



Promotion Optimization Institute, LLC

POI 2022 Enterprise Planning Vendor Panorama

(This document supersedes the 2021 POI EPx Vendor Panorama)





New vendor to the Vendor Panorama

Boston Consulting Group (BCG)





Vendor Profile: Boston Consulting Group partners with leaders in business and society to tackle their most important challenges and capture their greatest opportunities. BCG was the pioneer in business strategy when it was founded in 1963. Since its inception in 2015, GAMMA, part of BCG X, is the AI business unit for BCG. BCG GAMMA combines innovative skills in computer science, artificial intelligence (AI), statistics, and machine learning with deep industry and functional expertise. The BCG GAMMA team is composed of world-class data scientists, software and data engineers, and product experts with a consulting mindset. Today, they work closely with clients to embrace a transformational approach aimed at benefiting all stakeholders; empowering organizations to grow, build sustainable competitive advantage, and drive positive societal impact.

Geographic Presence: North America 30%, Latin America 25%, Europe 35%, and Asia/Pac/Africa 10%.

Total Consumer Goods Users (Seats): Not disclosed.

Tiers Represented: Tier 1 (100%), Tier 2 (0%) and Tier 3 (0%).

Solution Offerings: Advanced Analytics, including What-if Scenarios, ROI/TPO/RGM.

Major Product Sub-Segments Not Covered: Tobacco.

Data Management: BCG offers data management services for clients, including data cleansing and preparation. Depending on the resources at the client, BCG either works with the client data science team to teach them ways of improving the accuracy of the models over time, or in the absence of resources, they deliver this service to clients.

Baseline Creation: BCG utilizes several methodologies (classical regression, boosting algorithms, and Bayesian models) to calculate baseline in various categories reliably. Selection for a particular algorithm is done based on performance metrics. All baseline models are trained on the most granular data available, including sell-out data, promo calendars, assortment, holiday calendar, etc., and able to reflect such effects as cannibalization, pull-forward, and seasonality.

Headquarter Capabilities: BCG enables the setting of annual targets within the solution in a unique way. The AI tool answers strategic questions such as: What is the optimal mix of assortment, pricing, promo, and trade spend levers? How much net revenue and gross profit gain should come from each lever? What guardrails should we employ for each? The solution works as an optimizer to answer these questions for optimal target setting. Also, there are headquarter view reports that give users a look at the entire business with drill down capability.

Marketing: The marketing allocation solution is also used to optimize strategic and tactical allocation of marketing spend. It provides analytics capability to measure marketing impact on sales.

IBP: N/A.

TPM: N/A. BCG's focus is advanced analytics and optimization, so many planning aspects of TPM are part of the capabilities. However, there are no foundational transactional components such as target setting, fund and accrual management, or deductions/settlement capabilities. BCG builds and implements integrations between the RGM capabilities and clients' TPM platforms in support of execution.



TPM User Experience (UX): N/A.

Advanced Analytics Capabilities (What-if Scenario Planning, Pre/Post Event ROI, Revenue Management (RGM), Trade Promotion & Pricing Optimization (TPO)): BCG approaches implementation specific to the needs of the client and builds each platform bespoke for each client. They use modules to accomplish this work: Pricing.AI, Promo.AI, Assortment.AI, and Catalyst Cloud. Pricing and Promotion modules leverage descriptive, predictive, and prescriptive analytics. Descriptive analytics allow users to dive into elasticity and post event analytics. Predictive analytics simulate pricing and promotional situations for evaluation. Prescriptive analytics provide price optimization and calendar optimization, including the full category. AI pricing & pack architecture offers a combination of historical data, and consumer and business insights.

Pricing. Al brings together historical data, consumer insights, and business objectives into a unified model. This module delivers a granular view of historical elasticities and causals, as well as a predictive view of future elasticities, recommended price points, and optimization scenarios based on anticipated competitor/Private Label reactions. Price diagnostics looks at an overview of the market and brand price architecture. There is a price piano for each price point and pack size, price tracking, and price elasticities. POI really likes the driver tree, which details out revenue growth drivers, giving the enterprise full visibility to decomposition of sales and allows for changes right in the tree. The solution supports a wide variety of constraints and takes into account possible competitive reactions. The recommendations are nuanced, e.g., price elasticities are decomposed at a SKU-level into factors such as average elasticity, brand effect, banner effect, size effect, SKU correction, and total elasticity. The recommendations account for impact of price actions on promotion spend levels, depths and frequencies, and volume flows/cannibalization. POI likes the Volume Flow Screen that uses graphics to show where and to whom the brand is gaining or losing volume. The Incentive Curve depicts movement between packs and the price slope thresholds. The Full Detail Table is a view to tradeoffs to optimize the category. All of this and more creates a comprehensive pricing AI module.

Promo.Al offers advanced optimization and simulation capabilities, automatically building forward-looking optimal promotional calendars for full category, satisfying business objectives and constraints. TBCG examines ROI drivers and distills promotional insights, including and not limited to: reviewing effects of depth of discount, promo frequency, and promo mechanics used (e.g., weekly vs. seasonal promos, secondary display, store catalogue placement, etc.); understanding projected incremental uplifts in revenues and profits for each SKU across main discount options; reviewing impact on the category/customer, etc. – all in various levels of aggregation from SKU to category. This module brings visibility from a Headquarter view to brand and sub-brand promotions, as well as relaying timing and price point of each. Many clients use Promo.AI in sales calls to review the promotion calendar and Retailer impact and to visualize the full category calendar. There is a rolling KPI dashboard for the client and the retailer, and in the drill down tab a user can see the drivers impacting the promotion. Users can see how the brand and category is doing vs. other brands and can then do research into the "whys" and insights. The Pricing.AI and Promo.AI platforms can be fully utilized for retailer-specific planning.

Assortment.Al is an assortment optimization engine. The landing dashboard, named Control Tower, highlights sell-in, sell-out, and market share. This comprehensive dashboard enables users to understand changes in assortment and directs to the next right move. The dashboard is visually appealing and intuitive for the user. The assortment recommendation dashboard is also comprehensive, with specific recommendations for adds and deletes. The KPI ribbon across the top helps the user understand the next impact of the recommendation. The assortment capabilities round out the revenue growth management and optimization offering from BCG.

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Separately, BCG offers the RGM solution built on BCG's Catalyst Cloud platform, which provides 18+ standardized RGM analytic dashboards to jumpstart a classical RGM capability enablement to identify RGM value-unlock in specific market(s)/category(ies) based on historical data through manual intervention. Catalyst Cloud covers total category, enabling win-win optimizations and collaboration between client and retailers. Users can configure their own dashboards in this platform.

Advanced Analytics User Experience (UX): BCG offers a very clean, modern user experience. The dashboards and data are arranged in such a way as to not be overwhelming for the user, even though the solution is very robust. Even the color scheme is visually appealing. The user controls the charting of KPIs, and they are easy to read and understand. The service aspect of implementation ensures users are equipped for utilizing the solution to its fullest intent. BCG fully customizes the UX/UI to the specificities of each client and persona.

Analytics Modeling: All engines utilizing advanced modeling and machine learning techniques (e.g., XG Boost, Bayesian) are readily customized to accurately represent market, portfolio, channel, and/or retailer-specific demand drivers and business constraints such as financial targets assortments and promo strategies. The models are tolerant to data scarcity and can quantify uncertainty.

Foodservice: N/A.

Configuration/Customization: Each instance of the BCG solution is bespoke and created specifically to client specifications.

Technology Architecture/Delivery Options: On-prem, private cloud, or public cloud.

Service Partners: N/A.

Technology Partners: Microsoft, Amazon Web Services, Docker, Spark, Databricks, Gurobi.

Vendor Trend: BCG has delivered an AI solution for the market that is steeped in expertise. They have invested heavily and have a solid roadmap for investment to continue to deliver what the industry needs to manage net revenue. They complement the solution with service to ensure companies are getting the full value the solution can provide.

Strengths: BCG has deep expertise in AI engines utilizing advanced modeling and machine learning techniques (e.g., XG Boost, Bayesian) that are readily customized to accurately represent market, portfolio, channel, and/or retailer-specific demand drivers and business constraints. The models are tolerant to data scarcity and can quantify uncertainty. They are focused on incorporating forward-looking demand signals, such as consumer insights and preferences, to help provide a more holistic optimization solution. Optimal RGM intervention recommendations take into account possible competitive reaction and confounding factors such as supply constraints. The service that accompanies the solution implementation, including strong change management and focus on embedding the new ways of working into the operations, is a strength as well.

Challenges: The only challenge we see is that BCG does not offer transactional TPM functionality. This could be a barrier for companies looking for a full end-to-end enterprise planning solution.

Adjacent Offerings: Retail Execution/Monitoring: NextGen Sales solutions to identify next best action and sales opportunities at the store level; optimize visit frequencies, routes; Supply Chain Management: Predictive demand & supply planning tools to optimize OSA, service, inventory, & costs.

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Key Differentiators: BCG has a unique vision of executing RGM and a relentless focus on value and leveraging insights. Additionally, BCG has strategic and operational, layers of capability. The type of advanced modeling used is also unique. Additionally, they develop bespoke capabilities for each of their PricingAI and PromoAI clients.

Outlook & Prognosis: BCG is heavily invested in offering solutions that meet the needs of the market, and they have a strong road map for continued growth. They have a global presence, and we see them continuing to capture more of the market as companies become more aware of the offering they bring to market.

Evaluate BCG When: You are looking for extremely advanced predictive and prescriptive analytics, optimization, and revenue growth management capabilities. You have transactional TPM capabilities and are looking to add end-to-end value chain optimization. You need capabilities that incorporate marketing spend for a view of total investment. You need demand intelligence or supply optimization capabilities.

Avoid BCG When: You are looking for an enterprise planning solution that includes transactional TPM components such as fund and accrual management and deductions/settlement capabilities.

2022 BIC Distinctions: HQ Analytics & Insights, Financial Orientation & Simulation, Next Frontier – Advanced Modeling, Strategic War-gaming, Bespoke RGM Solution.