New Strategies for CPG Revenue Growth Management:

Harnessing AI to Change the Game

CPG companies are struggling to achieve profitable growth in today's shifting shopper landscape.

The Promotion Optimization Institute (POI) State of the Industry Report found CPG companies invest between 11% and 27+% of gross revenues on Trade Promotions to drive growth.[1] Trade spend dollars are deducted from gross revenue and net revenue is reported to the market so reduction of trade dollars would show up as growth in net revenue. Trade funds are not generating gross revenue or volume growth and **72% of trade promotions fail to break even.**[2] Retailers are demanding even more trade dollar support from CPGs and the cost to serve a retailer is actually increasing for CPGs with no real return from gross revenue growth.

In this new playing field, it is clear that traditional approaches to win the consumer primarily through investments in Trade Promotions at the retail shelf are not enough. Leading CPGs are increasingly adopting a discipline called "Revenue Growth Management (RGM)". Now, AI enables these organizations to scale RGM practices across their entire organization and realize a 3-5% increase in margin.

Read more

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1 The POI 2019 State of the Industry Report, released February 2019.
2 Nielsen Price/ Promotion survey, 2017.

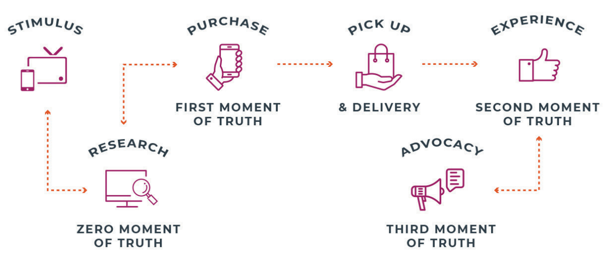
1 The New Playing Field

Winning consumers today is a whole new game, but many CPG organizations are still playing by the old rules.

With dual income households on the rise, more members of the household may be frequent buyers and their shopping journey has become very complex and multi-channel.

Now, first impressions happen when consumers learn about products online –the zero moment of truth. Decision-making moments occur millions of times a day on mobile phones, tablets, laptops and other devices – before, during and after the purchase. Consumers are more fickle and will replace a brand in a click or a swipe. eCommerce has even penetrated fresh and grocery segments. Pantry loading trips are declining and giving way to prepared foods with grab-and-go options.[3] Retailers and manufacturers need to partner on assortment, placement, pricing, promotion and formats for both online and in-store options.

TODAY'S MULTI-CHANNEL SHOPPING JOURNEY



In this new playing field, traditional approaches to win the consumer primarily through investments in traditional trade promotions at the retail shelf are not enough. Leading CPGs are increasingly adopting a discipline called "Revenue Growth Management (RGM)". Revenue Growth Management integrates decision making around pricing, trade promotion and assortment at the consumer and enterprise level, across all channels to drive profitable revenue growth. **The opportunity is huge. A CPG company that can effectively utilize Revenue Growth Management can see up to a 3-5% increase in margin.**[4]

2 Traditional Customer-Specific Trade Solutions

Many CPG companies are attempting to implement Revenue Growth Management practices using transactional Trade Promotion Management (TPM) and traditional scenario-based Trade Promotion Optimization (TPO) solutions that were designed to improve promotion effectiveness, everyday pricing and other key factors within a single retailer.

TPM and TPO solutions do not inherently provide Revenue Growth Management capabilities.

Sales effectiveness has improved when sales teams use TPO for what-if analysis during account calls. Yet, many organizations have struggled with sales adoption of these advanced capabilities. In the POI report, 67.1% responded that the entire promotion planning process is burdensome. TPM, TPO and ROI capabilities take a singular customer plan mindset where each account team looks to maximize the business relationship with a specific retailer. What legacy promotion planning capabilities haven't provided is a holistic enterprise view of category, brand and consumer impact to drive enterprise intelligence and a balanced approach across the entire retail landscape.

E-commerce and Modern Trade

The POI report reveals the shift in power to the consumer is forcing the CPG industry to dramatically change. However, reaction isn't a strategy. Manufacturers and retailers are still learning how to target the right consumer through the right channel at the right moment. It will be important that future forward planning capabilities are able to incorporate eCommerce, modern trade and balance the total enterprise.

Those that win in the future will need to embrace the new paradigm.

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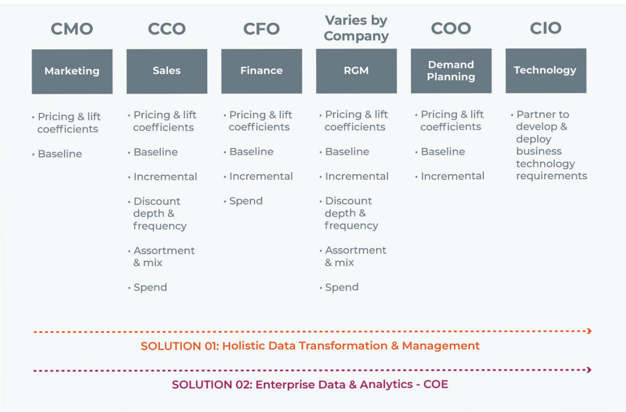
3 Symphony Retail AI Vision 2020 Study
4 McKinsey & Company, "Winning in Consumer-Packaged Goods Through Data and Analytics, August 2016.

No Single Version of Truth

Most CPG companies are inundated with data but still lack holistic insights. CPG organizations collect market and retailer-specific POS data, retailer and brand loyalty data, shopper research, direct-to-consumer sales analysis, social media and web data, customer care data and data from branded events. But challenges arise when departments such as finance, marketing, sales, revenue growth management and supply chain teams operate in silos and each team may have their own sources of data and analytics tools. This also makes it extremely difficult to cleanse data and harmonize hierarchies and other assumptions when data comes from multiple sources. When there is no single version of truth, organizations have limited success even after they invest extensive resources to gain alignment in strategy and execution across these functions.

HOLISTIC PROCESS TRANSFORMATION REQUIRED



Modern Data

The data, analytics and insights used over the last decade no longer describe the consumer or the dramatic shifts in buying patterns and moments of truth. There are more selling and buying channels as well as more competitive choices.

CPG Revenue Growth Management teams must consider traditional data sources as well as the myriad of new data that describe consumer behaviors to pull together a 360 degree and omnichannel perspective.

Siloed Customer Account Planning

Even within the sales organization, the traditional process is siloed where individual account teams plan in isolation from each other and do not work with a holistic enterprise lens. Siloed development, conflicts and misalignment between accounts must be resolved through iterations and rework.

It takes a high level of human touch and coordination for teams to evaluate and provide guidance. People end up focusing on the most urgent or most important segments at best. It is often easy to fall back into the comfort zone of repeating what worked last year. Manual iterations are time consuming and not scalable. In both cases, there are consequences to time, accuracy and effectiveness.

Driving While Looking Through the Rear-View Mirror

Post Event Analytics mostly look retrospectively. The typical outcome is to avoid tactics that did not work well and to repeat effective tactics. Such processes are largely open loop in the sense that teams don't learn the underlying "why" influencers that drive true efficiency improvements. Most of these analytics solutions do not reveal why certain tactics worked at certain times and why the same tactics or others succeeded at other times. Also, post event tools do not help predict what will and will not work in the future.

Broadening the Lens of Trade Planning

Trade planning and execution is done with sales teams that are constantly under pressure to deliver results in the short term. Sometimes the quickest way to fix shortfalls and make the numbers in the current month or quarter is to increase trade spend to bolster the top line. Near term gains must be balanced against longer term goals. Similarly, decisions to boost local performance within one customer account must be balanced against global objectives across accounts. Managing long term and global objectives is often difficult in organizations where headquarters staff and field teams either do not have optimization tools or utilize different platforms or consultants.

Analytics Tools Don't Deliver True Intelligence

Business Intelligence (BI) solutions have been developed for manual analysis and visualization. For instance, BI can help an analyst investigate the largest contributing segment for a sales decline. However, it does not automatically evaluate and relay causal factors to what led to the decline and they certainly don't suggest what to do about it.

3 Introducing Revenue Growth Management

We define Revenue Growth Management (RGM) as the application of analytics to discern the customers' perception of product value and then sense, predict and shape the customer path-to-purchase to optimize product, assortment, price, place, pack, promotion and availability with shopping occasions for profitable revenue growth.

RGM Compared to Traditional TPx

Revenue Growth Management is distinct from traditional Trade Promotion Management. It has distinct goals and re-engineered processes enabled by new tools, methods and technologies.

Strategic Goals

A core principle of Revenue Growth Management is to align price to the customer's perception of value. In traditional trade promotion optimization, there is no explicit link between value perception and pricing. In RGM, value perception is foundational to all analytics. The RGM paradigm strives for an outside-in and deeper micro-segmented understanding of the consumer and what influences purchasing behavior.

Traditional TPx has an inside-out view looking from "my-account" and "my-channel" out to the consumer. The inside-out view of TPx can lead to a mindset where trade spend is perceived as an entitlement by both the retailer and the customer account team in the CPG serving them. In contrast, **RGM takes an outside-in view from the consumer back, across all channels, within each market and for each shopping occasion.**

TPx metrics are primarily aggregated market metrics such as Revenue, Margin, and Market Share. RGM expands key metrics to include consumer-centric metrics such as share of wallet, share of stomach and share of time.

In RGM, trade spend is seen from a "zero-budget" lens. The Revenue Growth Management paradigm positions trade actions as competitive weapons enabling tailored "precision strikes" to drive desired outcomes in specific targeted segments. RGM can also manage modern trade so leadership can truly see the all-in costs of doing business with a retailer or trade channel. So, while TPx views trade promotions as an end in itself and highly transactional, RGM sees trade activities as just one of many levers to shape consumer path-to-purchase.

Finally, where traditional TPx can sometimes become focused on the short term; RGM is inherently strategic. In RGM, strategic long-term priorities inform short term decisions.

Re-engineered Processes

Historically, processes within CPGs have been top-down. Companies have been gradually migrating to an Integrated Business Planning approach and bring cross functional alignment across Finance, Brand, Sales and Operations. However, IBP largely remains an inside out process with each function maintaining its own data silos with alignment sought after the fact.

RGM replaces redundant effort, multiple processes and inconsistent facts with a holistic enterprise approach, where a shared single version of truth serves as a foundation for enterprise reporting, baselines, lift coefficients, everyday pricing strategy, go-to-market plan development, assortments, promotion pricing, planning strategy and integrated business planning, monitoring and control processes across functions. We start with insights about the consumer's perception of value by buying moment, look across channels and work back to specific customer account plans. Global portfolio-level objectives guide local planning within a cross functional integrated business planning process.

The integrated RGM process translates shopper and market insights into informed decisions. Manufacturers can benchmark product performance in relation to the market and competitors, monitor performance against objectives, identify the root cause of issues and sense trends. They can identify product, brand and category-level opportunities to adjust assortment, pricing, distribution and customer plans to drive growth.

RGM fosters collaborative processes connecting CPGs to their retailer customers and distribution partners. All parties work together to improve shared consumer-centric metrics such as share of wallet, share of stomach and share of time.

4 Artificial Intelligence Changes the Game

Artificial Intelligence (AI) is the ability of machines to emulate human intelligence in ways that can augment productivity and optimize business performance. Machine learning (ML), Machine Vision, robotics and natural language processing (NLP) are all applications of AI.

AI technologies have come of age. With big data and cheap cloud computing, AI is now not only highly capable but also economical and practical. What is most significant is that while complex models are running behind the scenes, the business planner receives concise and actionable recommendations from the AI system without tediously digging through data. AI capabilities today can also discern insights in the data and reveal the "why" intelligence without the human resources.

AI allows CPGs and retailers to gather customer insights in an automated fashion and predict next actions based on previous patterns. AI uses predictive patterns to help understand desires, motivations and actions across both physical and digital channels. This lets retailers and suppliers enhance many functions, such as executing more targeted and personalized marketing campaigns and improving trade promotion efforts. AI can also automate forecasting of inventory needs, more accurately predict out-of-stock incidences and ultimately help optimize supply chains.

How AI Makes a Difference

AI is both automating and augmenting intelligence.

AI-enabled automation can take the robot out of the human. We want people to spend more time strategizing, collaborating and negotiating; and less time doing repetitive tasks and digging for data. Routine cognitive tasks that AI is replacing include two common situations. First, where we have an army of people performing tasks requiring some moderate skill such as auditing transactions, cleaning up data, creating promotions, developing and optimizing retail execution routes and preparing plans. Second, where we have a handful of experts spending time on tasks that prevent them from spending time on tasks that truly leverage their expertise to achieve desired outcomes.

For tasks that are not routine, AI is augmenting human intelligence. Assistants trained with specialized skills are enabling more people to perform like experts. Assistants can learn from experience and accumulate institutional knowledge. Since Revenue Growth Management playbooks are now embodied in trained digital models, best practices found in one area of business are now able to be deployed across all teams.

AI is also helping people (including experts) make better decisions than they would have made unassisted. Here, AI and humans are working together to reach levels of performance not possible by either party working alone. **AI can sift through large amounts of data, discern patterns, find problems and opportunities, consider complex trade-offs and make recommendations.**

How AI enables Revenue Growth Management

Harmonized Data Graph

AI can help harmonize data across diverse channels, across retailers and across sources including both structured and unstructured data. Just as Google can organize the world's information into an efficiently searchable connected graph, it is also now possible to organize and triangulate all the information around consumers connecting individual household information, basket level scan data at point-of-sale, social sentiment, buying behavior across channels, day-in-the-life behavior, travel patterns and dwell time in various venues to gain deep understanding of the consumer path to purchase. The harmonized data graph becomes foundational to every analysis in Revenue Growth Management. And, all this is done within minutes versus weeks, at a time when speed to insights provides a competitive advantage.

RGM incorporates AI technology and can sift through large amounts of data to add 360 degree consumer insights into the mix. Then, AI-enabled analysis can follow the consumer 24x7 to understand behavior by day of the week, time of day and by shopping occasion.

Granular Predictive Models

Predictive AI models are built on the harmonized data. These are very granular, micro-segmented models capable of large-scale analysis with tailored objectives and constraints at every level. These models learn from history and predict likely future outcomes. They can compute baseline and lift forecasts combining a diverse set of influence factors. They use deep learning to discern shopping behavior and complex interactions such as switching between brands within category, switching between channels and switching between shopping occasions. They identify complex cross effect patterns between trade and other actions in the market.

Sense and Respond

AI coupled with cloud, big data and agent-based computing technologies is capable of highly sophisticated sense and respond actions. Today, AI assistants can scan all channels, all markets, competitor actions, retailer actions and own actions to find pockets of opportunities and threats. Then predictive models can evaluate complex interactions and explore millions of possible scenarios to recommend best course of actions to specific people in specific roles owning each market and each account relationship. Modern trade levers can be exercised through personalized digital offers.

TRADITIONAL TPX	REVENUE GROWTH MANAGEMENT
Inside-out view from "my account" and "my channel"	Outside-in view starting from the consumer back through channels and then to retail account
No link between consumers' value perception and trade actions	Aligns consumer perceived value to pricing and promotions
Focus limited to aggregate market metrics	Added attention to customer centric metrics across omni-channel
Can lead to entitlement mind-set	Enables precision strikes for desired outcomes in specific markets and segments
Short term orientation	Long term view with holistic enterprise, brand health and the consumer central to all decision making
Retrospective "post-event" analytics	Closed-loop forward looking analytics built on predictive models and cycles of learning about consumer path to purchase
Focus is on traditional trade spend on brick and mortar stores	Incorporates modern trade and can roll-up total enterprise analytics

Growth Hacking through Rapid Test and Learn

AI models continuously discern patterns and learn from experience. Event analysis in RGM takes a forward-looking perspective for learning about consumer behavior. **AI models close the loop between plan, execution and results through recommend - act - measure - learn cycles of continuous learning. This inherent composition is extremely valuable in cycles of innovation. Revenue Growth Management teams can conduct** carefully designed experiments in select markets and segments, observe the results and then roll out refined strategies across the business.

Benefits of Revenue Growth Management

Speed

AI can deliver sophisticated plans exploring complex tradeoffs. It enables rapid evaluation of all potential options via continuous learning models. Iterations and delays are eliminated by integrating planning across all account teams and across functions. For example, the impact of a price change under consideration can be evaluated rapidly within hours rather than days and weeks it would have taken with traditional processes and systems. We are already seeing 70% productivity improvement with augmented-reality based mobile applications to scan shelves and measure display compliance and On Shelf Availability in the store.

Scale

With AI-enabled solutions, Revenue Growth Management teams can move beyond being internal coaches to orchestrators and innovators. Rather than being bogged down with tedious repetitive analysis for different teams and contexts, Revenue Growth Management teams are freed up to work on innovating RGM practices. They focus on designing and refining Revenue Growth Management playbooks while letting the AI system help deploy those practices across the organization. This enables a shift to the "algorithmic enterprise". People focus on improving the algorithms while algorithms help run the business at massive scale.

Within our Symphony customers, we are seeing 3X improvement in accuracy with fully automated ML based forecasting. Due to such advancements in AI technology, CPG companies can now deploy smart Revenue Growth Management practices at scale across their global organizations.

Efficiency

Digital assistants do the analytics heavy lifting to take you directly to detected insights. This saves time, reduces effort and increases accuracy as well as consistency. Furthermore, AI models can evaluate interactions between account teams and functions to avoid conflicts proactively. Leveraging AI technologies, companies can get over 30% campaign participation and achieve over 10% of customers trading up to highest loyalty segment through hyper-personalized digital offers.

Optimization

RGM is inherently strategic and drives global objectives into local decision making. It optimizes across channels and across retailers. AI agents can find pockets of revenue opportunities and recommend optimal actions to the appropriate decision maker. With AI-enabled micro-segmented category price strategies that consider competitive position, key value items, localized pricing and margin guardrails, companies can drive 1-3% sales growth and 2%-5% margin growth for retailers.

Faster Time-to-Value

For many years, the POI recommended manufacturers begin the planning journey with TPM, and once stabilized, continue the planning evolution with TPO or ROI capabilities to maximize promotion efficiency and effectiveness. With AI assisted analytics, RGM teams can now focus directly on identifying the lowest hanging RGM opportunities and deploying them in RGM-assisted playbooks out to the broader organization. They can focus on testing, learning and innovating to identify new opportunities. AI-based models can be leveraged to continuously discern incremental influence on shopper journey and realized sales to close the loop and learn. The entire organization's RM discipline is gradually improved to drive ongoing improvements to business performance.

5 AI is Gaining Global CPGs' Trust

The race to Revenue Growth Management excellence has already begun. Visionary CPG organizations are already building Revenue Growth Management teams and deploying RM practices. For those that have already started down the traditional TPM to ROI to TPO path, RGM can speed up the journey and accelerate ROI.

For those that have not yet started, RGM can help you advance directly to Revenue Growth Management practices. Five years from now, those that opted to wait and see may find themselves with an unsurmountable competitive disadvantage.

AI is here and is already making a difference in CPG revenue performance. Embedding it into your processes and tools will drive the required changes to survive and thrive in this turbulent landscape.

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