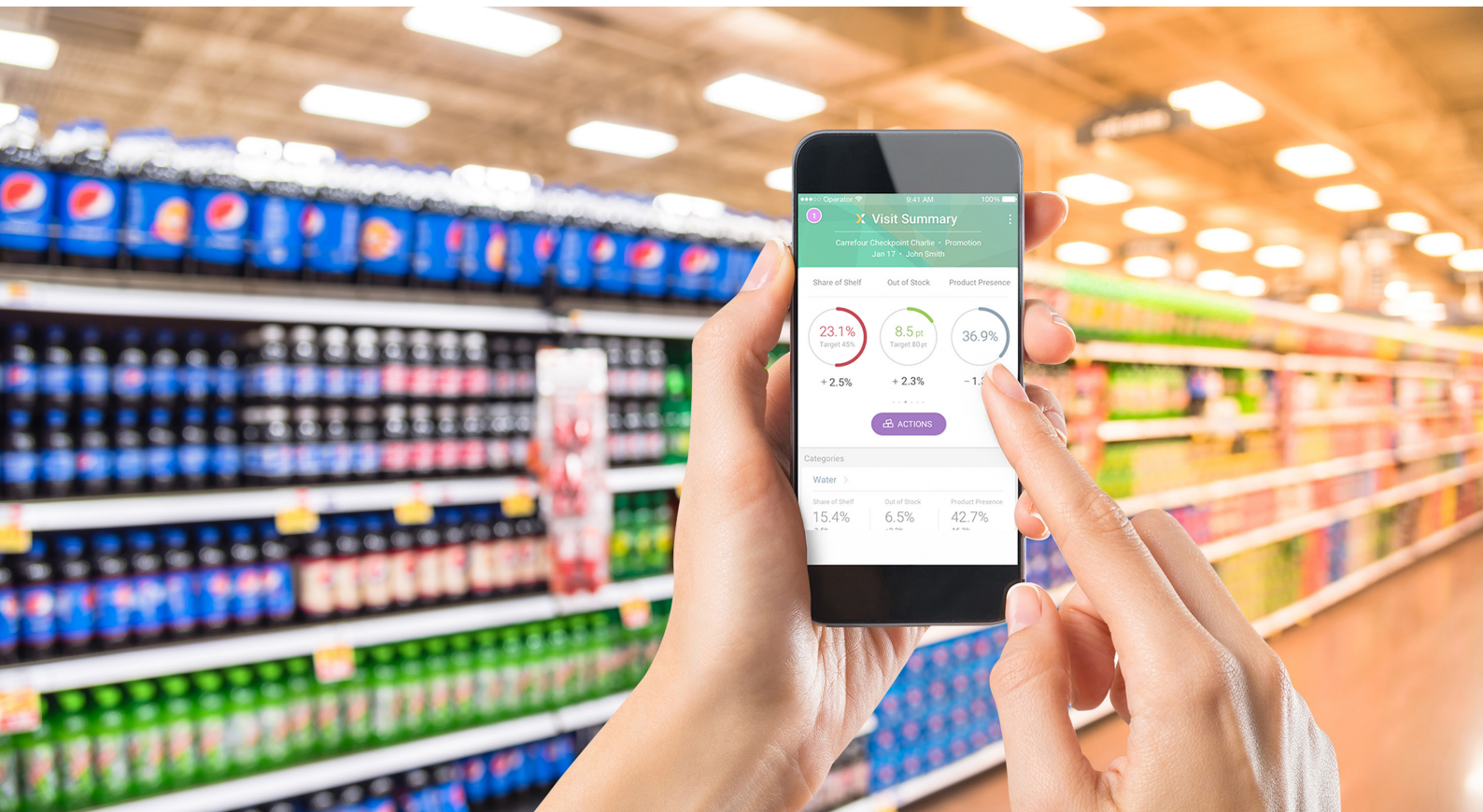
The perception of A&I is slowly shifting from a side project to one that informs the enterprise about the consumer. Leading A&I teams are organizing themselves to discover future growth opportunities faster and deliver insights that help provide consumers with superior brand experiences. The mantra is to have "eyes on the consumer and hands on the keyboard 24/7."

The days of "big bang" market research projects that take years to implement and cost millions annually are over. Real-time data is a crucial part of the new definition of consumer-centricity born in the Amazon and Alibaba era. The knack of acquiring just enough data to test out hypotheses and activate business strategies quickly is gaining traction. Successful companies are learning to partner with new vendors to double the speed at which they get consumer insights but at half the cost.

The industry is also showing some signs of moving to an outcomes-based approach to analytics. Although most companies are still determining whether to invest in the latest analytics technology or to pursue an all-encompassing data lake, companies have realized the need to demonstrate the return on investment (ROI) that comes with the analytics' spend.

The journey from entering the A&I race to achieving enterprise-scale impact presents many challenges. Whether it is connecting various data sources, understanding how to maneuver data sets to extract meaningful insights, finding the right partners to work with or upskilling your teams and managing change, the road to transformation has many pitfalls.

This report sheds light on how leading CPG companies are overcoming their challenges and creating a recipe for sustained success.



Section 1:

Consumers live in a digital world

Key takeaways

- Consumers embrace digital, creating massive amounts of non-traditional data
- As shoppers' digital footprint increases, their shopping journeys leaves bigger trails of data
- A consumer-centric perspective can only be achieved by using this data in real-time

THE DIGITAL CONSUMER AND MOMENTS OF TRUTH

Consumers are embracing digital every day in every part of their lives, and this is forcing brands and retailers to rethink how they view the shopping experience (See Figure 1).

People shopping for groceries and daily packaged goods actively seek information from multiple sources before making purchase decisions. According to [Deloitte Digital](#), "73 percent of CPG shoppers said they considered two or more products as they browsed and researched during their recent journey." The purchase itself can happen offline or online, or through a combination of both (click and collect).

The assumption that consumers know what they want and that a barrage of commercials showcasing this top-of-mind product will influence the moment of truth no longer works. New retail is immersed in digital and with each transaction – search, browse, buy – there is a clear opportunity for CPGs to know their consumers better, anticipate their needs, and redefine what makes them act in those moments.



Elaine Rodrigo

Chief Insights & Analytics Officer
at Reckitt Benckiser

"There is a new definition of consumer-centricity – one that is born out of the Amazon and Alibaba era. The onus is on us to build truly consumer-centric organizations, and companies are doing that by using data to understand buyer journeys, mapping path to purchase to moments of conversion and use insights to influence consumers in real-time. This is the new form of consumer-centricity."

How are consumers shopping today?

Online shopping

Shopping on their device at home or on the move



Walk-in

Select, scan, leave



3

Click and collect

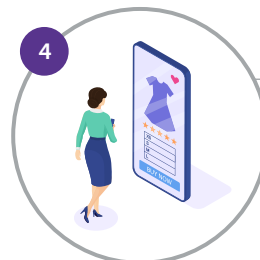
Shoppers buy online and collect the parcel from a location



4

Social shopping

Visual AI solutions such as a camera search button allow for a seamless and immersive shopping experience



Section 2:

Analytics in the Digital era

Key takeaways

- The variety, volume and velocity of the available data are growing, reducing reliance on sample-based research
- Outdated technology and attitudes can be a barrier to the widespread application of analytics, which should be regarded as a core tenet of marketing
- Talent shortages can be addressed through training as well as recruitment
- High-level buy-in is essential for success

A decade ago, the primary way for brands to understand consumers was through household panel interviews. But this has rapidly changed due to the sheer variety and volume of new non-traditional data sources, as well as the velocity at which this data becomes available for deeper analysis.

For example, it is relatively easy to collect data on how long people stand in front of an in-store display, using eye-tracking, and correlate this behavior with automated sentiment analysis of their social media posts.

With the emergence of AI-based technologies, social media analytics and IoT sensors, there are now limitless ways to tap into a shopper's thinking and understand their shopping journey. This is further enriched by looking at enterprise data (via operations and finance departments) and partner data (typically retailer or panel data), whether structured, semi-structured or unstructured.



Joanna Xu

Associate Director at
Procter & Gamble China

"The ways of acquiring data are different from before. Not so long ago, we tracked consumer or retail trends based on sampling from a few hundred stores. But now with large-scale digitization and access to observations on human behavior, we're looking at 400,000 data points rather than just 400 stores."



DATA ANALYTICS AT WORK

Doing analytics right has many benefits. The potential impact is not just in sales: [research](#) shows that companies that work with data analytics outperform their peers by five percent in productivity and six percent in profitability. Applying advanced analytics to set everyday shelf prices and to make more frequent and more substantial SKU additions and deletions helps CPGs manage revenue growth better than competitors.

Here are examples of some companies that have used analytics with some success:



Healthy snack brand Off The Eaten Path used [PepsiCo's proprietary analytics platform analytics for some clever trendspotting](#) that identified seaweed as an ingredient that would attract health-conscious consumers.

How PepsiCo uses data analytics

Challenge: Identifying key ingredient for product variant

Predictive insights: Seaweed was on-trend with health-conscious consumers

Outcome: Launched Off The Eaten Path Rice & Seaweed Crispy Curls



[Unilever uses a simple app called Idea Swipe to test out new ideas](#). Based on a Tinder-style user interface, the app asks consumers to swipe right if they like the idea of ice-cream-flavored breakfast cereal, for example. The company claims the app delivers "better data" faster than older survey techniques. The app has tested 5,000 ideas in more than 25 countries since 2018. This and similar applications have proved invaluable to Unilever for testing out new concepts quickly with a limited budget.

How Unilever uses data analytics

Challenge: Testing product ideas

Predictive insights: Better, faster results by using a Tinder-style app

Outcome: 5,000 ideas tested in two years

COTY



Kristina Kaganer, Director of Global Data Strategy at Coty, says a “glocal” approach to data and analytics has become a popular strategy for brands ranging from Covergirl and Rimmel to Well and Nioxin, particularly in priority markets like the US, UK and Germany.

All the data sits in a central repository that Coty manages and owns. It is used to inform local agencies about how they should deal with specific brands, rather than the other way around. Each country utilizes a distinct model, right down to the naming conventions that apply locally.

How Coty uses data analytics

Challenge: Localizing global product strategies

Predictive insights: Centralized data repository

Outcome: Global consistency while conforming to local norms

DIAGEO



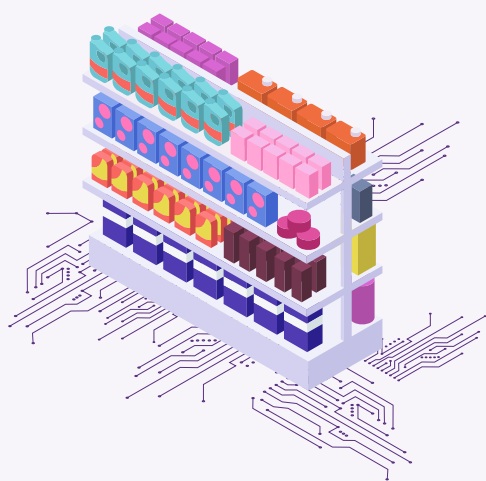
Diageo uses Trax's technology to analyze photos of store shelves, automatically identifying products, shelf placement, display, price, and more. This data is turned into scorecards based on key performance indicators providing targeted recommendations for improvements in each area. Average volume in outlets that have adopted these recommendations has grown three times faster than non-participating outlets.

How Diageo uses data analytics

Challenge: Store compliance with placement, pricing, etc

Predictive insights: Scorecards provide targeted, KPI-based recommendations for improvement

Outcome: Participating stores enjoy 3x growth



Trax provides Sanofi with “eyes in the store” to quickly check product availability and pricing against key performance indicators, supporting the company’s Perfect Store program and identifying stores with the highest growth opportunities. Stores participating in the scheme are growing 80 percent faster than the base business.

How Sanofi uses data analytics

Challenge: Quickly check product availability and pricing

Predictive insights: Identify stores with the highest growth opportunities

Outcome: Participating stores grow 80 percent faster

WHAT ARE THE MAIN BARRIERS TO ADOPTING AND SCALING ANALYTICS?

While these are great ways to use analytics, success stories of enterprise-wide analytics remain confined to a small pocket of CPG visionaries. These winners have made serious advances in the race to scale – applying machine-learning technologies to generate consumer insights, hiring analytical talent, establishing cross-functional workflows, reorienting core functions to leverage analytics better, and investing in the right technology stack and platforms so that data flows into a central cloud-based hub. But the reality in the industry at large is more sober. Only 40 percent of consumer-goods companies that have made digital and analytics investments are achieving returns above the cost of capital. What are the typical barriers?



Jing Mertoglu

Global Vice President - Insights at Anheuser-Busch InBev

“Data integrity and quality cannot be compromised – a high level of rigor in cleaning data and quality control checks is essential.”



Joanna Xu

Associate Director at Procter & Gamble China

“Data must permeate across functions. The skill of integrating human, media and business insights is needed to drive business, from planning to execution.”

Technological barriers. These include inadequate technology and the ability to store or manage data. Legacy technology unsuitable for modern analytics, data voids, silos, and the inability to harmonize data further exacerbated by the lack of quality and governance processes.

Organizational barriers. Intuition-driven decision-making is deeply entrenched in many established companies. Senior managers often achieved their positions by making a series of "right" decisions early in their careers, so now they can resist the adoption of data-driven decision-making. That makes it difficult to marshal executive buy-in for proposed analytics investments.

Shortage of the right talent. People with specialized analytics skills – data scientists, engineers and analysts – are in short supply and can be hard to retain. This, according to the [Boston Consulting Group](#), can lead to excessive reliance on outside vendors. There is also a risk that skilled staff will be spread too thinly around the organization, and the lack of critical mass will handicap their efforts.

[A recent international survey](#) found that the shortage of analytics skills was regarded as one of the main obstacles to becoming a more data-driven organization. [According to Bain and Company](#), "A successful tiered talent strategy incorporates new hires and internal retraining, while also tapping data hubs, third-party service firms and crowdsourcing."



Mevan Fernando

DX Shopper Insights, Perfect Store & Category Management Director at PepsiCo

"There's always a healthy tension between Sales and the Insights teams in most CPGs. Key is to work together as a team to arrive at what actions will lead to growth in order to promote a data-driven investment strategy and decision making."



Kirti Singh

Chief Analytics and Insights Officer at Procter & Gamble Global

"Technology is omnipresent, so teams must now have the competencies to win in both the old and the new worlds. During the last four to five years, we have worked on transforming skills and competencies in the world of data and technology to ensure the organization is relevant for the future."



Section 3:

A framework to improve A&I effectiveness

Key takeaways

- The first step is to recognize what's missing from your current information systems
- Successful firms understand when to buy and when to build systems in-house
- For a firm's data transformation to succeed, there must be buy-in across the enterprise, and this can be fostered by showing successful projects
- A governance framework is essential for successful scale-up across multiple markets and business units

As CPG companies recognize that advanced analytics and insights is central to growth, where should they begin? Consider the three stages of Embark, Develop and Accelerate.



1. Embark: Address what is missing

- Determine the area where A&I can make the most significant contribution to business results.
- Identify the factors preventing roll-out, such as a lack of data, a lack of tools, or a lack of skills.

2. Develop: Evaluate what to buy and what to build in-house

- Do you have the in-house capability to acquire the data and build the tools?
- If not, what type of partners best fill those gaps?



3. Accelerate: Show proof of concept to deliver results

- Show impact on business outcomes to gain buy-in for scaling.
- Demonstrate business growth at each stage of a long-term strategy.



trax

1. EMBARK: ADDRESS WHAT IS MISSING

Two questions must be answered to move in the right direction. Firstly, where can analytics be applied to make the most significant contribution to business results?

According to [Boston Consulting Group](#), the four applications driving most growth for CPG businesses are:



Demand forecasting



Measuring the ROI on advertising and promotional spending



Data-powered sales activation



Individualized store assortment

These areas may not always be low-hanging fruit, but they are ripe for picking.

Having chosen an application, the organization can address the second question: what is preventing the application or the technology chosen from being rolled out company-wide? The problem could be a lack of data, tools, or skills.



Jing Mertoglu

Global Vice President - Insights at Anheuser-Busch InBev

"The key to answering big business questions lies in the ability to triangulate more data points and pivot quickly, rather than gathering big representative sample sizes for research."

2. DEVELOP: EVALUATE WHAT TO BUY AND WHAT TO BUILD IN-HOUSE

Selecting partners and A&I applications that will yield a visible ROI is the next part of the journey. So start by asking two critical questions:

- Should I buy the tools and acquire the data I need, or should I build and collect them in-house?
- What type of partners best suit our firm?

Few organizations have the depth of talent needed to create their analytics tools from scratch. Everyone wants a single partner to provide end-to-end solutions, but that is rarely possible. Consequently, companies assemble a portfolio of partners, each with deep expertise in particular areas. Winning brands want to test and learn fast and are favoring vendors that support a culture that is less about doing research and more about experimenting in the market.

Identifying early on which data sets to look outside the company for is critical. For example, to understand the full customer journey, you require a harmonized data set of online and in-store data. But physical stores are still a massive blind spot for most brands. To solve this problem, companies such as Danone and Diageo worked with Trax to tap into technology that reveals in real-time exactly what is happening at the shelf.



Kirti Singh

Chief Analytics and Insights Officer at Procter & Gamble Global

"Instead of long-term, highly restricted contracts, look for an ongoing engagement process with a variety of vendors, and select those with the best ability to give data access and offers a tech platform in-built with great UI and flexibility."



Elaine Rodrigo

Chief Insights & Analytics Officer at Reckitt Benckiser

"Over the last two years, we've seen much progress in gaining access to real-time data. In merchandising execution, for instance, decision-making is faster and more agile now. The days of getting a new product into 99.9 percent of stores in a specific territory are over. It's more about getting to 80 percent (of stores), measuring performance and iterating – startup-style!"

3. ACCELERATE: SHOW BUSINESS SUCCESS, BUILD TALENT POOL

Successful proofs of concept are the best way to achieve organization-wide buy-in. But that buy-in could be hard won and requires actual evidence of ROI. As ABI's Mertoglu puts it, "Show proofs of concept that deliver real results, not just fancy analytics engines."

Buy-in and the rapid adoption and implementation of an A&I program is affected by several factors, including:

- Clarity of proposition (e.g. increased revenue or cost reduction) addressing already identified growth opportunities, focusing on the most important retailers, and taking an omnichannel perspective.
- A proof of concept that quickly delivers actionable insights.
- Vendor flexibility plus expertise in your business segment – be sure that what you are buying will integrate with your existing systems, both human and technology-based.
- Alignment of organizational culture and the proposed changes, including being transparent with all affected staff, and having a "champion" within the business who owns the program and ensures it rolls out according to plan.

Use the proof of concept results to build a robust talent base. Once leadership gets excited about results and potential impact on business, you will need to have the right infrastructure and people to help you meet scaling demands. You may spend several months searching for the best data scientists and analysts. While that's justified in some cases, consider building on in-house talent. Existing employees already know the company, the industry and how to operate effectively across the organization. Many have the quantitative background needed to learn best-practice analytical skills and knowledge sharing.



Conclusion

Digital and analytics programs are no longer optional. Companies can't compete effectively in today's business environment without harnessing the power and potential of these technologies. Scaling them so that they work their magic across the entire organization, instead of in small pockets, will be increasingly crucial to improving total shareholder returns and sustaining competitive advantage.

Trax specializes in shelf intelligence and analytics. Our mission is help you understand what's happening to every SKU and every display in every store.

Our customers draw on our advanced technologies and unique shelf insights to confidently make critical decisions in their categories and channels.



Advanced in-store execution tool for real-time shelf audit



Shelf-edge cameras for continuous monitoring of on-shelf availability



Dynamic merchandising services for targeted brand activations



Crowd-based shoppers for engagement with new products and promotions



On-demand workforce for direct store support on re-stock, inventory and more

Our analytics and insights are made available in a variety of forms. Choose from:

- Out-of-the-box dashboards visualizing your key metrics using pre-built templates
- APIs that help you ingest our data, combine it with other datasets and view on your own reporting platform
- Modelled analytics to provide customized insights on-demand

To learn more, visit: info.traxretail.com/trax-by-design

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