POI

PROMOTION OPTIMIZATION INSTITUTE

Promotion Optimization Institute, LLC

POI TPx Vendor Panorama 2019

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Introduction

The Promotion Optimization Institute (POI) continues to focus on improving the Holistic Enterprise Planning process centered around the trade promotion process. With the shifting CPG landscape there will be no new normal. The good news is that our world is innovating fast. We use new technological advances every day to make life simpler and, at times, easier. This leads us to have to take a continuous improvement approach to practices, technology, and skills at work and in our personal lives. Innovation means constant activation.

The time is now. POI is a firm believer that with the CPG paradigm shift taking place, the strengths, analytical expertise, and partnerships between retailers and manufacturers need to be fully optimized to seize opportunities, while stemming the negative impact of the industry change. There will always be winners and losers as paradigms shift. What is known is that winners will be the ones who lay new strategy, partner, and think differently. They will be the ones who have the courage to try something different. Reaction is not a strategy. As with any challenge there is opportunity. As leaders, we need to proactively lean into the change required.

This document is designed to highlight the technology and related service options that can help to improve promotional outcomes and help your organization drive efficiency. In short, it is a guide to help consumer goods (CG) manufacturers as they seek to acquire, upgrade, or geographically expand their TPx capabilities. Trade Promotion (or TPx, which is inclusive of trade promotion management, trade promotion optimization, trade promotion effectiveness, and trade promotion analytics) is more relevant today than ever before. As the industry evolves with eCommerce, click & collect, DTC, etc., brick and mortar experiences are still valued by the consumer, and organizations need to have the visibility, robust insights, and ability to balance the portfolio, costs, and entire ecosystem.

Scope of this Analysis

This document builds upon research in the POI Retail Execution Vendor Panorama (bit.ly/POI_RetX_Panorama2019). The two are companion documents. The Retail Execution Panorama evaluated the in-store component of the promotion cycle, while this TPx Vendor Panorama focuses on sales planning and trade management efforts that involve the retailer at the HQ level. Both are part of ongoing leadership efforts by the Promotion Optimization Institute designed to help its members improve their ability to manage trade promotions through the use of enabling technology, and thus improve the entire value chain, enhance trading partner relationships, and drive profitable growth. In this document we evaluate the TPx market and some of the vendors that enable this key set of capabilities. We will continue to perform the State of the Industry analysis each year to track changes over time.

Key Strategic Insights

Some of the most important takeaways from this year's compilation of POI research are as follows:

Holistic Planning: Many retailers and manufacturers are continuing to organizationally structure themselves based on old paradigms. Our number one focus is the consumer, and yet roles, processes, and systems are still internally focused, not optimal and, in many cases, broken.

> *When duplicative work effort is exerted across the organization it hinders obtaining the "one version of the truth" companies desire.*

There are numerous common denominators across an organization's work load: Pricing and lift coefficients, baselines, incremental, depth of discount, mix, etc. Take a moment and think about your teams, consultants, and tools that enable the analysis and work in each of the silos.

There is duplicative effort and cost associated with the siloed approach. It is not unusual for organizations to have consultants developing pricing coefficients and elasticities in marketing, while sales teams are utilizing a promotion optimization tool that utilizes different factors, additionally RGM and Demand Planning teams may also have their own analysts, systems, co-efficients, baselines, and lifts. There are a variety of vendor capabilities and services noted in the TPx vendor panorama that can support a Holistic Enterprise transformation that includes people, process, and systems.

Data Management: As companies have greater amounts of data, it is critical that an organization prioritize data management and assign an owner/team for this critical management component. POI's recommendation is to establish an enterprise data and analytics owner that is responsible for: data management, enterprise analytics and reporting, executive dashboards, and generating the critical "Enterprise" outputs for the common denominators noted above. This Holistic Enterprise approach will drive transparency, consistent process, and accuracy across the organization, while enabling the functional business unit work below. With the Holistic Enterprise approach, cross-organizational work will be done utilizing consistent foundational data.

Can you imagine the positive impact to your company's Integrated Business Planning monthly consensus meeting if all teams involved were using "one version of the truth" and the same underlying "common denominator data" as they built their forecast? Not to mention the downstream benefits and cost savings of having an accurate forecast.

Data is foundational. Yet, companies are struggling to access, cleanse, harmonize, and hub the data. Purchase power of the Millennials is surpassing that of the Boomers and they are digitally engaged. To offer our consumer personalized offers in the new paradigm, data is critical. Clean data enables revenue growth management practices, customer level P&L's, post event analytics, TPO, AI, Holistic Enterprise reporting, and executive dashboards.

We continue to see a strong correlation between companies that are satisfied with their promotions and their ability to bring external data into the process. While trends are improving, nearly 76% of the companies continue to have data challenges with foundational data, and the need is to advance the types and breadth of data shared to includes services. Retailers and manufacturers must make data acquisition and sharing a top priority in 2020 and beyond.

While many TPx offerings include data management, many do not. This is a key differentiator in vendor support and, ultimately, in the quality of promotional outcomes.

Baselines: Baselines are developed and utilized by many functions across the organization as noted above and are foundational to advanced analytics and optimized planning. As a Holistic Enterprise common denominator, it is important that they are accurate. Organizational projections and forecasting efficiency can be gained by unifying the baseline effort. You will see that automated baselines are possible today with many of the TPx vendor capabilities.

Revenue Growth Management (RGM): TPx is becoming a subset of emerging revenue growth management (RGM) initiatives. This team has to balance the total enterprise and the short-term and long-term needs of the company. As a result, RGM teams are highly cross-functional in their approach and drive collaboration, cross-BU alignments, and governance for the organization. CPG RGM team's own enterprise short-term and long-term pricing roadmaps, architecture, and compliance via KPI's. RGM teams also own retailer trade allocation and balancing the trade funding needs across channels and accounts. Proper allocation, planning, and monitoring of trade spend is critical. CPG companies spend between 11% and 27+% of revenues on Trade Promotions, which continues as one of the company's largest expenses on the P&L.

What percentage of your annual revenues do you spend on trade promotions?
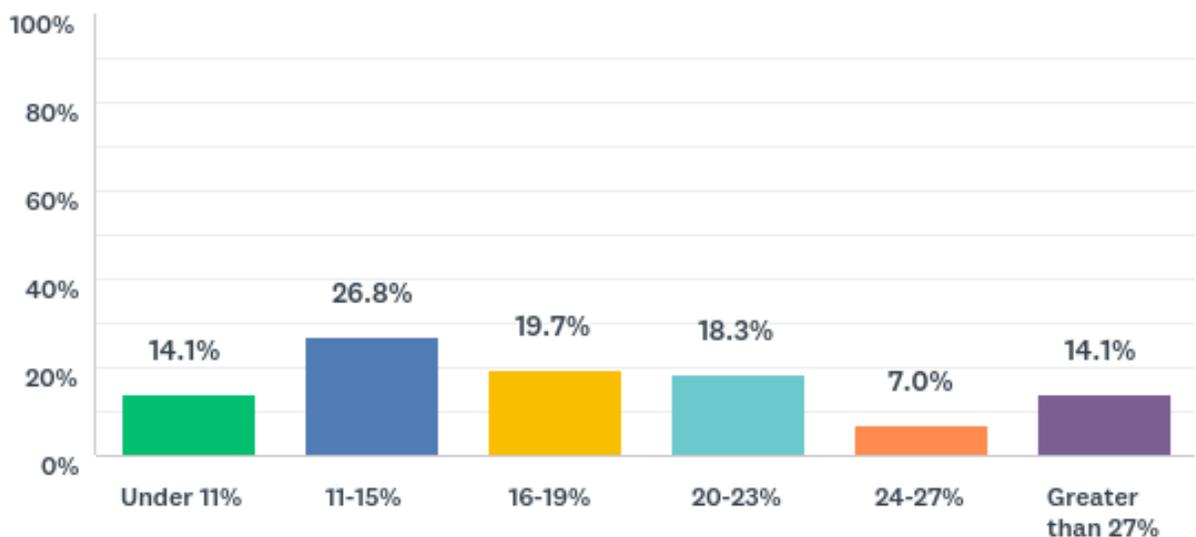
The RGM planning diligence and profit focus has transformed episodic, once a year planning into an ongoing and dynamic planning practice deeply rooted in advanced analytics.

In the 2019 POI survey, 45+% of companies will be advancing their RGM practices. 28% of these companies will be adding personnel and nearly 35% will be advancing technical resources with tools and advanced capabilities.

Vendor capabilities are improving dramatically and companies are embracing revenue growth management practices. With the advancement of capabilities and practices, organizations will be able to transition from siloed independent marketing, finance, sales planning, and demand plans to a more holistic planning effort. Pricing, go-to-market strategies, planning, and forecasting will all be utilizing the same data and analytics.

Additional TPx Insights & Opportunities:

- There is modest differentiation among TPM solutions at the transactional level for planning and executing promotions. What differentiation there is typically can be found in the user experience and also the ability to evaluate promotions before and after they are executed. Greater differentiation can be found in the management and cleansing of data, baseline development, and the ability to predict promotional outcomes and generate insights (using predictive/ML/AI) to improve the overall promotional cycle.

- Artificial Intelligence (AI) is all around us. AI is here today, and it's not bleeding edge. AI can analyze large amounts of data quickly. AI analysis detects patterns, opportunities, and issues, evaluates options, and generates recommendations. How are you building AI into your strategy? This is a strategic question that every retailer, manufacturer, technology vendor, and consultant partner should be asking. Artificial Intelligence has considerable interest among vendors, and you will read in the report of numerous instances where we at POI see it is being brought to bear in a way that benefits promotions, trade, pricing, deductions, and much more.

- 70% of POI survey respondents agree that their companies are struggling to have retailer aligned promotions executed at the store level (vs. 91% YAGO). Through POI research and evaluation, we see advanced analytics and optimization tools available in this space today show promotional outcomes and their financial impacts on both parties, which can help to reduce noncompliance by increasing retailer "buy-in." Many systems can also monitor in-flight promotions, enabling the manufacturer and retailer's ability to stay abreast of promotion execution and performance, and perhaps adjust tactics (especially with digital offers and eCommerce).

- The lack of connectivity between Trade Promotion Systems and Retail Execution Systems is severely impacting execution and revenue gains. Execution is everything, and the inability to pass promotion tactic changes to the field and monitor in-flight activity is costing manufacturers and retailers millions of dollars. 65% of POI survey respondents communicated that their TPx systems are not automatically integrated with their retail execution solutions.

- Omni-channel shopping is becoming prevalent and increased funding is spent against digital and shopper marketing, personal consumer offers, and eCommerce. The vendor capabilities must advance to manage "modern trade" (traditional + digital/eComm/ AO). In the 2019 POI survey, 81% of respondents noted that their company is struggling with how to manage modern trade. The lack of linkage between digital and traditional promotion is substantial. Integration of consumer and loyalty shopper data is helping to see who our target consumer is and cater store layouts, offers, promotions, etc. based on these preferences. Ensure your company is on a journey to 'full integration,' which will benefit you as the manufacturer and what you can share with your retail partners. Many of the vendors in the panorama are starting to create the necessary linkages between digital and traditional promotions.

If your company is looking to build or advance your capabilities, join us at POI Summits to connect and dive deeper into these topics. Examples of these technologies and CPG/Retailer case studies will be presented at: poinstitute.com/events

To read the full 2019 POI State of the Industry Report: bit.ly/PoiStateOfIndustryReport2019

Recommendations

POI suggests the following strategies for improving your trade promotions:

- Seek to enable all of your trade promotion related processes with technology. We still see a large number of activities that are done in spreadsheets instead of through a system. You are not alone in this regard. We recommend that you evaluate all of your processes when choosing a TPx solution. Adding spreadsheets to compensate for inadequacies in your system of choice only adds cycle time, complexity, the possibility of "multiple versions of the truth," and increases the chance for errors, including negatively influencing the customer experience.

- Prioritize functionality above delivery method. The lines between SaaS, managed services, hosted private cloud, and public cloud are blurrier than ever. We believe that having the right functionality to deliver insights and build more effective promotions is much more important than how a technology is delivered. Furthermore, as POI watches trends in the industry, including digital transformation, there is a significant movement towards the cloud.

- Evaluate systems and processes that will make the planning cycle more efficient and less burdensome. Systems that have user adoption drive value. 67% of POI survey respondents feel the planning process is burdensome, 26% acceptable, and 6.8% state less than anticipated. This is a 26% increase in satisfaction, as 93% of respondents in 2018 noted that the process was burdensome. User experience and ability to gain user adoption, should top all other considerations, including low price points and promises of easy integrations.

- Ask for best practices from your vendor. Many vendors have implementation teams and or services that can help to assess current gaps in your processes, enable best practice discussions, and facilitate gap closure efforts. This is a differentiator amongst the vendors and critical to improving your promotional execution. Also, find out the background of those who are expected to deliver them to ensure that they are indeed subject matter experts. Then, document precisely the sort of best practices you are looking for and make this part of the scope of work.

- Don't underestimate the need for change transformation. Whether moving from spreadsheets to a server-based system or implementing optimization capabilities, getting people to embrace change is vital.

TPx Market Overview

Our CPG marketplace is changing and many ongoing issues like effectively managing trade promotions, pricing, forecasts, etc. still persist. Additionally, there are changes in market dynamics with blurring channels and ecosystems. We experience, with our growing membership, some of the following trends, which merit focus from CG manufacturers:

- We have seen multiple merger/acquisitions and also partnerships develop among the vendors in the last year. While there is an adjustment period and fine-tuning of strategy, in these specific instances the merging businesses are well fit and driving forward with Holistic Enterprise Planning capabilities. In this report we have evaluated a total of 18 vendor solutions.

- We continue to have a few "localized" solutions that focus on specific geographies, such as Europe or North America, yet we are also seeing growth with vendors that can service global deployments.

- Deeper analytics, better user experience, and capabilities for optimizing promotions through ML, AI, and predictive models are key differentiators that are highly sought after. We consistently see this in case studies of success.

- Post event analysis and automatic what-if capabilities are often overlooked or an afterthought when considering the entire trade promotion cycle. However, as these capabilities are incorporated seamlessly in the holistic planning and optimization process, it enables fast and extensive promotion evaluation across categories at the time of planning, which is a competitive advantage.

Before engaging with technology vendors it is important for an organization to understand how new capabilities will fit into the organization's strategy, resolve current pain points, and create enterprise visibility and connectivity across the cross-functional teams.

Evaluation Criteria

The Promotion Optimization Institute recommends using this TPx Vendor Panorama to narrow down your options and thus simplify your TPx selection process. Geography is the first criterion to evaluate. If you operate in a specific set of geographies, narrow your search based on vendors that deliver desired capabilities in those regions. Then determine whether you seek TPM, TPO, or a Holistic platform. This will further narrow your search. Next, consider what combination of software and services you seek. We point to these three criteria (geographic presence, TPx capabilities, and software/services combination) because they are relatively concrete and not subject to much perception. It will also narrow the field of potential vendors considerably to a manageable few. Thereafter, continue to rank and weigh the criteria based on your organization's strategy, pain points, and what is most important to the users. This will help to make the selection process more objective as well as help you deal with the complexity of having to look at multiple options.

Company Assessment

Company Viability

Viability includes an assessment of the organization's overall health, so far as we are able to ascertain it. Most of the companies we feature in the POI TPx Panorama will not disclose financial data to us or are not able to do so because of how their business units are aggregated and reported. Where possible, we look at changes in headcount, investment in the product, deal flow, visibility in the marketplace, and stability of management. Ultimately what we look for is the financial and practical success of the business unit and the likelihood that the individual business unit will continue investing in the product, will continue offering the product, and will advance the state of the art within the organization's portfolio of products. A vendor must be able to generate sustainable momentum and be committed to continued success in the specific TPx marketplace where it has chosen to compete. However, we are forced to make our determination based on all available data in the absence of disclosed financials. Therefore, we recommend that you perform your own financial due diligence as part of vendor selection.

Geographic Strategy

This is the vendor's strategy to direct resources, skills, and offerings to meet the specific needs of the geographies that it is targeting directly, or through partners, channels, and subsidiaries, as appropriate for that geography and market. This also covers a vendor's ability to support these companies in targeted geographies and in targeted languages, as well as the vendor having the quantity and quality of clients available to provide references from targeted tiers of consumer goods companies.

Tier 1 companies have revenue greater than $1 billion. Tier 2 companies have revenue of between $250 million and $1 billion. The revenue of Tier 3 companies is less than $250 million. The application of our tiers can occur at the corporate level for global deployments or at the region/country level. This is because Tier 1 companies don't necessarily act as such when selecting and deploying solutions at the micro-level or for a business segment that is relatively small compared to the overall organization.

Market Responsiveness and Track Record

This is the ability to respond, change direction, be flexible, and achieve competitive success as opportunities develop, competitors act, customer needs evolve, and market dynamics change. This criterion also considers the vendor's history of responsiveness.

Deployment Capabilities

This is a vendor's demonstrated ability to deliver trade promotion management solutions for consumer goods companies through its own implementation or with the help of external service partners, as may be required by its clients.

Market Understanding

This refers to the ability of the vendor to understand buyers' wants and needs, and to translate them into products and services. Vendors that show the highest degree of vision listen to and understand buyers' needs and desires and can shape or enhance those with their added vision. This also means having an in-depth understanding of the consumer goods industry and the needs of companies in this market segment, coupled with the ability to act in time to remain

relevant, translate this market understanding into comprehensive functionality, and meet customer needs within its geographic scope, worldwide.

Vertical/Industry Strategy

This is the vendor's approach to product development and delivery, recognizing the unique requirements of the geographies and types of consumer goods companies that it serves. Examples of customers include manufacturers from food and beverage, tobacco, hard lines, footwear, and apparel. Other examples include fully covering the functional footprint within the geography where the vendor operates. This is not to say that a vendor needs to cover the globe but must accommodate variations within its targeted geographies. The vendor's strategy must include directing resources, skills, and offerings to meet the specific needs of individual market segments, including vertical markets. Thus, we do not penalize a vendor in the ratings if it is localized, nor do we reward a vendor merely because it is more global. Most important is its proven ability to deliver against its target market.

Partner Leverage

This is the demonstrated ability to form and execute meaningful partnering relationships across the breath of the offering. Such additions to the product offering are embedded, typically transparent to users, and included in a single contract. Examples include underlying technology, hosting, analytics and data visualization, predictive models, and hardware. Not included in this category is the delivery of deployment services.

Company Vision

This is the ability to attract and retain personnel that will keep the company relevant and growing. It is also the ability to articulate and deliver against a vision of where the TPx space is going in the two-to-five-year time horizon and beyond for its targeted geographies and tiers of customers.

Product Assessment

Product Aptness and Flexibility

This is the vendor's approach to product development and delivery that emphasizes differentiation, functionality, methodology, and feature sets as they map to current and future requirements. This also includes web and mobile technology that is scalable and can support internal sales personnel, as well as partner sales agents. The data model can support appropriate hierarchies of customers and products (e.g., product family, brand, and SKUs). The product also supports appropriate platforms, such as laptops, tablet devices, and relevant forms of handheld devices. The vendor's technology can be expanded to integrate with other company legacy solutions, best-of-breed offerings, or syndicated data sources. These criteria also include important enablers, such as content management, contract management, reporting and analysis, and online/offline capabilities as required.

Delivery Flexibility

This is the vendor's ability to provide its solutions in multiple fashions: on-premise, third-party hosted, cloud, and SaaS.

TPM Functionality (Important - This definition has expanded over historical TPx Panoramas to provide insights into the extent and depth of TPM delivered). This analysis does not cover vendors that specialize in enabling any one of the above, but as a more complete approach to managing trade promotions.

The vendor offering TPM must enable the following key customer-planning functions providing a complete solution that meets market requirements for each function:

- Strategic and account planning

- Promotion planning and budgeting

- Simple promotion evaluation (scenario planning and/or post-event analysis: based on historicals)

- Calculation of financials and other KPIs for both manufacturer and retailer

- Promotion execution and monitoring

- Fund and accrual management

- Deductions/settlements/claims management

- Forecast development (base and incremental)

- Reporting and dashboards

TPO Completeness (Important - This definition has expanded over historical TPx Panoramas to provide insights into the extent and depth of TPO delivered).

The vendor offering TPO must have the ability to predict promotional outcomes with:

- Automated and modeled baselines

- Vendor calculates co-efficients, lift factors, and elasticities

- Uses available data to understand past promotion performance and project future (historical data, POS Brand loyalty, etc.)

- Multiple promotional factors, including timing, frequency, duration, pricing, promotion type, and other capabilities specified by users

- Promotion decomposition: Harmonizes data to know the impact of all activity that is critical to promotion analysis, consumption, spending, shipment, qualitative trade advertising, and shopper marketing activity

- Identify optimal type of promotion to achieve desired goal (maximize: profitability, unit sales, revenue, market share, spend, and contribution)

- Predict and optimize promotion outcomes (what-if), including revenue and profit, for both manufacturers and retailers

- Ability to manage overlapping promotional components and take into account EDLP and Hi-Lo effect where overlap exists

- Identifies Pre/Post Effects (consumer Pantry Loading and Pre and Post Buy-In)

- Calculates statistically-based Promotional Return on Investment (ROI) – optimally with automated "true-up" capabilities, but at least manual entry input of user intelligence

- Constraint-based optimization

- Optimization through iterative scenarios and/or complete AI calendar development
- "Best" promotion option
- Cannibalization effects

User Experience

This includes UI, navigation, and ergonomics for moving throughout the promotional cycle.

Analytical Capabilities

Analytical capabilities involve:

- **Graphics** — Integration of graphical representations and the ability to obtain additional information through hovers or drilldowns.
- **Dashboards/KPIs** — User-configurable lenses that enable the monitoring of multiple dimensions of the business and provide access to insights.
- **Alerts** — The ability to specify conditions that will result in a notification through the TPx system, email, or text message.
- **Reporting** — Predefined reports and/or embedded report writers.
- **Query** — Embedded technologies such as online analytical processing (OLAP) to enable data analysis; ability to export to Microsoft Excel, manipulate the data, and bring the results back into the application.
- **Artificial Intelligence** — This is an innovative set of capabilities that can learn, predict full year promotion calendars based on a set of constraints and parameters the user provides. It is able to provide answers to questions or options the user hasn't thought to ask or insights the user hasn't asked for. Where business intelligence allows you to drill into questions based on some hypothesis or anomaly, AI does not require the "ask."
- TPx analytics provide insights about the aspect(s) of the promotional cycle and we only rate them as to their ability to provide these insights into areas outlined under TPM and TPO Functionality above. While there are many powerful analytical tools on the market, we look at those that are embedded in TPx and shed light on its processes in the TPx Vendor Panorama.

Product Vision

This is the ability to articulate future product needs and have them included in the product when early adopters in the market are prepared to embrace them.

Configurability

This is the ability to accommodate nuances at various user levels, without having to write code. Special consideration is given to solutions that allow nontechnical personnel to manage various levels of configuration, without involving the vendor and where individual users can configure their own solution, based on how they like to work or view information.

Analysis of Representative Vendors

Accenture Cloud TPM accenture.com/cpgsolutions

Profile: Part of the global Accenture Software division that leverages both software and services.

Geographic presence: North America (80%), Latin America (5%), Europe (11%), Asia/Pacific (4%).

Total consumer goods users (seats): TPM 19,000 & Scenario Planning (TPO lite) 350.

Tiers represented: Tiers 1 and 2.

Solution offerings: TPM with Promotion Scenario Planning (TPO), and support services.

Major product sub-segments not covered: Semi-durables (footwear, apparel, furnishings, etc.) and consumer durables (consumer electronics, etc.).

Analytics: The Accenture Cloud TPM solution continues to benefit from development through the influence of ongoing as well as recently acquired CG clients. It leverages Salesforce methods of reports, graphs, and dashboards to give each client a unique view of their data. Additional possibilities include loading the data into Einstein Analytics and creating reports and dashboards. Accenture Cloud TPM has effectively closed many gaps in terms of critical features, functions, reporting, and dashboards required by the market. The analytics in general have improved dramatically. Accenture has added a set of robust TPM dashboards that are excellent and the actionable data and layout is Best-in-Class. In the checkbook dashboard view, the user can see the LE available budget vs. total, liability vs. reserved, liabilities by type, line item fund detail, available to plan, combined spending, total credits vs. total debits, and LE by promotion phase, each in a very visual display: Odometer, funnel, list, scale, and doughnut/pie charts. The new payments dashboard is also excellent, representing outstanding payments by age, top five payment by $, and payment by age balance scatterplot. The promotion dashboard is excellent with a snapshot of promotion planned and actual volume, top 5 and bottom 5 promos, the details of the promotion, and alerts. Accenture has also enabled aggregated account plan reporting where one can visually see aggregated account plans for one or multiple accounts, and they will be building this out in the future. Users can configure the layouts. We particularly like how Chatter is nicely embedded as a way to share best practices and leverage the power of the extended enterprise. It has an exceptional trade calendar, which segues to insights through drill down filtering. A user can quickly reset the filter for an 18-month rolling plan view and also see which promotions are committed. The cross-brands view enables multiple accounts and brands on the calendar view to see if your "own brands" are self-competing.

Accenture Cloud TPM now includes Promotion Scenario Planning (TPO lite) which allows users to compare different combinations of tactic strategies to determine an ideal mix and view a side-by-side Promotion P&L. It has also enabled the ability to add the selected promotion to a library of events to use in building the plan.

Promotions can be added to a promotion list view based on certain promotion KPIs and reused/copied into the next plan. While we would like to see Accenture develop Holistic Enterprise Planning with TPM/TPO/ROI in one platform, adding the what-if scenario capability is a start.

Accenture Cloud TPM generally receives the baseline integrated into TPM from a client's Demand Planning system. Users have the ability to increase or decrease the baseline due to various business reasons such as distribution changes, market changes etc., using a concept called Building Blocks, which is then communicated back to a demand planning team. The only caution with this approach is the accuracy of the baseline coming in from "other" systems. As Accenture develops out its full TPO optimization capabilities, POI would like to see the optimization of baseline included with that module, which would elevate it to market demand and on par with other leading TPO and holistic planning vendors.

This has been another pivotal year for analytics in the Accenture Cloud TPM solution because of the expansion beyond an initial charter customer to include several others that are driving for deeper analytical options that also leverage more machine learning and AI, which has been available but not fully utilized due to immature demand.

As a result, POI rates Accenture Cloud TPM Analytics as Above Average and TPO Analytics as Below Average (only side-by-side scenario planning available).

Technology architecture/delivery options: On-premise, for existing clients on Accenture CAS, hosted private and public cloud as SaaS.

Configuration/Customization: The Accenture Cloud TPM offering utilizes the open APIs in Salesforce.com to enable client-specific customizations. Since the core Salesforce.com application is not impacted by customization there will be no impediment to upgrading. All business processes are easily configured, controlled, and adjusted via Accenture Cloud TPM business templates. Thus, the Accenture Cloud TPM offering offers both configuration and customization. There are modules that can be enabled or disabled using configuration tools as well as adapted at the business process level.

Service partners that have deployed in the past: Accenture, Strategy&.

Technology partners: Salesforce.com for technology and hosting partner, Amazon Web Services – hosting (cloud).

User experience: The Accenture Cloud TPM offering continues to have a superior UX. We simply don't see other products that utilize Salesforce getting this quality of UX. POI continues to find that planning based on attributes instead of complex hierarchies and smart KPIs based on what the user happens to be doing at the moment are an asset to users and a differentiator for the Accenture Cloud offering. We also like the ability to build a promotion and forecast it at the overall promo level and then allocate it down to the individual SKUs in the event. A recent enhancement is the distribution of top-down promotional strategies from higher levels of the customer hierarchy down to planning accounts. This will be of high value to those planning large banner retailers or wholesalers.

- "Push" derived promotional strategy from higher levels of the customer hierarchy to account plans
- User-controlled selection of account plans that receive the strategy
- Parent-level P&L to review and monitor aggregated child-level KPIs
- What-if process to analyze and adjust the strategy prior to releasing for execution

On the near-term roadmap are two mass copy and mass change enhancements so that users can copy and modify promotions easily. There are pros and cons to allowing users to mass copy promotions, but this will become a non-issue as future AI enablement evolves in the planning cycle. Plans will be recommended and not the traditional yearly copy and paste with

sales tweaking. A new improvement that is UX smart is the one-click access to Promotion Product Assortment, Volume Planning, Spend Planning, and Funding from anywhere in the promotion. The cloud UX is strong, smart, and ergonomic in how it renders on the screen.

POI rates Accenture Cloud TPM as Above Average.

Vendor trend: Accenture continues to ramp up wins for the Accenture Cloud TPM product. This is critical to staying relevant, especially as Accenture has announced it is sunsetting the on-premise Accenture CAS offering but with customer specific innovations and support up to 2024. It still offers a managed services approach, which is beneficial in recent years of hiring freezes and movement away from growth in internal IT budgets to support applications. The only limiting factor is that Accenture continues to be primarily focused on Tier 1 companies. Accenture continues to drive TCO reduction while increasing innovation, and as a result, we expect them to gain relevancy with potential Tier 2 clients moving forward.

Strengths: The Accenture network and depth of global expertise is vast and can help with best practices in most geographies. The user experience is exceptional across the board. Supporting annual customer meetings and joint planning with more of a view to the retailer's business is a plus, as is the ability to look at cross-retailer cannibalization. The roadmap is very robust and past history has shown a strong ability to innovate and keep the UX on the cutting edge.

Also, the product development process is amazingly disciplined based on how it secures client input, conducts usability studies, and leverages external usability experts. The breadth of the vision is also noteworthy as it extends well beyond the relationship with retailers to include interaction between consumers and the promotion as part of a true omni-channel approach.

Challenges: The biggest challenge lies in the focus on Tier 1 companies. It will need to continue to focus on reducing TCO and expanding down market to Tier 2 and smaller affiliates of Tier 1 companies. Accenture will need to continue to focus on demonstrating that it has a mature and viable solution after several years of being a work in process. Not having full TPO capabilities will reduce the RFP opportunities, as may companies (especially Tier 1) are driving toward TPx Holistic planning with TPM/TPO/ROI seamless in one platform.

Adjacent offerings: POS data management, data-cleansing services, food services, shelf management/visualization, retail execution and monitoring, digital merchandising.

Key differentiators: The ability to deliver a complete solution and service from initial situation assessment through to deployment and training. It also embodies the combination of deep functionality, high usability, and strong analytics. We think that using Chatter to leverage peers is relatively uncommon. Accenture is one of the very few vendors to offer this. Finally, a key differentiator going forward will be the ability to combine Accenture expertise with the depth of the Salesforce technology and platform.

Outlook & prognosis: Uptake on the cloud TPM solution has been slow, given four years since the announcement to work with Salesforce. Yet, the Accenture Cloud TPM product that is being delivered is exceptional. Some things are worth the wait. Given the strong usability and underlying industry expertise of the broader organization, it will be a viable option for organizations that are willing to pay more for the exceptional service and TPM capabilities. Again, full holistic planning capabilities need to be delivered in the near-term to keep up with holistic planning market demand and Tier 1 requirements. We don't see Accenture Cloud TPM becoming the market leader in terms of seats because of the focus on larger Tiers. We do see it as a market leader in usability and analytical depth, especially in combination with

the exceptional services available. Accenture has the opportunity to lead Enterprise Planning Strategy from AOP top down planning through the supply chain process, but the organization needs to build and communicate the overarching strategy. It certainly has the required talent to do so, and it is what the Tier 1 C-Suite needs to drive efficiency and grow revenues in the future.

Consider Accenture when: You seek global capabilities for proven solutions that have global reach, but local expertise, and also when you seek a superior user experience that has not waned over 20+ years.

Avoid Accenture if: If you are starting your TPM journey from excel and only want an inexpensive platform for trade promotion management.

Distinctions: POI Best-in-Class for HQ Analytics/Insight, Internal Collaboration, Analytics Visualization, Dashboard, and Calendar.

Acumen Commercial Insights Ltd acumenci.com

Profile: A UK-based firm combining consulting services, outsourcing of key business processes, and TPx software for the last 13 years.

Geographic presence: North America (1%), Latin America (4%), Europe (55%), AsiaPac (40%).

Total consumer goods users (seats): 1400.

Tiers represented: All.

Solution offerings: TPM-TPO, implementation and support services.

Major product sub-segments not covered: Tobacco, household products, Semi-durables (footwear, apparel, furnishings, etc.), and consumer durables (consumer electronics, appliances, etc.).

Analytics: Acumen is first and foremost a services firm. Historically each client would receive 8-10 standard reports and Acumen teams would build out the remainder of the reports based on specific client needs. Analytics has migrated to Microsoft Power BI, which gives users the option to create their own reports and also configure their dashboards. Acumen support is at the ready, but the flexibility is mutually advantageous. The dashboard is tile-based, which we like. From there the user has the ability to drill into the details to see graphics as well as see the data and analytics. A new enhancement is geographic analysis and benchmarking of multinational client's revenue management performance across markets allowing central global revenue managers to focus on specific market challenges. This ensures assistance is prioritized in the areas of greatest need and issues. Acumen is continuing to build out a revenue management platform focused on answering the right questions at the right time for their clients: trade terms optimization and structured pricing modules, mix management and pack/price architecture modules, and promotion activity and plan optimization modules. While Acumen offers flexibility in reporting, they are also focused on optimizing the promotion management process and helping clients develop "focused reporting" to answer the most important business questions. They work with the client to build new processes and guidelines for the teams to drive insights out of the promotion learning. Acumen also has solid P&L views for analysis and driving internal and external JCBP conversations. It has good capabilities for identifying underperforming promotions graphically and then drilling into the details. In particular we like the ability to lasso a group of dots on the matrix and then drill into them,

and also the graphical ability to look at claims and their aging. Promo coefficients can be generated by the tool or else imported. Over the past 12 months Acumen has worked with clients leveraging machine learning and linear programming to determine the optimum mechanics and then take and present the optimized plan to their customers. Acumen uses a proprietary algorithm or client specific machine learning models to produce client baselines reducing the administrative work of the users and adding accuracy to system outputs. For data preparation Acumen either leverages existing client platforms or, where the client doesn't already have infrastructure in place, Acumen delivers a data orchestration platform for them leveraging MS Azure cloud-based data management. In addition to the data management platform, Acumen has additional controls such as data validation dashboards and alerts that notify Acumen and clients (when required) of data quality issues. Data validation is built directly into the user interface, to give users confidence in the system, and wherever possible, they try to show end users where their numbers have come from and highlight any issues (such as missing list prices, where a product hasn't been listed in a customer before). This is a great example of the combined power of service and capabilities that Acumen delivers.

POI rates Acumen Analytics as Above Average.

Technology architecture/delivery options: On-premise and hosted private and public cloud.

Configuration/Customization: It is configurable, but customization that would take a client out of the upgrade path is not an option. Client requests are evaluated and considered for inclusion in the roadmap.

Service partners that have deployed in the past: Acumen does all of its own deployments.

Service partners that are able to deploy but have not yet done so: Not applicable.

Technology partners: Microsoft stack (Microsoft Azure hosting and machine learning, and Microsoft for PowerBI), Telerik, RippleRock, Nfocus, LifeLineIT, Mongo, HeadforCloud, CN Group, Vitamin C Ltd.

User experience: The solution continues to improve significantly and has gained flexibility with the move to Microsoft Power BI for reporting and analytics. The system is graphical and ergonomic. This year the system underwent an upgraded UI with a new contemporary look, menu, and optimized views. The goal was to drive "action" and base the flow on logical action steps that a user needs to take. We have historically liked the stepwise workflows that guide the user through the process, and yet Acumen continues to gain feedback from their users to hone and improve the experience. The calendar has the ability to color code the events in the calendar based on profit and uses detailed hovers to reflect promotion details. Users can now create customer agreements (trading terms) in even more flexible ways to more closely match the retailer commercial agreement. Acumen has also advanced performance improvements so the TPM and speed of analytics and reporting is at the highest levels for those clients with more robust product/promotion combinations. They gain continual data-driven feedback through satisfaction surveys users complete in the planning system. Acumen's focus is on the "specific" customer experience and offers a service/capabilities combination that drives a satisfying user experience. The user isn't left with a robust tool that they don't know how to utilize.

POI rates Acumen UX as Above Average.

Vendor trend: Acumen is a global, specialized firm. Its focus is on client retention, and as a result, achieves modest growth year-over-year. It is demonstrating the ability to be nimble as evidenced by the improvements in analytics and UX.

Strengths: We find Acumen to be special in the marketplace because of its ability to provide consulting, implementation, ongoing support services, and software from a single source. This is highly desirable for a company seeking TPx but having difficulty moving off of spreadsheets. We also find the "concierge" model around creating reports, cleansing and managing downstream data, and providing analytical services to be appealing to companies that prefer a high touch model. The solution has a strong financial orientation and with the development of the RGM suite is quite powerful. Acumen has the services and capabilities required to assist clients with the establishing an RGM practice.

Challenges: We don't see Acumen facing significant challenges beyond the dynamics of supporting a client base in multiple geographies with a high touch model out of offices in the U.K. and Singapore. It is a company that is content to be focused on providing broad services to clients looking for the same. It faces less competition in Europe than a similar firm would face in another major market like the U.S.

Adjacent offerings: POS data management and data cleansing, demand planning, price management, and trade terms re-engineering.

Key differentiators: In addition to the combination of product and services from start-up through maturity already mentioned, we found that the solution has an extraordinary ability to capture tribal wisdom by annotating objectives, variances, learnings, and general comments throughout the system. In the computer age such things are often eschewed because they aren't quantifiable or easily searchable. However, we find that capturing the "why" behind a result or a change to an entry is very important to help managers understand the rationale as well as to help someone taking over an account relationship due to turnover. Perhaps more important is the ability to capture insights with commentary. We wish that other vendors would follow suit.

We also found the "nearest neighbor" proxying capability to be very unique. It can grab a similar promotion that has previously run as a proxy for an outcome if not enough data is available for the machine learning to actually determine an outcome.

Finally, the depth of engagement through a suite of services is quite compelling and detailed to ensure that people understand and utilize the solution. The depth of the curriculum and feedback loops with users are quite impressive. Also, the ability to benchmark with other clients within a set of processes aids along the journey.

Outlook & prognosis: We believe that Acumen will remain a specialized company that caters to companies desiring services and solutions in a high touch model. It will offer this option globally but remain relatively small and focused. The migration to Microsoft Power BI lowers TCO and provides more flexibility for the client. Building in predictive models as more of an out-of-the-box offering will be critical to gaining momentum, but getting a voice in the marketplace is paramount.

Consider Acumen when: You need help getting started on the TPx journey across multiple geographies, want to augment your staff with a capable partner, or desire to establish an effective RGM practice. Also consider if you want to tailor a support and services package that is just right for you. Acumen is more oriented to being a consulting and services firm first and TPx solution provider second.

Avoid Acumen if: You simply want a TPx solution that you can maintain and control internally.

Distinctions: POI Best-in-Class for Desktop UX and Internal Collaboration.

Blacksmith Applications blacksmithapplications.com
(New vendor to the TPx Vendor Panorama)

Profile: Blacksmith Applications, a leading provider of FoodService TPM and Advanced Analytics capabilities, has broadened its TPM presence with the development of a new Retail SaaS-based trade promotion management capability. In addition, it announced the acquisition of T-Pro Solutions in 1st Quarter 2019 giving it an immediate entrance into the TPO and TPx space.

FORGE TPM is the flagship product under the Blacksmith banner with a legacy in foodservice and a future in retail planning. The marriage of FORGE Retail TPM with T-Pro's data management, advanced analytics, and optimization is going to be a powerful combination. Blacksmith has drawn together an end-to-end trade promotion and optimization platform that will be able to serve CPG companies of all sizes, channels, and markets.

Blacksmith will retain the T-Pro brand and offering as the principal TPO solution for retail customers and it will continue to be offered to new clients seeking a user-friendly set of tools for data harmonization, real-time post-event analytics, and constraint-based optimized planning.

Geographic presence: North America 100%.

Total consumer goods users (seats): TPM 2,300; TPO 700.

Tiers represented: ALL.

Solution offerings: TPM and TPO.

Major product sub-segments not covered: Tobacco, semi-durable and durable consumer goods.

Analytics: As this is a transition year for Blacksmith/T-Pro, and the capabilities can be sold in stand-alone fashion, POI is reviewing both platforms independently.

On the T-Pro landing page and dashboard clients can see how the business is doing at a glance. T-Pro is in the process of building a library of dashboards for client use. A gatekeeper for each client will manage the dashboard and provide structure to how the organization will look at the business. Data visualization is excellent and the user can drill down to gain deeper insights. Users can quickly toggle between graphics and tables depending on preference. When any report shows red, a user can pull up T-Pro's accelerated intelligence to guide the user to action. The solution is oriented around post-promotion analysis and optimizing annual customer plans to company or brand objectives. Baseline/promotion analysis is the heart of the approach. It is the accuracy of T-Pro baselines and data (management/cleansing-including anomalies in syndicated data) that is attracting clients who have found less accuracy elsewhere. As we know, predictions are only as good as the data utilized. This is true for T-Pro ROI capabilities and analytics. T-Pro Optimum® utilizes data sourced from syndicated suppliers (as well as DSD and other POS sources) to create six baselines that are configurable and specific by geography (down to customer level) and product. T-Pro Optimum can also model shipment baselines for clients who do not have syndicated or other POS data. The algorithms smooth the baselines looking back at a configured period of time and defines a baseline as the volume sold to the consumer in absence of a promotion or incentive. In addition, the modeling engines identify data anomalies— such as competitive OOS and other factors not reflected in the raw data— which are explicitly detected and corrected to better represent a true

baseline. The baselines created from historical observations are used in generating "Projected Baselines" guiding predictive analytics, what-if planning, and optimization. These reflect historical and recent trends, as well as "change drivers" identified by the user(s). This is critical in the planning process to ensure that the lift coefficients apply to a more accurate baseline. The system does the heavy lifting and cleansing of the data, aligning promotion shifts and outliers. This keeps it simple for the user while enhancing accuracy. The promo detail event report represents key metrics with ROI which is fully exportable to Excel. Over 100 measures are currently available for utilization. T-Pro handles promotional overlap and EDLP and users can see specific impacts of each. It features many unique insight drivers, such as: viewing competitive baselines and promotions, predictions that include historical averages, having the system tell when the best time is to promote, and includes digital marketing causal data to simulate into the mix. Utilizing unique metrics such as "Consumption-to-Purchase Index" (CPI), adjusted forward buy and diverting, and "percentage base participation," which is a better indicator than ACV when promoting a single SKU, set T-Pro apart. They have a solid roadmap include additional AI developments: Price Elasticity Demand (PED) Coefficients, opportunity finder, category optimization planning and analysis, and cannibalization modeling.

POI rates T-Pro Analytics as Above Average.

The Blacksmith Insights reporting and data visualization module was deployed in August 2019. The Insights product integrates with all Blacksmith solutions. This provides a solid, repeatable, and highly scalable and configurable suite of standard and custom views that are persona based. Exception based alerts on defined client KPI's are available. Reports are average visually, but the depth of analytics is strong. Various standard reports include a post event ranking report (bubble chart), consumption trend, merchandising support, and plan vs. budget (with actuals is on the roadmap). A unique view to the business that POI likes is the category response report, which looks to see how the category is doing and what activities are driving the category up or down. The report includes competition and a user can easily toggle to a grid output and also download the image to PowerPoint.

POI rates Blacksmith Insights/Analytics as Average. POI will be executing a mid-year update on this vendor in Q1, 2020. POI fully expects the development team to have the back-half roadmap delivered and gap closure improvements live by the update.

Configuration/Customization: No. While the Blacksmith solutions can be "customized" to meet a client's specific needs, any such functionality is managed through configuration. As a true SaaS solution, all clients are on the same version of the application. The current approach to be the low-cost producer in a multi-tenant highly secure cloud environment, with enhancements at no cost, has not created a demand for a custom database.

Technology architecture/delivery options: On-premise, not standard model, but possible. Hosted/private cloud, not standard model, but possible. Public cloud, currently, Blacksmith Applications clients are hosted in the Azure and AWS environments.

Service partners: None. Blacksmith uses internal staff to deploy all products.

Technology partners: Microsoft Azure, Amazon Web Services, Microsoft Power BI, Tableau, Business Objects.

User experience (UX): As this is a transition year for Blacksmith/T-Pro, and the capabilities can be sold in stand-alone fashion, POI is reviewing both platforms independently.

T-Pro has a landing page for understanding the business at a glance. However, the core of the application is looking at the baseline graphics for projected and historical baselines

on promotions and then moving to the calendar for plan creation. T-Pro is simple and yet powerful, with emphasis on simple. A library of scenarios helps with plan creation. POI found it to be exceptionally "flow" oriented, meaning very stepwise with the ability to drag a scenario from the library into the plan. Historical ROI is easily reviewed and users can drill into historical data to validate predicted lift. This is especially important when companies begin the journey into TPO capabilities and need to manage change with users. Guardrails about the appropriate components of a promotion guide the planning scenarios. The entire optimization input process can be done through a single pop-up; it is just that simple. As companies focus on RGM, note that T-Pro can do complete customer P&L's for both the manufacturer and retailer. T-Pro continues to be grid-like, but what is acceptable visually is robust analytically.

POI rates T-Pro as Above Average for UX because they really have made a complex process quite simple for the user.

The FORGE home page has a very administrative look and feel. For users to engage in a dashboard they click over to the scorecard tab to view a summary grid of foundational metrics: Volume, lbs., sales, trade up against various timeframes: AOP, LY, locked plan, latest plan, YTD, and actuals (no graphics). The planning screens are clean and simple and the flow is step-wise and intuitive for the user. The calendar view is solid and has the ability to hover over a promotion to gain the details at a glance. The user can drag and drop a promotion and copy from one promotion to another. A user can also see the volume planned on the TPO side (volume plan tab), including a detailed view. Users can review quantities, and spend liabilities, and align them back to the S&OP targets. Users can save four plan versions.

Key gaps to close: Systems management of direct/indirect; system calculating the spend liability and updating with actuals; dashboard/homepage enhancements; availability of all spend types; configurable status/approvals; and settlements (back-end deduction and reconciliation). While these are substantial projects, the Blacksmith development team has seasoned staff and excels at hitting key deliverables, and have committed to delivering these aspects in Q1 2020.

POI rates the current FORGE UX as Below Average, but POI will be executing a mid-year on this vendor Q1, 2020.

Special Note: Blacksmith has a new Portal that will be implemented in Q3, 2019 which will provide one UI/UX for all Blacksmith applications: Retail TPx, FoodService, and Data Visualization. The configurable portal has an excellent look and feel and will provide metrics and actionable direction to users as they begin the work day.

Vendor trend: Blacksmith has a tremendous upside with the acquisition of T-Pro Solutions and leadership capabilities. The combined tenure and "know how" in the retail pillar will set Blacksmith on a growth trajectory. Historically Blacksmith has been known as a foodservice leader, and future forward it will have broader breadth across the industry. Once the Retail product is fully enabled, Blacksmith will be able to enter into more global deals and compete with other holistic platforms.

Strengths: Blacksmith and T-Pro leadership, seasoned development and implementation teams, and exceptional foodservice brand name. The breadth of the combined organization and depth of optimization capabilities with the acquisition of T-Pro.

Challenges: With any acquisition there are adjustments. Uniting the teams to drive forward and deliver on the Q1 time tables (exceptional leadership, teamwork, planning, and execution can eliminate/mitigate the challenges).

Adjacent offerings: POS data management and cleansing; elements of demand planning; master calendar that includes all historical and future planned sales/marketing activity; shelf management/visualization; retail execution monitoring and digital testing and activity monitoring to determine impact and promotional spend effectiveness.

Key differentiators: Data cleansing and harmonization- while this is often a concern for manufacturers before beginning the solution consideration process, Blacksmith carries the weight of the initial data work and partners with the client to establish ongoing data governance best practices. Baseline determination (core strength) — many of Blacksmith/T-Pro's clients use them to create a baseline sales forecast and utilize it across the S&OP process. From historical and projected baseline creation, to predictive lift tables, to constraint-based modelling and calendar optimization, machine learning and Artificial Intelligence play a key role in the analytical results and the planning and optimization process. This provides a strong foundation for the user to interact and leverage the outputs, predictability, and recommendation from the results. Again, the key differentiators in this area is 1— the accuracy of the output that starts from a foundational baseline and predictive lift accuracy, and 2— the ease of use with which a user can employ the AI capabilities to improve results.

Outlook & prognosis: Blacksmith will become a leader in the TPx retail space and the total portfolio brand will benefit from the extension of the Blacksmith capabilities.

Evaluate Blacksmith when: When you seek a holistic planning tool that is intuitive, have Blacksmith Foodservice capabilities, are good with being an early adopter of FORGE Retail TPM and enjoy shaping a product, your organization's deployment timing works with the Blacksmith development timing of Q1 2020.

Avoid Blacksmith when: When you require a fully loaded holistic planning tool immediately that is already fine-tuned for CPG Retail.

Distinctions: Blacksmith T-PRO: POI Best-in-Class for TPO Ergonomics, Post Event Analytics, and Data Management.

Cornerstone Capabilities cornerstonecapabilities.com
New vendor to the TPx Vendor Panorama

Profile: A Canadian-based firm combining RGM consulting services and TPO software for the last 5 years.

Geographic presence: North America (100%).

Total consumer goods users (seats): 462.

Tiers represented: All.

Solution offerings: TPO and RGM services.

Major product sub-segments not covered: Tobacco, semi-durables (footwear, apparel, furnishings, etc.), and consumer durables (consumer electronics, etc.).

Analytics: The best way to think of Cornerstone is "Revenue Management in a Box." It is a full suite of Pricing and Promotion tools that are very visual and intuitive. It allows for Sales, Finance, and Marketing to utilize the same tools for pricing, promotion, and reporting vs. multiple systems. A strategic revenue management leader can quickly ascertain answers to questions through the suite of reports and tools. Both co-founders have owned and driven this

exact work at Tier 1 organizations, so they understand the needs of RGM and organizational leadership. The robust, question centric reporting is a result of this experience.

The main drivers of ROI for Cornerstone's clients reside within their predictive and prescriptive capabilities, scenario planning and promotion optimization dashboards. Cornerstone has Promo Calculator, a side-by-side scenario planning view with full P&L viewer. What is powerful is the visual promotional elasticity curve and promotional "multipliers" (e.g. Flyer, display) that is displayed beneath the scenarios and shows the promotions options so a planner can easily see the individual activity impact. The Beat-the-Curve dashboard helps a user ascertain what promotions worked or didn't vs. "expected" lift from price discount alone. They can test and learn from different promotional strategies to see what brands respond best to various promotion levers like price thresholds and multiples. POI thinks this has tremendous benefit for HQ teams who are evaluating go-to-market-strategies (GTMS). The goal is to find what activities beat the curve, which is visually depicted nicely. The Portfolio Map is critical to annual operating plan development. Sales, Marketing, Finance, RGM, and Sales Strategy collaborate on this report to determine brand/pack strategy: price increase opportunity, drive non-price growth, invest for volume etc. For trade spend and promo ROI tools, the Fishpond dashboard helps users to determine where they want to push and pull activity, and reallocate trade dollars. Waterfall Reporting visually shows the outcomes from various scenarios to show the drivers of change and helps a user to understand which products, markets, etc. are driving key metrics such as revenue, profit, etc.

To drive improved scenario planning and optimization, Cornerstone has newly released artificial intelligence capabilities within their Category Optimizer dashboard, Portfolio Advisor. This first version focuses on maximization of manufacturer profit via identification and execution of optimal regular, instore, and flyer pricing. Their platform uses smart business constraints to make the results realistic and executable. If you are trying to maximize profit across your portfolio, want to take a price increase without negatively impacting sales and/or retailer margins, or are time-starved in scenario planning, AI can positively impact your planning. By using Portfolio Advisor, you can now find the most profitable scenarios across your portfolio. It takes the guess-work out of optimizing price and promo strategy. By identifying trends and relationships in the data, the system delivers pragmatic and actionable recommendations, thereby enabling faster decision-making, planning, and more accurate forecasts and assumptions.

How Cornerstone Capabilities use AI:

- Using advanced analytics and statistical techniques they generate demand functions, cannibalization, and category expandability

- Defining business objectives as math-based optimization problems with real world limitations and guardrails built in as model constraints

- Using iterative loops of scenario testing to maximize profit across the portfolio

In terms of "foundational dashboards," POI likes the Pricing Bandwidth (ladder) capability that helps a user understand their company's pricing vs. competition. A user can evaluate pricing strategy and drill through the path (multiple hierarchies) to see pricing strategies by region with weekly detail. One can understand who has taken price when and evaluate potential "next step" options. It enables the organization to evaluate where there is room to take price. Another valuable analytical tool is Rangefinder, which enables an RGM and pricing team to answer key business questions (for example, "how much of my volume sells at a given price point?") with the goal of pulling back on heavily funded price points. A user can review key price thresholds (simple slider), learn what price points are critical (via sales

velocity changes), see where the organization is over/under funding, and also determine which customers will be impacted by a change. One can see natural price thresholds from the tool and take action. Many vendors have Bump reports to depict non-promoted and promoted volume flow, but Cornerstone's representation is excellent and customizable by user. Users can directly input data where they have additional promotional details that aren't represented in the data (e.g. Price multiples, loyalty points, etc.). We really like the split-screen capability to see cross-customer cannibalization impact. On Cornerstone's roadmap is the incorporation of pre/post effects (Consumer pantry loading and pre and post buy-In). A suite of "rear-view mirror" dashboards, reporting, and executive summary tools allow data reporting to all be in a single location. This has allowed for widespread usage across an organization. Sales, Finance, and Marketing are all using the same tools and can now have one version of the truth. Sales decomposition breaks down the drivers of change to explain the "why" behind sales changes. Cornerstone has easy and intuitive user interfaces. In 2020, Cornerstone will be launching a suite of forward-looking weekly forecasting and event planning capabilities.

POI rates Cornerstone Capabilities Analytics as Above Average.

Configuration/Customization: Cornerstone does allow for some customization within their software, but also actively solicits input from clients and prospects, adding many of these suggestions into product roadmap. As part of the consulting services they work with clients on RGM and planning best practices which lessens the client's desire for customization.

Technology architecture/delivery options: Public cloud.

Service partners: None, Cornerstone capabilities provides service as well as capabilities.

Technology partners: Amazon Web Services, Heroku.

Note: Q4 2019 Cornerstone will deploy new capabilities to integrate with any TPM solution for holistic TPx.

User experience: Cornerstone converts the "tough to explain" market research lingo into easy and simple sales vocabulary. All of the tough "research and optimization" oriented terms (i.e. Elasticity/multipliers, etc.) are available, but are hidden within default views. Data and pages are laid out in simple terms for all levels of the organization including Sr. Executives to easily understand what is happening. The calendar has been enhanced to include all marketing and GTMS planning inputs. It is highly visual, intuitive, and one of the best calendars we have seen. Each of the reports reviewed in the analytics section have visual representations that are easily deciphered and actionable. These are reports that drive insights for a user and cross-functional team. Numerous aspects of the system and reports are exportable directly to PowerPoint so teams can pick up a graph or data that they need to create an internal or part of a retailer story. Cornerstone's hands-on approach ensures that they are not just delivering software, but rather, they are involved in many aspects and stages of annual and quarterly planning with their clients. This allows Cornerstone to incubate best practices directly within the various account teams within and across their clients. Training of client "Power Users" ensures that there is enthusiasm and expertise residing on-site at all times with the cross-functional teams. POI would like to see greater ability in the Cornerstone platform to plan and evaluate wholesaler and distributor planning. This includes having the individual KMA/Division plan evaluation and development rolling up to the banner level for final review and evaluation. It is important to ensure all the parts roll up to the whole and deliver the profitability, revenue, and volume that is expected of the total banner.

POI rates Cornerstone Capabilities UX as Above Average.

Vendor trend: They have demonstrated the ability to listen to their clients, market needs, and industry advisors. As a result, they have a strong future roadmap. Cornerstone has an impressive ability to turn around a new enhancement quickly when it is strategic for their client base. They have made the right investments in their people and platform. Cornerstone has a great ability of making technical things simple, and we look forward to this platform taking on additional layers of CPG AI application.

Strengths: Cornerstone's unique blend of RGM focused TPO software and processes, combined with real-life experience through consulting services, has created a strong TPO value proposition. The Cornerstone team is hands on with their clients and can help initiate business reviews and forward-looking planning processes throughout the clients' organization, helping deliver "one version of the truth."

Challenges: Cornerstone has the challenge of being a boutique Canadian firm and relative newcomer to the TPx space, which can often favor large, more established players. Global expansion is always harder than expected, and as Cornerstone expands into the U.S., they will need to evaluate best practices, processes, system instances etc., as they enter new markets.

Adjacent offerings: Data cleansing and management.

Key differentiators: RGM focused services in combination with intuitive RGM/TPO Advanced Analytics. The hands-on approach can take an organization from limited or no knowledge of RGM practices and embed into the enterprise exceptional advanced analytics.

Outlook & prognosis: The leadership team thrives on serving their customer needs. Cornerstone has a strong and insightful platform and user experience. Cornerstone has a solid business in Canada with clients of all sizes. We expect them to continue to be a very strong option for companies or affiliates doing business there. U.S. expansion is in motion and we feel confident their passion and drive will overcome any obstacles and mitigate growing pains. The key will be to hire and partner with the right people when entering new markets to help speed to market success.

Evaluate Cornerstone when: You need or are expanding RGM practices within your organization. With Cornerstone you don't need to have an RGM plan, they can lead and guide your journey. You need to optimize pricing and trade (TPO). Your organization needs to utilize robust reporting and analytics that any level of your organization can consume and take action on.

Avoid Cornerstone when: You are only looking for TPM (transactional) capabilities.

Distinctions: Financial Orientation and Simulation, Post Event Analytics, and TPO Ergonomics.

CPGToolBox cpgtoolbox.com

Profile: A global TPM offering architected on the Salesforce.com platform.

Geographic presence: North America (60%), Latin America (15%), Europe (11%), and Asia/Pacific (24%).

Total consumer goods users (seats): Approximately 1,445 (last year 775).

Tiers represented: All (CPG ToolBox has executed Tier 1 & 2 enhanced capabilities to manage the business with a new $4.5B client).

Solution offerings: TPM (Note: new partnership with TABS enables in system TPO and Holistic Enterprise Planning capabilities).

Major product sub-segments not covered: Tobacco.

Analytics: A new partnership with TABS provides powerful data, baseline, and lift management and promotion optimization capabilities side by side with CPGToolBox TPM. Optimized calendars based on constraints from the TPM solution and optimized events across the product portfolio are ingested back into the TPM solution for proper management (edits, funding, settlement, etc.). This includes the system's ability to execute cross references and harmonized data points. The depth of baseline and promoted analytics and the ability for a user to perform "what-if analysis" will elevate CPGToolBox capabilities to handle Tier 1 & 2 holistic planning business requirements. Through a current implementation they are working to seamlessly incorporate the strengths of the two platforms.

The Salesforce Einstein capabilities have been released and the organization is taking the system to the next step with deploying Salesforce Intelligent Analytics. This represents another level of trade analytics for CPGToolBox clients. Capabilities are flexible enough to optimize in the middle of an event. The platform can connect events on the calendars to the marketing cloud and to a retail execution solution, all built on Salesforce. This ties together all marketing costs and integrates data seamlessly across various sales and marketing tools. There are many standard reports. Dashboard visualization is good and offers drill-down capabilities, but the reports are not visually robust. CPGToolBox does have a near-term roadmap to improve the visualization and has new personnel resources onboard to drive improvement in this area. Intelligence through machine learning and AI is expected in the next year to support numerous planning processes.

POI rates CPGToolBox current TPM platform as Average. The platform continues to improve, but analytics is still not up to robust market requirements regarding insightfulness and how the data renders. We see this quickly improving with the new TABS partnership, reporting development team, and advancements made on the Salesforce platform.

Configuration/Customization: Can be customized using the open APIs in Salesforce, which will not impede the upgrade path.

Technology architecture/delivery options: Multi-tenant SaaS on Salesforce.com cloud.

Service partners: PolSource, Capgemini, PwC, and Netsuite.

Technology partners: WalkMe, Conga, Plex, Tamlin.

User experience: UX continues to drive more out of the Salesforce Lightning toolset. Added flexibility has been added to the system through a grid that maintains different SKU's with differing list prices, deal rates, etc. This allows for a product group to contain disparate pricing and deal structures yet be planned together as one product group. All information is maintained at the individual SKU level even though the product group was planned on the calendar. A great example of supporting planning flexibility. The dashboards are excellent and now have the ability to drill into detail and see the net effect of changes made to the plans. The ability for users to do some configuration is excellent. The calendar is very good and the hovers offer more flexibility to drag, drop, and stretch a promotion. The ability to clone an entire calendar or go event by event is nice. A new improvement to the list view is the ability to edit all data points in the promotion line which provides fast view and editing of information for each promotion. UX enhancements are submitted from client deployment

and usage experience, and CPGToolBox has listened, prioritized, and delivered key experience improvements. Through continued improvement CPGToolBox UX has advanced to Above Average.

Vendor trend: This vendor has excellent momentum in user seat growth, capabilities enhancements, and partnerships. Growth over the last year was substantial and due to CPGToolBox executing Tier 1 enhanced capabilities to manage a new $4.5B client (700 new user seats). This executed Tier 1 deployment demonstrates CPGToolBox's agility and also the flexibility of the Salesforce platform. A great example of this agility is the development of a Heroku version of the Trade Promotion Management solution which allows for cost-effective storage of very large data sets. The new account has driven Tier 1 enhancements into the core product that will be beneficial to all clients on the platform.

Last year CPGToolBox took some minority investment from PolSource which was good for the capital expansion and also for the expertise to expand scalability and performance by building out the enterprise edition on the Heroku platform and services offerings that include change management. The organization is executing on YOY vision and strategy.

Strengths: Ability to work hand-in-hand with clients during discovery and implementation despite being a relatively small vendor. The name recognition of being part of Salesforce cannot be understated.

Challenges: Serving and staying in touch with a global client base while not having offices outside of the U.S. except those offered through partners.

Adjacent offerings: POS and syndicated data storage within the TPM tool and partnership with Gigwalk for retail execution.

Key differentiators: Full implementation on the Salesforce Lightning user experience, Step-by-step, tutorial-driven deduction-clearing capability featuring heavy use of Chatter to engage multiple stakeholders. Impressive global footprint for a vendor its size.

Outlook & prognosis: CPGToolBox is well positioned for companies looking to get off of spreadsheets, and has entered into the Tier 1 & 2 market. Last year's move to offer more ongoing support services through PolSource is a plus for Europe and should be considered globally, as many regional companies struggle with resources and partial FTE's. Last year we recommended CPGToolBox should focus on insightful analytics and services as opposed to TPO. They are implementing both, as they have recently partnered with TABS Analytics for Advanced Analytics and Optimization and are delivering the new Einstein Intelligent Analytics for BI. The organization set an aggressive strategy and is making strong advancements to meet the market demand (including Tier 1 &2). As noted above, CPGToolbox continues to improve and we expect solid advancements from the new TABS partnership, reporting development team, and Salesforce partnership.

Evaluate CPGToolBox when: When you seek a holistic planning tool that is intuitive and TCO is very important. Also, if you want to leverage the Salesforce offerings for omni-channel.

Avoid CPGToolBox if: As stated above, the momentum, new partnerships, near-term reporting improvements, and roadmap will quickly advance CPGToolBox analytics, so they should be included in holistic planning reviews.

Data Ventures, Inc. dataventures.com

Profile: Data Ventures (DV) is a business analytics company offering TPx through analytical products and services through a SaaS platform for both manufacturers and retailers. It was spun out of the U.S. National Laboratories in Los Alamos, New Mexico and still has some operational departments located there. Data Ventures is a wholly owned subsidiary of a multi-billion-dollar beverage company.

Geographic presence: North America (56%), Europe (21%), and AsiaPac, including India (23%).

Total consumer goods users (seats): Approximately 220 TPO users, of which about 270 also use TPM. Enterprise licensing relationships do not allow for precise user counts.

Tiers represented: Tier 1 and 2.

Solution offerings: TPO (most TPM components, less deductions/claims/settlements management).

Major product sub-segments not covered: Household products, semi-durables, and durables.

Analytics: Data Ventures analytics extend well beyond the scope of this report into macro insights, shopper loyalty dynamics, assortment optimization, space management, strategic pricing planning, new product evaluation, and supply chain analytics. On the planning side, this means promotion decomposition at the event level to understand which promotional approaches generate truly incremental results for both manufacturer and retailer- results net of cannibalization and time shifting. In particular we like how it shows volume decomposition graphically, side by side, for both trading partners. It also provides understanding of brand and package switching, and calculation of pricing opportunities. The latter shows graphically which products to promote in a Strategic Pricing Matrix, which is a really cool way of looking at win/lose combinations for both the manufacturer and retailer. Also impressive is the ability to index product affinities and display them graphically as a way of looking at co-promotion and product mix opportunities. The Data Ventures team continues to enhance the forecasting accuracy capabilities by matching the statistical forecasting approach used: for retailers where POS is available they employ their proprietary recurring Neural Net algorithm; for retailers where delivered data is available with promotional retail pricing data they employ linear regression models; and for those with delivered data but where the retail pricing data is missing they employ time series forecasting models. IDV express is a revolutionary new data processing engine designed for extremely complex data sets (i.e. loyalty card data). Highly detailed queries against enormous databases can now be delivered in under 10 seconds (60X faster response time vs. earlier processing engine).

Data Venture's expertise in post event analytics stems from its work with global retailers on POS/Scan/loyalty card analytics. It is arguably one of the most powerful analytical tools on the market. They can then be planned and monitored at the banner level. One ongoing engagement for a very large beverage company and a pair of very large retailers involves monitoring on-shelf availability with full root cause analysis by store every day by 10 AM. This has also extended into the ability to support promotions by predicting when a specific SKU will run out of inventory at a specific store 3-4 days in advance.

Forecasting capabilities have been enhanced this year to extend down to the most granular level: store/SKU/day which enables clients to now integrate their TPM forecasts with their supply chain planning. Planners can still plan at the promoted group, but the system takes care of the aggregation and disaggregation behind the scenes.

Best-in-Class executive dashboard reporting has been deployed and is a highly visual, interactive, geo map-based solution to enable high level views in real time into: YTD TPO/TPM results, along with BOY forecasts and by market unit trade channel, retailer, category, products, and packages. We wish we could share the graphic with you as this dashboard is exceptional both visually and regarding the depth of data that can be reviewed quickly to understand the business and gaps.

Overall, POI rates Data Venture Analytics as Above Average.

Configuration/Customization: Requests for customization end up as an enhancement for the entire user base. There is the provision for a complete one-off solution if desired.

Technology architecture/delivery options: On-premise: several large clients still require the solution to run behind the firewall, so this is still an option. Hybrid cloud infrastructure: recently completed work to enable a Private/Public cloud environment with Microsoft Azure. Also, third-party hosted resources utilized for servers, storage, and security (primarily as a back-up/redundancy function); multitenant SaaS.

Service partners: Capgemini (globally), Peak Ten (data services), and Microsoft Azure Cloud Services.

Technology partners: Capgemini for the Hadoop data lake. TIBCO/Spotfire for analytics and application delivery. Linux for application hardware.

User experience: The solution is intuitive and has impressive depth of analysis, but much of what is delivered is in the form of a grid so that it can deliver as much information as possible. There is so much functionality that it feels like a power user solution with function over form. While the UX has improved this year and the look of the executive dashboard is exceptional, POI continues to rate the Data Ventures UX as Average.

Vendor trend: Data Ventures is a lifestyle company because it is a subsidiary of a multi-billion-dollar beverage company in the US, and so long as it is profitable, it doesn't have the normal pressure to grow. Hence, their growth has been modest, as focus has been placed on bringing more insight to their clients, rather than acquiring new ones. The deep partnering relationship with Capgemini is helping to expand services, but Data Ventures does not market itself aggressively. Investments in Big Data capabilities have paid dividends compared to competitors.

Strengths: Data Ventures is very hands on with its clients and conducts frequent workshops, even after initial deployment, to help clients grow their proficiency. They don't like to be pigeon-holed into the beverage world, but the reality is they do a lot of work with many bottling entities around the world, and they are really good at it. That said, where causality is concerned for pricing, execution, promotional de-composition from the retailer and where manufacturer perspectives are concerned, Data Ventures is very strong. Data acquisition, cleansing, harmonizing, and staging is a clear strength.

Challenges: Getting the tool in the hands of the basic account manager as opposed to the power users who are part of account teams or corporate. This is shifting because of the ability to push the insights into the hands of those who can act upon them, but the Data Ventures toolset itself is more oriented to power users. Also, getting mindshare is a challenge, when their key clients in the beverage world are not motivated to tell anybody what they are doing or about the results they are achieving.

Adjacent offerings: POS data management/cleansing, shelf management/visualization, shopper analytics, demand forecasting, supply chain management, assortment and space allocation optimization, pricing optimization, demand forecasting, remote retail execution and shelf monitoring (i.e. detect out-of-stocks).

Key differentiators: Data Venture's depth of the analytics, combined with the experience of seeing things from the retailer side of loyalty card and shopper analytics. This is a really strong synergy and few competitors can do things like manage 1.7 million SKUs for a Japanese retailer for better merchandising, shelving, and pricing locally, let alone from halfway around the world. In particular, where we see depth on the TPx side is in volume decomposition, whether at the plan or individual level. Also, as it relates to monitoring and predicting out of stocks, which should be a part of any TPM approach. Thus, it is the insight on overall strategy development and details on how to execute a better promotion that differentiates Data Ventures.

Another differentiator relative to promotion execution is the ability to monitor product at the SKU and store level in near real time, or as often as the data is available. We believe that capability should be part of every TPx deployment, so that adjustments and collaboration can be done in-flight instead of registering that the promotion was not executed per contract or had product availability issues after the event was over.

Outlook & prognosis: Data Ventures will remain a highly competent and respected niche player for insights, simulation, and promotional monitoring.

Evaluate Data Ventures when: You want broad and deep analytics that completely surround the promotion process from strategy to execution from a partner that wins awards for its insight generation capabilities both at retailers and manufacturers. Also, if you want end-to-end options from data management to ongoing training on the solution. Finally, if you want to bring shopper analytics into the TPx cycle.

Avoid Data Ventures if: If your core requirement is TPM with full deductions/claims/settlements.

Distinction: POI Best-in-Class for HQ Analytics/Insight, External Collaboration, AI, Data Management, and Remote Monitoring.

Effectmakers effectmakers.com

Profile: A European headquartered TPM vendor taking an eCommerce approach to selling its solutions, as well as traditional engagement with implementation support.

Geographic presence: Europe (100%).

Total consumer goods users (seats): 1,229.

Tiers represented: All.

Solution offerings: TPM.

Major product sub-segments not covered: Tobacco and durables.

Analytics: Effectmakers offers a flexible built-in report generator and a customized Microsoft Analysis Services cube for each client with specific KPIs and functionality. The dashboards can be configured based on the user needs and can be shared or private. The dashboards provide business outlook and key metrics at a glance with nice visual representation. A bar

graph denotes the actual vs. forecasted units so the user can easily see the business trend. Users can then reference the KPI table below to dig deeper into the business drivers. KPI traffic light visuals can be configured based on the client's needs (ex: gross sales and/or net sales vs. LY, promo spend vs. LY or target, sales margin vs. LY, units vs. LY). The team is also working to make the platform increasingly scalable to continue to drive performance excellence as they grow the business with additional layers of transactional and user data. Effectmakers is adding flexibility to the platform to be more tightly synced to current client business processes and how they want to analyze the business. Effectmakers has invested in BI development by optimizing batch processing and undergoing a cube architecture upgrade to improve data processing X5. The OLAP cube reporting capabilities with dynamic drop downs make pivot reporting faster and extends the KPI options. With the OLAP cube development the new Profitability Report with Performance KPI's was created. This report helps a user evaluate brand performance over specific time periods. The report is both graphical in nature and also provides a data driven grid overview to dive into promotion specifics. Effectmakers has also released a new forecast accuracy tool to provide visibility of planning inputs into the S&OP process. Cannibalization is a user input as an assumption, as it cannot be calculated by the system, and there isn't a provision for competitor cannibalization. All reports can be exported to excel for further analysis or presentation development.

POI rates Effectmakers analytics as Average.

Configuration/Customization: The core database and frontend are not customizable, but on requests they build customer-specific tool extensions/improvements. Interfaces and reporting cubes are customized based on a specific framework.

Technology architecture/delivery options: On-premise, and both private/public cloud.

Service partners: None.

Technology partners: Microsoft Azure for hosting.

User experience: During the implementation project, Effectmakers offers services customized specifically to the customer's needs, such as project management, scope-definition, time plan, process descriptions, system configuration, interfaces/data mapping support, model/method validation, and key-user and end-user training. An attribute that has benefited them with their Nordic customers is the ability to be flexible and combine TPM's best practices in a structured project fit with the client's business processes in mind. The platform has a tile-based landing page from which to navigate to the various functional areas. The UX is simple and straightforward. It is a bit monochrome and grid-like, but for organizations that desire functional TPM this can be an asset. POI likes the stop light functionality and configurable alerts. Some editing to cells can be done through pop-ups. The promotion calendar is available for the user to view promotions in a Gantt chart promotion overview. The view is intuitive, simple, and user friendly. Reporting is self-serve and it is very easy to generate reports. There is a step-by-step guide to using the solution. The ability to copy to Excel, manipulate, and bring it back into the tool is a nice feature. New list management and price list automation support basic transactional aspects of the system and increase access and visibility of the data to the working teams. The development team has enabled new trade terms management which is very easy to use and with new calculation options for allocating fixed amounts: condition stream, planning stream, and percent of gross. Inputs to the forecast are important. Enhancements have been made to baseline planning with the release of three new planning streams. A planner can plan a program based on ambition, expected promotion, or expected launch. The goal of the new baseline planning streams is to gain a better perspective of the forecast drivers and the intention of each plan and to make the input faster for the users.

POI rates the Effectmakers UX Below Average.

Vendor trend: Effectmakers has been able to get a good mix of brand name, multinational as well as local clients in the Nordics and German speaking countries. The organization has been highly focused on enabling client requirements which has superseded the 2018 roadmap. Effectmakers is growing organically based on the excellent service and enhancements provided to their clients, so the strategy is working for all involved. They have an excellent roadmap but need the bandwidth to execute against the vision.

Strengths: Simplicity, attractive price point, local expertise in Nordics region, and client retention. It also has a penchant for getting TPM deals with companies that have an SAP footprint for the back office, but choose Effectmakers for the above reasons plus speed and cost of the implementation.

Challenges: Selling the solution online and through re-sellers will allow them to achieve critical mass, but it is an interesting model. They are the only real entry level TPM solution in Europe, so we continue watch their journey and growth.

Adjacent offerings: None.

Key differentiators: The selling model is truly unique: go online and try out the software. If you like it, then download your customer and item master with some help from their Business Integration team. Then just pay a monthly fee based on the number of direct and indirect users. They also have a higher touch, engagement-based model for larger enterprises, but the low price, try-before-you-buy approach, and self-serve deployment model are the key differentiators.

Outlook & prognosis: There is always a market for low cost TPM solutions, because our POI survey data still shows that, despite the availability of TPM solutions for two decades, there is a perception that they are too expensive. The Effectmakers selling model is intriguing and we predict that it can garner interest globally because it does not require any local sales or support offices. However, we see it as niche because most companies we survey and speak with are asking for more services, support, and best practice inculcation rather than less. Nevertheless, we applaud their offering a low cost, self-serve option.

Evaluate Effectmakers when: Your primary TPM requirements are for a complete, cost effective, and largely self-supporting approach. Also, if you like to try before you buy or value local expertise in the Nordic region.

Avoid Effectmakers if: You desire a broader range of support and service options. Also, if you want to move quickly beyond TPM to TPO or place value on functionalities such as rich causal analytics or a superior UX.

Exceedra, a division of AFS Technologies exceedra.com

On March 25th, 2019, Exceedra and AFS Technologies (AFS) announced the merger of their business operations to offer global Integrated Business Planning and Trade Promotion Management/Optimization solutions to the Consumer Goods market. AFS has acquired the Exceedra shares, and the merged business will operate under the Exceedra brand as a division of AFS Technologies. The acquisition will enable Exceedra to leverage the positive AFS delivery track record and AFS can leverage Exceedra's expertise and product innovation.

Symphony Technology Group (STG) is the private equity partner backing the Exceedra and AFS merger. The firm brings expertise in the consumer goods sector, providing the resources to build strategic value and unlock the potential of these two innovative companies.

The new combined business offers an exciting opportunity for AFS and Exceedra to accelerate the expansion of its products and services offerings for consumer goods companies improving trade spend ROI, operational efficiency, delivery, and visibility.

The Exceedra Solution Portfolio now offers solutions that fit any size CPG company; at any process maturity level.

Geographic presence: Europe (24%), North America (68%), Asia/Pacific (6%), LatAm (2%).

Total consumer goods users (seats): TPM 35,655, of which 2,200 use TPO.

Major product sub-segments not covered: None, cover all.

Service partners: Clarkston Consulting, TPG (Partnering Group), Strategy&/PwC, Tata Consulting Services (TCS), and Genpact.

Technology partners: Microsoft Azure and Rackspace for hosting and underlying technology, Retail Velocity — Demand Signal Repository (embedded consumption-shipment data mapping services), Preactor (factory planning capability extending S&OP remit), Sofco-Factory planning capability extending S&OP remit, SQL service desk stack, Power BI for visualization (embedded), Office 365.

Exceedra Enterprise IBP Solution exceedra.com

Profile: A global TPx vendor providing TPM/O, demand planning, supply planning, and S&OP support.

Tiers represented: All.

Solution offerings: TPM and TPO.

Analytics: The Enterprise landing page and dashboard are both excellent. We like the ability to create personalized dashboard elements. It has a broad range of reporting capabilities that enables users to see live changes made, view standard reports, create ad-hoc reports, as well as leverage visualization tools like Exceedra G2 or PowerBI, which are directly connected to the tools providing powerful visualization and reporting. Exceedra has enhanced standard and in-context reporting to provide insights and detail within a specific module so the user doesn't have to leave that module and find the reporting and insights. The promotions module has a flexible set of filters that includes a list of key measures including planned and actual. This in-context reporting turns the promotion list view into a powerful user defined report and can be further sorted and filtered.

We like the ability to compare the entire plan in scenario mode, in addition to the individual event. Reporting and insights can be exported for sharing or further analysis, including being pushed out through a mobile device. The solution has a strong financial orientation to highlight contribution vs. spend or promotion contribution. It has embedded predictive and post event analysis.

The analytic tool set now includes AI and machine learning. The modelling platform leverages Python to generate the models and process the data using machine learning to test the best fit from the model library. The model library ranges from more basic regression models like Linear Regression and K-Nearest Neighbours to more advanced Machine learning models like Support Vector Machine, Random Forest, and Gradient Boosting. The output can be reviewed and models adjusted and tuned by the modelling team, if required. The analytic engine leverages a library of algorithms using machine learning techniques to generate a statistical base volume forecast the planned customer SKU level. The process classifies each SKU by volume pattern then applies the best fit algorithm based on its historical characteristics. The process also understands and manages the seasonality, trend, promotion effects, cannibalization/halo, and forward buy. The same engine using different mathematical approaches also generates the promotional lift models in a second stage of the process. Actuals are integrated into the system for both shipments and consumption to update the automated actualization and post event analysis. This provides an update to the P&L from the bottom up and the ability to monitor in-flight promotions at any level. They have also improved speed of entry of promotions, speed of generation of an annual plan, and in-context analytics.

For analytics POI rates Exceedra Enterprise IBP Solution as Above Average. It is a stellar analytical product and Exceedra continues to invest and make improvements.

Configuration/Customization: Customization is allowed but not preferred. Exceedra looks to add requested functionality into the standard solution but has done one-off's when the client opted for it.

Technology architecture/delivery options: On-premise, hosted/private cloud, and public cloud. All of these are the same technology and code base.

User experience: Exceedra Enterprise IBP Solution is one of the few vendors that provide promotion management capabilities to support top down/bottom up promotion management. This includes funds allocation and management, assignment and tracking objectives, supporting HQ guidelines, and guardrails. This holistic approach improves planning and forecast accuracy across the organization and positively impacts integrated business planning (IBP). The Exceedra solution is modular and can be implemented to support the core trade processes, e.g. trade promotion management. It can be deployed as front-end customer business planning to an existing TPM or as the full integrated business planning solution — including demand planning and S&OP support. This allows customers to de-risk projects and also utilize existing IT investments such as SAP, APO, or BI frameworks. Exceedra's focus is on the principle of "right investment, right result."

We like the ability to easily copy over only the successful promotions from the prior year, while leaving out those that were not. New enhancements include the ability to adjust a scenario at any level of customer and product, risk and opportunity visibility, and improves the graphical interaction, such as waterfall reports on risks and opportunities. A promotion can be created directly from the calendar view or users can insert a totally new one. We particularly like the flow and navigation using the "next" button. The graphical approach to post event analytics with the ability to then drill into the details is very nice.

Exceedra focuses on ease of use and a self-configurable solution. The HTML shift will be completed by the end of 2019 which offers browse/device independence for end users. Another new UX addition includes the ability for the client to maintain and manage the customer and product hierarchies within the admin module. Within the system there is the ability for the account team to capture comments and share with the organization. This is rare with TPM and TPO systems and we wish more vendors would consider this capability.

POI rates Exceedra Enterprise IBP Solution UX as Above Average.

Vendor trend: Exceedra has executed a very strong multi-year growth trajectory and, when coupled with the AFS merger, has the opportunity to leverage both Exceedra and AFS strengths for additional growth and innovation. POI has seen Exceedra consistently called for RFP evaluations, and in 2019 has won a tremendous number of deals. It also has very strong client retention.

Strengths: Exceedra offers a strong blend of analytics, usability, and industry expertise. We often don't see this balance in other vendors. Also noteworthy is the ability to leverage S&OP requirements, such as baseline creation and mutual priorities, to bring the promotion cycle into the conversation. Many of Exceedra's clients use them to create a baseline sales forecast. Also, a strong stable of services partners for deployments allows them to focus on being a more innovative software company. Exceedra has a really strong streamlined flow through the optimization and planning process. Note also that their modules are already on modern platforms vs. old legacy technology. A multi-country, large company deployment takes time and clients need to know there is stability in the platform and the underlying technology. Exceedra's modular yet holistic approach provides the ability to add more sophistication and capability as your organization evolves, supporting the key challenges in Trade Promotion Management and Optimization, Demand Management, and Sales and Operational Planning.

Challenges: Their primary challenge is managing growth. Exceedra has to navigate this fine line between growing too fast and still being able to execute for all tiers of clients. However, having a strong partner network already in place, and leveraging AFS's deployment and implementation strength and practices means Exceedra is well placed to support further continued growth.

Adjacent offerings: POS data discovery, management, and cleansing. Demand planning and Supply Chain modules. Retail monitoring/reporting capabilities of store level data and have integrated to client's handheld devices. Exceedra Retail Execution, and DSD capabilities (Formerly AFS).

Key differentiators: POI is very impressed by the in-context reporting capability, which is a highly differentiated way of anticipating what a user may want to see based on a current activity. We are big fans of using machine learning to optimize promotions, but also see the benefits of using it to learn and anticipate what a user might want to see at just the right moment. Additionally, the new pre-configured solution for more rapid deployment gives a prospect more options, either as a company or for various geographies. Ultimately, Exceedra's greatest differentiation is that a company can manage the full planning and forecasting cycle with the Exceedra modules and can achieve the "One Version of the Truth" that all organizations desire.

Outlook & prognosis: POI has seen Exceedra elevate its organization and platforms to become a global player. With the AFS merger it is positioned and backed for accelerated growth and innovation. It has a focused strategy, speaks the business language in selling situations, and has good client references. They are continuing to invest heavily in their tool and internal teams.

Evaluate Exceedra when: You seek quality in both TPM and TPO as an integrated and yet modular proposition, may have global intentions, like to look at promotions from a financial perspective, and are looking to link demand creation to demand fulfillment with integrated S&OP.

Avoid Exceedra if: We don't see a compelling reason to avoid Exceedra.

Exceedra Enterprise Distinctions: POI Best-in-Class for Financial Orientation and Simulation, Analytics Visualization, TPO Ergonomics, and S&OP Capabilities.

Exceedra Professional TPM, formerly known as AFS Retail TPM afsi.com

Profile: Exceedra Professional (formerly AFS Retail TPM) has grown from its legacy in the food service industry to an end-to-end consumer goods platform that includes ERP, analytics, retail execution and monitoring, and TPx.

Tiers represented: Tier 2 and 3.

Solution offerings: TPM.

Analytics: Exception-based reporting that includes recommendations about what action should be taken are excellent. Overall analytical capabilities are based on Microsoft's analytical stack and offer greater access to insights. The dashboard is visually pleasing and works nicely as a landing page with KPI and alerts that are configurable by the user and by specific roles. Exceedra Professional has a shared report library. Reports can be scheduled, published, and/or pushed to users or groups as a link or actual Excel doc based on a predetermined schedule. The reporting cube has actuals at the day level and can easily convert to graph formats and publish to others. There are more than 5,000 measures in the tool for users to utilize. The filters and report layouts are intuitive and much improved over prior years. A new rolling time frame on reports can now be configured (past and future) so users don't have to manually update the time filers. Another new advancement is the addition of out-of-the-box deployment options for G2 Analytics Business Intelligence. This enables sales performance and deductions management dashboards, currency conversion, and cross-country roll-up to common currency. Six standard reports are ready to be utilized on day one. An insightful feature is the ability to understand what trade spending is at any point in time. With the AFS/Exceedra merger, Exceedra professional is now integrated to the Exceedra Enterprise analytic engine (reference detail above in Exceedra Enterprise excerpt).

Closed Loop: If a company uses Exceedra Retail Execution (formerly AFS) and combines it with TPM Retail and G2, they have the capability to sense and respond to promotional effectiveness and compliance in near real-time. By following this type of closed-loop approach, a user is able to modify the in-field promotion to better reflect ground level realities.

POI rates Exceedra Professional analytical capabilities as Above Average.

Configuration/Customization: It is a multi-tenant solution. Client specific functionality can be developed as enabled functionality for all clients to turn on.

Technology architecture/delivery options: SaaS Cloud deployment.

User experience: POI likes the dashboard landing page as it can be configured to the individual user level. The calendar hovers are very nice and clean, and users can drill down directly from the calendar into a promotion to view or edit the selection. The calendar is visible in multiple views that can be exported to Excel or PowerPoint. Promotions created directly in the system will pre-populate as much of the promotion detail as it can, reducing administrative burden (rate, spend, and fund types based on historical "like" promotions). Two enhancements have been added to ensure planning accuracy: system will display valid funds and performance types by sales type so users don't build invalid allowances and it's now impossible to save an allowance if the account or product on it is invalid. The automated deduction clearing and UX has a nice graphical appearance vs. just green screen is very good. This will advance

the speed of deductions clearing. In addition, multiple enhancements have been added to expedite deductions processing: the ability to approve multiple submitted promotions and deductions at the same time, based on your search criteria to save time; easier navigation and referencing back and forth from deductions to promotions when reconciling, reviewing backup documentation, or investigating overlapping promotions. The 24x7 user helpdesk is a real plus as users need to gain resolution when issues arise at any hour.

POI rates Exceedra Professional UX as Above Average.

Vendor trend: Overall trend continues to be positive and Exceedra Professional is winning new clients. The company is investing in the TPx product and with the Exceedra/AFS merger will be able to tap into Exceedra Enterprise innovation and TPO capabilities. Client retention is strong.

Strengths: Exceedra Professional is a great fit for small – medium companies and for clients moving from spreadsheets to their first automated planning capabilities. It has deep industry experience since the vast majority of clients are in the consumer goods industry. The solution is very well-rounded, and there aren't any significant TPM deficiencies.

Challenges: With the Exceedra/AFS merger, the TPO and implementation partner opportunities are closed. No foreseeable challenges in the future.

Adjacent offerings: Food service, rebate management, ERP, warehouse management, BI, and retail execution.

Key differentiators: One of few providers offering TPM to tier 2 and 3 companies. Also, one of the few vendors offering best-of-breed retail execution as well as TPM. Adding machine learning and recommendations to the planning process is future forward development that can be applied to any tier organization.

Outlook & prognosis: We expect continued momentum in the tier 2 and 3 market, which is still very attractive and out of reach for many of the large, enterprise players. Also, putting the solution on the Microsoft AppSource on a "try before you buy" basis will reduce perceived risk and increases interest for prospective buyers.

Evaluate Exceedra Professional when: Your company is looking for a solid trade management system. Also, evaluate AFS if your organization sees the value of having an integrated TPM/ retail execution solution.

Avoid Exceedra Professional if: You want your own customized solution.

Exceedra Professional Distinction: POI Best-in-Class for Field Analytics and Insights.

Kantar Consulting consulting.kantar.com/our-capabilities/technology

Customer profile: A Kantar company global TPx vendor with deployments in over 50 countries. Kantar is part of WPP and also has more than 20 years enabling sales processes in the consumer goods industry.

Geographic presence: Europe (79%), Latin America (6%), Asia/Pacific (5%), North America (8%), and the Middle East (2%).

Total consumer goods users (seats): 10,028.

Tiers represented: All.

Solution offerings: TPM and TPO.

Major product sub-segments not covered: Tobacco.

Analytics: Kantar now enables front-end reporting through PowerBI which has improved the user experience and self-reporting capabilities. They have advanced capabilities such as cross cannibalization, sell-out and shopper data, and total plan optimization. POI likes how optimization includes expanded factors such as weather, promo duration, competitor promo, mix, and any special pricing. Kantar derives deeper volume decomposition discovering root behaviors in what we would describe as "behavioral TPM," which brings in several factors of shopper dynamics. Kantar recently invested in refactoring the TPO engine leveraging the machine learning and AI models powered by the Azure cloud computing platform with improved outcomes for promotion analysis and predictions. The AI TPO engine derives baselines from sales using a full time series approach which factors in trend and seasonality. The model catches all phantom spikes and tags them.

The landing page and dashboard are exceptional in the insights for managing the business and how they render graphically. The Promotion Funds Optimizer module has very nice HQ functionality for determining where to spend/invest. It combines the learnings from past promotions with the goals and constraints to predict future performance, then utilizes the TPM functionality to allocate the funds and manage the execution. Many other solutions are heavily weighted to either HQ or the individual event. We find that Kantar has a great blend of both. Some of the macro fund allocation tools are an asset to revenue growth management (RGM) personnel based on how they can slice by product and by customer.

It also has some unique KPIs that are visualized very well. The work flow starts with a graphical chart and a user can drill into a table and access more detail. It also has a unique ability to see a graphic and a grid side by side. Examples of some insightful views include: cost of non-compliance, competitive promotional activity, reasons for non-compliance, and POS compliance. Its dashboards are strong and graphical. Promotions by store in a 2X2 matrix is exceptional. It also has an Excel plug-in that is the best we have seen, for those who favor Excel. Additionally, Kantar data services provides wider benefits: maps sell in/sell out data, harmonization and fixes syndicated data anomalies. As a result, users can trust the data and TPx findings. New product architecture has been put in place that delivers CI/CD, continues integration and delivery, and supports a faster and easier upgrading process.

POI rates Kantar Analytics as Above Average.

Configuration/Customization: Both are offered, as well as a pre-configured, rapid deployment version.

Technology architecture/delivery options: Hosted at Microsoft Azure.

Service partners: Capgemini/iGate, Everis, HCL, d code, ICB Works, NTT Data.

Technology partners: Microsoft.

User experience: Kantar has a superior user experience with a mix of ergonomic and graphical elements using a new unified HTML5 UI. All constraints in TPO can be entered from a single location. Being able to define promotional ranges by using a slider is both convenient and cool. The calendar is also very nice, because you can stretch it, drag and drop, add color coding based on how it is trending, and even do optimization directly from the calendar. We also like the heat maps for viewing which products and customers are performing well, a novel way to allocate brand spend across customers, and a very graphical comparison of plan scenarios.

Even the detail screens that are nest viewed in a more grid like way are relatively pleasing due to color and shading. Kantar is focused on the user experience and with the change to HTML5 has re-done the UI, resulting in improving the day to day work of the users. Technically they are also working on the engine and back end to advance the types of trade terms capable with the new omni-channel planning need. Azure has also improved the ability to add markets and regions when required.

POI rates Kantar's UX as Above Average.

Vendor trend: Kantar has delivered 2928 new users and also landed one of the largest North American TPM deals in 2019. We attribute this to more cross selling and ramping up executional capabilities outside of Europe. Kantar has made a huge investment to develop a global, multi-tenant platform, serving one application for all clients, but with company specificities when required. They are also building the foundation of data that will be good for future expanded AI plan building. It also uses its services organization more consistently as a differentiator.

Strengths: Industry expertise, strong product functionality and usability, excellent vision, and strong client references. A very strong roadmap for innovation to support revenue growth management. Offering both TPx and Retail Execution complete the promotion cycle down to the store level, driving execution of plan visibility.

Challenges: The key challenge lies in continuing to build upon its sales execution investments and build TPx product recognition beyond other portfolio components: Consulting, analytical tools for category management and shelf analytics. When Kantar gets on the list of solutions evaluated it does very well.

Adjacent offerings: Sales quota and incentive management, retail execution, sales volume planning, portfolio optimization, assortment optimization, virtual store/merchandising visualization, POS data cleansing/harmonization, image recognition, retail and shopper insights.

Key differentiators: Having three solution models is a really insightful way to go to market based on what sort of data is available to drive the forecasting and optimization processes for Tiers 1-3. The breadth of the offering around promoting and executing is stellar: strategic-level insights to inform the right market and trade spending levels through the Marketing Mix Modeling tool; Promotion Funds Optimizer to best allocate promotion funds across retail partners and brands; TPO to generate optimal calendars; planning and execution capabilities to deliver the right mix of activities and investments in a collaborative and effective manner. Furthermore, when combined with Kantars' proprietary shopper and retail insights and end-to-end category management and retail execution solutions, it has the potential to enable full transformation programs in the commercial area to drive both revenue and margin growth.

We also see the usability as a real differentiator, because it has been exceedingly strong for two decades, we have been tracking it. Finally, the increase in best practices consulting resources throughout the entire TPx journey is a real differentiator.

Outlook & prognosis: Kantar will become a global leader in the next few years based on the quality and breadth of solutions and influence network. It should get more than its fair share of deals, because it has an exceptional product, both from a functionality and UX perspective. It also enjoys high client retention due to the strong analytics in combination with a superior UX, which make it a system that companies can invest in and use for the long haul.

Evaluate Kantar when: You favor a strong user experience, excellent analytics, and industry expertise around the globe. Also, evaluate when you seek TPx as part of a larger, strategy-to-execution solution.

Avoid Kantar if: You seek something inexpensive to meet basic requirements such as TPM and funds management.

Distinctions: POI Best-in-Class for Desktop UX, HQ Analytics/Insights, Analytics Visualization, AI, and TPO Ergonomics.

Periscope By McKinsey periscope-solutions.com

Customer profile: A highly analytical TPM/TPO offering that embeds McKinsey & Company intellectual property and a broad array of services into the promotion cycle. In 2019, McKinsey reorganized the integrated solutions in a way to 100% integrate the former insight solutions into each of their core six solutions (Marketing, Customer Experience, Category, Pricing B2C, Pricing B2B, and Sales Solutions). Each of the six solutions combines ongoing data management, insights, software tools, client service, and capability-enhancing support that deliver continuing client impact by embedding McKinsey's IP into their client's everyday way of working.

Geographic presence: North America (55%), Europe (10%), AsiaPac (5%), Latin America (30%).

Total consumer goods users (seats): 1100 for TPO; 150 TPM.

Tiers represented: All tiers. Primarily in food and beverage.

Solution offerings: TPO/TPM (TPM capabilities exclude funding and deductions/settlements. 150 users utilizing TPM).

Major product sub-segments not covered: All are covered.

Analytics: The advent of the self-serve portal is a real plus because it opens up the models (Python, R, and SQL) to data scientists and analysts to be more self-reliant and adjust quickly. From the acquisition and preparation of data, to insight-based planning, to simulating the best possible promotion or price, this is where Periscope excels. The Promotion Optimization module (TPO) has developed foundational analytics to develop the science behind the "DNA of an event," allowing clients to review the impact of over 30 drivers of effectiveness (e.g. execution, competitive effects, intra-portfolio effect, etc.). Periscope uses pattern recognition to establish guidelines and guardrails for "never before run" promotions. Over 10 baseline methodologies are available to handle any type of promotional category. Recently they have launched a proprietary visualization framework and integrated this into Periscope's reporting platform, leading to better performing charts that are more visually engaging. We found these analytical aspects to be compelling:

- The depth of analytics to support both modern as well as traditional trade, where the latter is largely overlooked by many vendors.

- Leveraging Machine learning for pattern recognition in post event analytics to provide more insight than can be yielded by arithmetic calculations.

- Ability to simulate volume transfer from de-listed SKUs and to new SKUs.

- Dynamic price and promotion modeling to empower the RGM discipline.

- Advanced capabilities, such as cross elasticities, which many TPO vendors do not have.

- Ability to aggregate optimized scenarios to see total impact at various levels.

- Allows to track forecasts and actual against plan at various levels of the hierarchy. This, in addition to the Mean Absolute Percentage Error, forms the basis of the accuracy reporting.

POI rates Periscope McKinsey TPO analytics as Above Average

Configuration/Customization: Customization is possible and Periscope will provide resources to support customization needs. However, it is not common as the off the shelf solution is highly configurable. For example: a new platform across all solutions that launched since our last writing allows for more tailoring to meet the needs of a client or subsidiary because they become a single instance in the cloud.

Technology architecture/delivery options: On-premise (still offered; works well in countries/regions where internet is less reliable), hosted/private cloud (possible but less common), public cloud (default approach and preferred) with AWZ or Microsoft Azure.

Service partners: McKinsey and Company, McKinsey's Consumer Marketing Analytics Center (CMAC) group for Advanced Analytics, Eversight for offer innovation, and Dynamic Yield for eCommerce offer personalization. Periscope does its own implementations through the global capabilities in 27 locations and supports clients on 6 continents. In LATAM they recently opened an office in Mexico City.

Periscope By McKinsey and Nielsen have an important alliance through Nielsen's Connected Partner program. Through this collaboration, Periscope's food retailer and FMCG clients have seamless access to Nielsen's syndicated point-of-sale (POS) data, panel data, a variety of in-store execution monitoring services, and pricing and promotional models, globally. Periscope's clients are able to make better and faster decisions across their sales and marketing activities.

Technology partners: Microsoft (hardware and software), BoardwalkTech, Tableau, Amazon Web Services, Alteryx, Spark, Exasol.

User experience: Periscope continues to combine power with simplicity in a HTML 5 delivery. The tile-based landing page is exceptional because it presents the icon as a mini of the underlying report, which aids in recognizing and navigating to it. In particular, we like the ability to create a scenario, review it, compare it side by side with an actual, create even more scenarios for side-by-side comparison, and then push the desired one into the plan. Promotions with overlapping dates can be grouped into one single trackable event and moved via digital workflow together. Profitability, ROI, and other key metrics are displayed for the group representing a consolidated view. It also has a robust capability for a reviewer to add a detailed annotation and send it back to the author as a form of internal collaboration. The dynamic store grouping feature really makes it easy for a user to make comparisons based on attributes and then apply a tactic to them. This includes causal factors such as socio-demographic data that are often overlooked in other TPO approaches. Also, the very robust Learning Management System and eLearning modules wrap themselves around a user as part of the overall experience. The Periscope planning module can now be integrated with existing vendor funding management systems through a rule-based feed. If a future promotion adheres to the specified criteria in the deal, the agreed upon funding will automatically be applied. In addition, Periscope has started launching new capabilities that expose configuration aspects to the end user so the client is in full control over how the toll is configured. Periscope has vastly improved ETL times and reduced calculation times by 75%, so the user receives results

on screen in less than 3 seconds in the majority of cases. They are now working on promo grid loading times.

POI rates Periscope UX Above Average.

Vendor trend: Growth in CG TPx user count continues to be low year over year. Yet, investment in the product has continued to be strong. Becoming part of the Nielsen Connected Partner program favors existing as well as future Periscope clients through speed and depth of analysis at a lower cost of doing so.

Strengths: The depth of experience working the promotion cycle for both manufacturers and retailers gives them a hands-on understanding of what retailers are thinking about and struggling with. This dovetails nicely with the willingness and ability to manage data hygiene of retailer POS as well as other data sources. We also see the linkage between category management and TPx to be a real plus because of how the insights can be easily brought to bear in the planning cycle. Industry expertise and depth of talent base are also big factors for Periscope to enable a focus that starts with the strategy and includes marketing as well as trade effects. Also, the proven ability to partner with a TPM tool to leverage existing investments and provide holistic TPx planning.

Challenges: Periscope is reliant on a third party TPM tool for the transactional functions. It will need to create a holistic TPx platform or socialize the TPM partnership.

The Periscope approach is high touch and has many wrap-around services relative to others. This differs widely from a software-only approach that may have no provision for including data management and enrichment, insight creation, software, expert support, and capability building. This means that a TCO comparison is harder and if not "bundled" for a manufacturer/retailer's specific needs, they could have "sticker shock" when reviewing the potential total capability cost without adding needed implementation and insight services in the TCO of its competitors.

Adjacent offerings: Customer Insights, POS data management, POS data cleansing, Assortment optimization/shelf management/visualization, remote retail execution monitoring, pricing management, offer personalization, and demand forecasting. The markdown management tool is being re-platformed.

Retailer specific call-out: Periscope has a retail planning platform which enables integration with CPG vendors for collaborative planning in two ways: promotion planning integration via their vendor template excel export/upload or via direct login allowing CPG's to plan in the same system and the Trade Promotion Effectiveness Insights Portal where retailer can onboard CPG's to see the same analytics insights if they choose to share.

Key differentiators: The level of automation and depth of the end-to-end offering of software and services as previously mentioned. POI also sees Periscope as being a leader in pattern recognition through machine learning to help in answering the questions that people don't think to ask. Also, the willingness to get their hands dirty on the data management and enrichment to ensure a more favorable output. Finally, the story boards for presenting the insights to customers or internally are compelling because they are dynamic and make collaboration easier than building PowerPoints from scratch.

Outlook & prognosis: Because of the importance of analytics with a "tools plus services model," Periscope will continue to thrive, but as a specialized offering. It will have global reach because of its McKinsey network and ability to work in data rich as well as data poor environments.

Evaluate Periscope when: You want an analytical suite to enable promotion optimization including RGM. Also, if you a seek depth of capability for a single/incremental area of expertise like post promotion analytics. In general, if you want expertise and the ability to deploy globally but adapt to the local environment. Lastly, when you want analytical power without overwhelming users with complexity. Beyond TPx, Periscope By McKinsey also has a vast portfolio of services and capabilities that are worth investigating to solve enterprise pain points and deliver transformative strategies.

Avoid Periscope if: You want a transactional TPM tool for funds, accruals management, or settlement.

Distinctions: POI Best-in-Class for HQ Analytics/Insight, Financial Orientation and Simulation, External Collaboration, and S&OP Collaboration.

SAP SAP.com

Profile: A global, enterprise software vendor with a large ERP install base and significant presence in the Consumer Products industry.

Geographic presence: North America (40%), Latin America (5%), Europe (45%), and Asia/Pacific (10%).

Total consumer goods users: 18,000 combined across TPM/TPO. Enterprise license agreements do not provide a distinction between the two.

Tiers represented: All.

Solution offerings: Holistic Suite (TPM/TPO/ROI).

Major product sub-segments not covered: Tobacco, semi-durables.

Analytics: Users continue to benefit from SAP's significant analytics focus. The landing page contains KPIs that account managers care about and each have drill down capabilities for root cause analysis. The landing page layout provides both insights as well as details in just one click. The ability to segment a plan by category and buyer with KPIs set up for each specific buyer help to enable joint customer business planning. A user can easily layer in KPIs and can zoom in on a quarter or other timeframe of the plan. Seeing multiple scenarios side by side is not only powerful but the graphical renderings are very good. Emerging capabilities in guided discovery are exceptional and visionary. The visibility of plan drivers and building blocks support the planning and revenue management processes. At the other end of the spectrum is the inclusion of machine learning to provide pattern recognition and answers to questions that a user hadn't thought to ask. Teams can plan or review promotion and product impact at the account and also with a revenue growth management enterprise lens thanks to the combined power of in-memory planning via HANA and SAP Analytics Cloud's holistic reporting capabilities. Users can view P&L by month as a graphical view. The analysis capabilities can enable a high-level executive discussion or an interactive meeting with a buyer- the graphics are excellent. SAP has continued the innovation with SAP Customer Business Planning and SAP Analytics Cloud (SAC) which delivers pre-defined business content. SAC easily extends sample stories and sample data models to fit specific needs like additional KPIs and company-specific calculation rules. The aggregation levels can be easily controlled to enable key roles (e.g. sales managers) to execute review sessions with their delegates. SAC furthermore enables secure collaboration by allowing annotations and sharing visualizations. SAC provides a variety

of connection types and visualizations which help to create compelling cross-system data analytical stories unleashing useful insights to the business.

POI rates SAP Analytics as Above Average.

Configuration/Customization: SAP provides customer exits for enhancing the solution without precluding upgrades. SAP provides a platform which the customer and partners can leverage for adding their own enhancements.

Technology architecture/delivery options: On-premise or hosted/private cloud. In 2019 SAP launched the cloud-based Trade Management Single Tenant Edition which enables the same robust on-premise capabilities but offers a simpler pricing model and cloud services like deployment, support patches installations and upgrades, which equals lower TCO and faster implementations. Cost is based on usage. This is a benefit to tier 2 & 3 organizations, as well as Tier 1 clients who need a solution for smaller markets.

Service partners: PwC Strategy&, Deloitte, Accenture, HP, AgilityWorks, IBM, Infosys, Knack Systems, Gruppo Asso, TechLink, Bluefin, Cognizant, and Capgemini.

Technology partners: No dominant technology partners. SAP is hardware agnostic.

User experience: The extensive SAP Trade Promotion Management improvement in recent years has culminated in the completion and release of SAP's cloud based Single Tenant Edition launched in 2019. As a result, the UX has remained consistent YOY. Continued UX strength delivered through HTML5. Particularly noteworthy are:

- A highly interactive calendar that includes KPIs, great hovers, and the ability to put the prior calendar at the bottom of the page for relevance. Users can enter data directly into the hover.

- Chevrons give a clear sense for the process flow.

- An optimizer that shows side-by-side scenarios as well as graphics that show profit and other key metrics.

- A user can visualize product hierarchies, drill into them, and create custom roll-ups.

- Exceptional graphical orientation.

SAP has created the Trade Management Golden Process methodology based on 17+ years of working with some of the largest CP companies around the globe. The process dissects the trade management business process down through four levels of detail across key stakeholders to define cross-functional impact, roles and responsibilities, and data requirements. The process steers development, implementations, and change management at the customers across the key roles impacted by trade management. This lends to a user experience that works well, as it is built for the specific organization. SAP's Golden Process enables SAP Model Company for Trade Management (MC4TM) which was released in 2018. MC4TM is an implementation accelerator that can enable a customer to stand up SAP Trade Management in four weeks for a reference system or to fast track the blueprint phase for an overall faster time to realize value.

The much-needed flexibility to plan on a separate product planning hierarchy (vs. ERP) is now possible with the HANA foundation. Users can also do a split calendar when planning and drag a successful promotion from one year to the next. This has proven to be an 80% time savings for planners. When clients also have the TPO platform, the dropped promotion content will be updated with new uplift values. The Trade Management calendar uses the CRM Marketing

Calendar for a view of the marketing events. So, for customers using CRM Marketing those events will be visible. If not, the feature to enable the capture of consumer campaigns can be enabled to reflect them in the calendar. POI especially likes that when a user drills down multiple times through reporting the visualization continues to be strong. Google like search capabilities enhance the user experience.

POI rates the SAP UX as Above Average.

Vendor trend: The past 4 years have been key for SAP. With investment commitment, SAP has addressed most major shortcomings in its previous versions, landed numerous deals, guided key customers through the upgrade process without experiencing defections, and begun to flex leadership muscle. It listens to customers through multiple means and prioritizes the input for more frequent releases (two per year). It has simplified platform pricing to three major trade management line items [Customer Business Planning (CBP), Trade Promotion Planning and Management (TPPM), and Advanced Trade Management Analytics (ATMA, a.k.a. TPO); PwC/Strategy&'s Performance Analyzer is a complementary solution for post-event analytics and is available separately]. The new SAP Trade Management solution is truly an out of the box solution, as opposed to a framework for co-development. The UX is now among the best, as is SAP's roadmap.

Strengths: Product development is a strength for SAP. It has shown that it can buckle down and deliver needed and innovative capabilities, and do so quickly. SAP is a product development leader. It also has a vast service provider network, name recognition, and relationships with IT organizations. In memory computing powered by SAP HANA. Tight integration with Demand Planning, S&OP/IBP, Retail Execution which drives one set of financial "books." SAP's client Trade Council is a differentiator. While many vendors solicit input on new enhancements, SAP treats the process formally and seriously through more personal interactions with both SAP and peers. Clients find huge value in the process (sharing between the teams on system set-up, process, etc.).

Challenges: SAP has made solid progress breaking through the "old tapes" and stereotype that SAP carried for years, which reflected a stark, basic, and lacking TPx. Many companies are on older SAP TPM versions, and it will take time for SAP to upgrade some of its historical client base to the latest and greatest capabilities. Another challenge is continuing to gain investment money for enhancements and innovation, as SAP is a large and highly matrixed company.

Adjacent offerings: POS data management and cleansing, retail execution, supply chain management, IBP/S&OP, marketing automation, campaign management, Hybris Marketing, SAP CRM, ECC, S/4HANA.

Key differentiators: The depth of expertise in the industry, number of trained implementation partners, and strength of the roadmap. For example, the work already done on the "conversational UI" (voice driven) and smart discovery is quite impressive. The obvious SAP differentiator is the full, native integration to SAP back-office (ERP, S/4HANA, APO, Finance, etc.)

Outlook & prognosis: We look for SAP to gain momentum like never before. And with its cloud offerings and new Trade Management Single Tenant Edition, we look for more movement down market to Tier 2 & 3. SAP's CX roadmap is progressing its vision for a fully harmonized cloud platform for customer engagement, for B2B, D2C, and B2B2C customers. The C/4 Hana suite will enable customers to have a consistent user experience, with common services across all clouds-Sales, Service, Commerce, Marketing, and Customer Data. This includes providing seven operational capabilities that will underly the suite – shared master-data services, UX

harmonization, end to end processes, platform services, extensibility and integration, open eco-system, and suite intelligence and analytics. In addition, a shared customer master data service is arriving in the back half 2019, which provides a 360° customer data capability, including BOTH B2B and B2C customers. This service will be supported across all C/4 Hana clouds and establishes the foundation for a complete customer data platform. These master data and suite capabilities form a foundation for the future SAP Trade Management roadmap to extend into D2C promotion planning and execution. SAP is innovating through manufacturer partnerships and insights.

Evaluate SAP when: You haven't seen their TPx offering lately. Also, if you have SAP as your ERP. Finally, if you are looking for a TPx partner with a complete commercial vision for a consumer goods customer experience, from demand creation to demand fulfillment to invoicing and beyond.

Avoid SAP if: You want inexpensive and basic TPx. Also, if you want a bundled offering of solution and services.

Distinctions: POI Best-in-Class for Desktop UX, Field Sales Analytics/Insight, Financial Orientation and Simulation, External Collaboration, and Calendar.

TABS Analytics tabsanalytics.com

Customer profile: An advanced analytics, optimization, and data management company. In May 2019 TABS acquired Decision Insight, a market research solutions company, which will provide additional test and learn research and price and promotion data points for the organization.

Geographic presence: North America (80%), Latin America (20%).

Total consumer goods users (seats): 200+. Enterprise contracting does not allow for a precise user count.

Tiers represented: All.

Solution offerings: TPO-Advanced Analytics and Optimization (new partnership in 2019 with CPGToolbox for TPM –bridging holistic planning capabilities).

Major product sub-segments not covered: Tobacco, household products, and consumer durables and semi-durables.

Analytics: TABS is moving to cloud-based deployment on Snowflake with the roll-out of the TABS Insight Portal, which will lead to faster deployment, full report building on the fly, and enterprise-level (highest) security standards and customization. Expanded cloud-based capabilities are a real plus for CG companies who want more configurability in dashboards or require power to do more heavy lifting with their big data. TABS Insight dashboard is top notch. It is visually compelling and includes unique elements such as social "buzz" data, ads by banner, breakdown of sales volume data, demographics, and total share by retailer/online vendor. It has the ability to drill into the details to understand every driver and aspect of the business. It is truly "total business analytics." We applaud that the platform is data agnostic instead of relying solely on traditional syndicated data sources. There are many other analytical insight capabilities such as:

- Understanding the impact of existing, discontinued, and new products on growth.

- Visually showing changes in price elasticity.

- Leakage and slippage chart with causal factors to show not only where lost shoppers are going, but why.

- Integration of panel data to marry sellout with behavioral data and better understand shopper dynamics.

- A "ship to consumption" that helps to equilibrate the two metrics and provide insight about behaviors such as diverting and forward buying.

Additionally, the All Outlet Visibility offering leverages a cloud-based big data management firm to increase speed and data rendering through Microsoft Power BI. All Outlet combines eChannel with brick and mortar to better understand product performance dynamics in the marketplace with the inclusion of Nielsen, Info Scout, and survey data. This allows for segmenting (high/medium/low/extreme) stores with accompanying volume decomposition by store segment. Thus, it can track trends for brands as well as outlets for performance as well as emerging trends. Showing these trends in a word cloud is an appealing way to capture them. This can make for better focus on promotional attributes by looking at these trends across the eChannel as well as regular retail. TABS analysis rigor has exceptional insights for S&OP planning partners: marketing mix analysis, business drivers, models using price elasticity, SKU elasticity, and demand transfer.

POI rates Tabs Analytics as Above Average. It is highly innovative, shows the insights in very consumable formats, and has deep insights.

Configuration/Customization: Customization is common due to how user organizations like to analyze their business.

Technology architecture/delivery options: Private and public cloud and on-premise (one current client).

Service partners: Cognizant. TABS acquired Hybrid in March 2019, so they are no longer an external service partner.

Technology partners: Tableau, Microsoft (Excel), Alteryx.

User experience: TABS has a very strong UX and ergonomics. The landing pages are exceptional. It is graphically engaging, and additionally offers grids beside the graphics for those who prefer to view it more like raw data. It has all the capabilities of a power user tool, but is intuitive enough for the general user. Inclusion of the presentation builder to facilitate turning insights into impactful materials makes life easier. Also, doing more in Microsoft Power BI will provide additional options on how data is rendered. We also like:

- Embedding images, such as ads, as part of the baseline rendering and calculation so that the user can see what it is that drove the results.

- The ability to do a promotion simulation off of a single screen that is graphical and provides a holistic view of the business.

POI rates Tabs UX as Above Average.

Vendor trend: In May 2019 TABS Analytics acquired a market research solutions company, Decision Insight, which will expand the employee count to 60+ and TABS client base to 150+ globally. In addition, TABS embarked on a partnership with CPGToolBox in March 2019 for TPM – bridging holistic planning capabilities. This is a key strategic partnership for both companies

enabling the companies to compete in RFP's for manufacturers that are desiring holistic planning capabilities (TPM/TPO and ROI in one tool). These combined ventures are powerful and will drive enhanced revenues for TABS and advancements for their clients.

Strengths: The depth of the analytics expertise and offerings and industry experience of key personnel.

Challenges: TABS, like other companies that focus on macro as well as micro level insights, can be perceived as a power user tool. In point of fact, there are many insights that are readily consumable by field personnel, and in very engaging ways, but companies tend to keep the tool within the COE or analytics organization.

Adjacent offerings: Category management, data management, retail store optimization, advanced marketing analytics.

Key differentiators: Speed and depth of data cleansing/harmonization of disparate data in one platform. Data quality is key to generating insights for better promotional executions. Few vendors provide data quality services. We have seen TABS successfully take on data harmonization challenges after other vendors/providers have failed. Equally deep analytics and evaluation of drivers. The depth of decomposition and baseline development is Best-in-Class. Flexibility of the platform and software to work with legacy and enterprise systems. Finally, the dashboards continue to be in a league all their own.

Outlook & prognosis: Continued presence and relevance as an analytical player and innovator into the foreseeable future. Historically, it could be argued that TABS is more of an analytics enabler rather than a TPO vendor, but with the CPGToolbox partnership it can be considered for holistic planning RFP's (TPM/TPO/ROI). TABS has great focus on the data that is essential to doing meaningful predictive modeling or post event analysis. There are many TPO options in the marketplace, and certainly TABS is one of them, but there are fewer offerings for data cleansing and harmonization. Thus, before any meaningful TPx work can take place, a firm like TABS has to prepare the key ingredient; the data.

Evaluate TABS when: You want insights to make for a better promotion, plus services to help you along the way. Also, if you want unique ways of looking at business problems with a superior UX.

Avoid TABS if: You seek a TPM solution (yet, they have the new CPGToolbox partnership that covers both TPM and TPO). Also, while TABS has recently deployed a LATAM client, they don't yet have the global presence of some other vendors.

Distinctions: POI Best-in-Class for Dashboard and Data Management.

UpClear upclear.com

Customer profile: TPM & TPO vendor with a global footprint.

Geographic presence: North America (35%), Asia/Pacific (20%), EMEA (40%), and Latin America (5%).

- New markets deployed in the last 12 months: Austria, Canada, Malaysia, New Zealand, and Mexico.

Total consumer goods users (seats): TPM: 3,000; 500+ TPO.

Tiers represented: Tier 2 and 3. Many clients are affiliates of Tier 1 multinationals.

Solution offerings: TPM and TPO.

Major product sub-segments not covered: Tobacco, consumer durable and semi-durables.

Analytics: UpClear has invested in analytics by re-positioning the system related to commercial performance: dynamic waterfalls, business drivers, channel impact, and YOY developments. It continues to have a robust and intuitive user landing page/dashboard that provides contextual messages to the users for action items. It allows the user to configure views based on individual user preference. Platform graphics are excellent. We like the tile-based orientation with a miniature version of the underlying report to aid in navigation. Functionality for top-down planning and budgeting are a real plus for visibility and accountability. The TPO capability has good side-by-side comparisons of scenarios, excellent bubble charts to show key metrics like promotional ROI versus percent incremental volume, and has drill downs into nearly any graphical element. The pricing module reflects pricing changes over time, discounts, list, and invoice pricing. The analytics promotion dataset includes overlapping doc types within the promo impact calculations, cannibalized SKUs, and post promo dip. New analytics advancements include: ability to mass load any type of external data (online, competition, compliance, EPOS, stock in trade) into the Analytics data set to overlay the transactional data with external causal factors; improved pricing analytics to clearly map and identify consumer price on/off promo by customer, product week in order to support Revenue Management strategy definition (Margin Pool measurement, price conduct vs. competitive set) as well as in store compliance tracking; pre-configured pricing, promo, trade terms, and mix dashboards (e.g. heat map, waterfall) to measure top line growth drivers and support commercial strategy and revenue management routine; and configurable snapshots to store promotional and commercial P&L views at a given point in time to support holistic post event analysis and drive insights into the root cause of each single event and number in the P&L. These provide visibility of promotion performance and support UpClear's revenue planning reports and capabilities. UpClear enables revenue planning screen visualization and analysis of key metrics at a glance. The "due to" analysis is quite powerful because it shows a volume bridge that can include TV, radio, holidays, and most any other factor. A report writer is included.

POI rates UpClear TPM Analytics Above Average; TPO Analytics as Average

Configuration/Customization: Most user needs can be accommodated through configuration. As a result, customization is not an option at present, unless it is a change that aligns to the global roadmap.

Technology architecture/delivery options: SaaS in a private cloud. Rackspace and Microsoft Azure for infrastructure and scalability.

Service partners: Clarkston Consulting for SAP integration and change management (USA); Infor for general partnering from ERP to joint product marketing, sales, deployment, and integration; IDCOM for Consulting and project management in Central America; Edenhouse and Pivot for SAP integration; MSA for data modeling; Rackspace for hosting; Microsoft for software and hosting: and Digital Security for Security, GDPR, etc.

Technology partners: Rackspace and Microsoft for technology and architecture. Infor as ERP partner/integrator. Tableau for data visualization. Dell Boomi for data integration. TPO offered is through an embedded solution from Management Science Associates (MSA).

User experience: New enhancements include the ability to promote at lower levels than the planning customer (store, groups of stores, geography levels). UpClear's goal is to make planning as simple as possible, so the user doesn't have to worry about how to set up the deal with new market complexities. The system has traffic lighting and status icons to help a user quickly understand how a promotion is doing. The calendar has been dramatically improved to include more user preferences. The calendar already included the ability to drag-and-drop activities, promotional indicators, the ability to show/hide promotional details (easy slider button), swap between ship and store dates, and reflects marketing activity and competitor details. Ease of deduction clearing is facilitated by automation of invoice matching in BluePlanner. Overall the user experience is very modern, graphically oriented, and is easy to use. The Mobile BluePlanner for viewing and approving on mobile devices is a real plus.

POI rates UpClear UX as Above Average.

Vendor trend: UpClear is experiencing high-growth (22 new customers this year) and is heavily investing in senior client team members (+20 new employees). They continue to recruit globally only those people who have the appropriate CPG and TPx technology experience. Year over year the company is investing back into the technology with solid R&D levels. UpClear continues to make inroads into Tier 1, which positions it very well to enable a multinational company in all markets, not just smaller ones. UpClear is continually evolving their solution with added functionality, capabilities, and enhanced performance to further meet the needs of clients.

Strengths: The Global Enterprise Template, specifically for multi-market and/or enterprise sized clients, incorporates best practices for TPM revenue management for emerging markets. The process ensures clients with complex requirements are able to develop a Core BluePlanner model that meets the needs of the central team yet is also able to allow individual markets a degree of flexibility based on local requirements, legislation, and business unit needs (80/20 Core/local split). UpClear utilizes a phased deployment strategy, which ensures that the most critical business needs are addressed with the relevant functionality first, followed progressively by further modules. This approach is also followed for global deployments, where the first module deployed can vary between markets, again depending on the pressing business need or market capabilities. This "Pilot" methodology and stepped approach, combined with the intuitive nature of the system, ensures that adoption is rapid and change management issues are minimized. Everybody claims to be able to do rapid implementations, but UpClear does it consistently.

Challenges: Their primary challenge is managing growth. UpClear has to navigate the fine line between growing too fast and still being able to execute for all tiers of clients.

Adjacent offerings: Data management and integration; RGM consulting services.

Key differentiators: Expertise in emerging as well as developed markets. Deployments in Asia have given it more expertise in working through distributors and some unique functionality. This includes pushing budgets down to the store level, confirming promotional participation through the "WeChat" app, and rolling the spend data back into BluePlanner for budgeting and invoice matching. UpClear is quick to deploy and has low deployment and ongoing costs relative to other solutions. BluePlanner is highly intuitive, which drives quick user adoption. Yammer is embedded for internal collaboration based on topic, distribution group, and includes notifications. Driving insights across the organization is critical.

Outlook & prognosis: UpClear has a tremendous upside and momentum as a global player.

Evaluate UpClear when: You want really good TPM and TPO capabilities and an exceptional user experience with global potential at an attractive price, or if you have an existing TPM and want TPO capabilities layered on top to evaluate optimized promotions.

Avoid UpClear if: You want an on-premise solution you can customize.

Distinction: POI Best-in-Class for Desktop UX and Analytics Visualization.

Vistex vistex.com/industries/consumer-products

Profile: Vistex offers commercial solutions as both an SAP partner extending SAP ERP and S/4 HANA systems as well as on its own with its cloud-based Go-to-Market Suite (GTMS) for SAP and other ERP brands. Vistex introduced TPx capabilities as part of its existing solution set in 2016.

Geographic presence: North America (60%), Europe (30%), Asia/Pacific (5%), Latin America (5%).

Total consumer goods users (seats): Enterprise delivery model does not provide for visibility into the number of users. 350 clients using Vistex for Transaction support (execution and settlement) and 16 companies using Vistex for Full TPx (transaction + planning, analytics, optimization, forecasting etc.).

Tiers represented: All.

Solution offerings: TPM and TPO.

Major product sub-segments not covered: All are covered.

(For Vistex we have a unique situation. The system is completely transforming. As a result, we have noted current state and pilot/new sales state for the Analytics and UX sections. Vistex is currently piloting the new version with select current manufacturers and selling for new client deployments in Q1 2020).

Analytics: Current State: Vistex has a complete set of analytical capabilities such as baseline/promoted volume generation, cannibalization and halo effects, nice bubble charts showing ROI and dollar profit for promotions, and a graphical promotion waterfall. It doesn't provide a dashboard to be able to view the business at a glance. We particularly like the "lasso" feature for looking more closely at some elements of a bar chart or scatter plot. It has a nice spend tracker to show how much has been allocated during the planning process. Similarly, it has a graphic to show target attainment, spending, shipments, and so forth. Vistex brings a lot to the table from a post event analytics perspective because of the speed and accuracy with which it pulls the trade spend elements from the general ledger to facilitate the analysis. The reports that come with the solution are a good start and can be configured to suit, they just don't have much of a graphical orientation.

POI rates the Vistex (current state) as Average for analytics, but Below Average for how analytics render.

Pilot/new sales state: Vistex has enabled HQ planning with top down assignments of trade spend and volume targets by brand. The HQ planning is insightful and intuitive. Vistex now has an excellent dashboard with key performance indicators, revenue doughnut graphic, item performance, store performance, elapsed time in plan to date, promotion performance (top 5

promotions in revenue), and quick links to the plan, execute, settle, and analysis tabs. Vistex's new TPO capability determines the best trade promotion schedule with respect to gross sales, net sales, and net profit for the retailer as well as the manufacturer. The user controls the scenarios with parameter-driven business objectives. In addition, Vistex has added a retail pricing with automatic model selection capability that determines the best model representing the relationship between demand and price actions, from a predefined set of models on two levels of the product hierarchy. The estimates support several pricing related business cases:

- **What-if Analysis for changes to the list prices** – annual large-scale list price changes or smaller, budgeted list price adjustments for select categories and product groups
- **Markdown Planning** – scheduled markdowns for inventory corrections and end-of-life product markdowns
- **In-Store Clearance Markdowns** – small-scale same-day markdowns to optimally handle expiring inventory at the store level

POI especially likes the new Annual Plan Overview dashboard that visually depicts the volume trends (base and incremental), a checkbook view in a bar chart, and trade spend by vehicle in a doughnut chart. This view is a snapshot of the total business. Overall, POI rates Vistex (new sales) Analytics as Average.

Configuration/Customization: Customization is an option. A rules-based engine architecture enables customizations if necessary while simplifying the effort required to maintain and implement future upgrades.

Technology architecture/delivery options: The SAP-based solution typically resides within a client's existing SAP environment. GTMS deployments are cloud-based, available for any brand of ERP, and are sold, licensed, and hosted by Vistex.

Service partner: Vistex does the majority of its own deployments, but in the past has also worked with SAP, IBM, and Accenture for global system integrations.

Technology partners: SAP.

User experience:

Current State: We found it to have good flow and ergonomics, but the lack of a dashboard is an issue. Also, it is quite monochrome and not very graphically oriented. There is an excess of white space and the test/numbers often don't size up well in their allotted space. POI rates current Vistex UX as Below Average.

Pilot/new sales state: Vistex on-premise version offers an updated UX comparable to contemporary cloud solutions. This has enabled the promotion and price planning UX to be much more intuitive. Embedded analytics were added within the transactional screens and the overview pages to give the user the data that they need at their fingertips in an easy to consume manner contextually as they do their daily activities. A new UX for maintaining price records for non-trade prices such as bracket price, list, MSRP, etc. was introduced using a grid-based view with functions and controls for mass maintenance, extension, and creation.

Vistex now launched a cloud solution that provides the same capabilities as its established on-premise solution. The cloud version of the Vistex solution has a modern, clean UI typical of contemporary cloud solutions. Contextual analytics and an overview page for an at a glance view of relevant information were added to give the user an easy way to prioritize their daily activities when they log in. A new UX for maintaining price records for non-trade prices such

as bracket price, list, MSRP, etc. was introduced using a grid-based view with functions and controls for mass maintenance, extension, and creation.

The new UX reporting is no longer gritty and has transformed into elegant, insightful dashboards and reports.

The calendar represents consumer, media, and digital marketing events overlaid on the user's promotional calendar providing a fully integrated calendar view. Timing, budget, trade, case funding rates, and other key targets are clearly displayed at the top of the page. The tiled landing page is beautiful, intuitive, and action based.

POI rates new sales Vistex UX as Above Average.

Vendor trend: Vistex TPx deployed in 2016, so it is defining itself in the TPx space. Vistex has a very positive trend for growing staff and revenues and has even taken clients from more established competitors. It also enjoys strong client retention.

Strengths: The primary strengths of Vistex have been its ability to leverage its existing B2B revenue management clients into TPx opportunities and the speed with which it has been able to enter this space, because it is able to leverage the resources of its nearly 1,500 employees and revenues in excess of $250 M. The new UX is a great example of Vistex's ability to dig deep and create what the market demands.

Challenges: When engaging with prospects that run SAP, Vistex is usually invited into the discussion when a prospect is looking for complex pricing functionality, a faster implementation, or a better price point. Vistex also has to wait for the latest SAP tools and features to be released to them. Additionally, the SAP Public Cloud does not allow partners to operate therein, so a prospect with SAP S/4HANA public cloud option has to utilize the GTMS product offering.

The GTMS product offering presents an opportunity for Vistex to expand outside of the SAP ecosystem, but it can be seen as competitive to SAP. As a result, Vistex will gain ground by generating leads and managing sales cycles independently.

Adjacent offerings: POS data management and cleansing, B2B gross-to-net revenue management tools.

Key differentiators: We see Vistex having three really powerful advantages that competitors are not willing or able to replicate:

1. The ability to handle complex promotions beyond the typical fixed and variable types. This would mean rebates, growth programs, performance incentives, and so forth. This is the Vistex bread and butter.

2. The ability to operate inside of SAP and thus seamlessly leverage the connectivity to pricing, customer master, financials, item master, and to pass accrual data to the ERP (embedded in SAP ERP or SAP S/4HANA stack).

3. End-to-end coverage of the entire annual volume and trade spending cycle – including settlement and claims/deductions management within the Vistex solution.

Outlook & prognosis: Vistex is relatively unique in the TPx space based on what we have outlined above. As it leverages its 600+ existing client relationships, including 175 CG companies, and executes its GTMS offering, it will be a player in this space. The latest UX transformation should enable Vistex to capture its fair share of the market.

Evaluate Vistex when: You run SAP and want an alternative to SAP for TPx, or when you have complicated promotional structures and need a partner who can handle them. Also, if you don't have SAP but want to tap into the GTMS for holistic sales planning.

Avoid Vistex if: Avoid Vistex if you need to implement prior to Q1 2020.

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visualfabriq visualfabriq.com

Profile: An integrated TPM/TPO vendor, focusing on manufacturer clients and a growing global presence.

Geographic presence: Current: Europe (60%), [South] Africa (25%),

New – North America 15% (Multiple Tier 1 & 2 clients in 2019) AsiaPac (Australia Q1, 2020), LatAm (Mexico Q4, 2019).

Total consumer goods users (seats): Visualfabriq utilizes an enterprise subscription model (unlimited user) vs. per user/seat model.

Tiers represented: All.

Solution offerings: TPM and TPO.

Major product sub-segments not covered: Tobacco, consumer semi-durables, and durables.

Analytics: Visualfabriq covers the entire planning process end-to-end from planning to evaluation, integrating predictive models for optimized promotion planning while showing the full financial effects. The planning process is scalable and configurable. The platform utilizes web based HTML5 (React). The platform incorporates all leading OS machine learning libraries out of the box, allowing client data science teams to generate cleansed data sets by the platform and use those to directly develop predictive models with these familiar libraries and roll them out directly into production, effectuating predictions directly for all the users. Visualfabriq is one of a very few offerings utilizing AI. With additional AI leadership onboarded, visualfabriq is upgrading the AI implementation methodology to improve even greater results and robustness of models. The platform's dashboard is intuitive and looks very good. It is easily configurable with drag and drop capabilities. It provides standardized template reports, which can be enhanced or adapted by the user. The ROI promo scatter chart is a nice way to look at the "Top" and "Flop" promotions in a matrix. It shows causal data such as forward buy in a graphical way. It has the ability to proxy a prediction based on similar promotions or solely based on historical data for companies that change their assortment frequently. It has waterfall charts for both the retailer and manufacturer perspectives. The fully automated post event analytics is very strong because of how it compares actual to expected, highlights forward buy, and provides a copy of the ad for reference. In particular, we like how the ROI is graphically represented, while also providing the standard revenue/ROI data field in chart/ grids. Visualfabriq also has some unique KPIs, like "bang for the buck" ratio, to provide deeper insights. It does volume prediction on the fly through standard machine learning. Visualfabriq planning and analytics is a full suite of Revenue Management capabilities with the power of applied AI, which enables holistic planning (TPM/TPO/ROI in the moment of planning).

POI rates visualfabriq Analytics as Above Average.

Configuration/Customization: As a SaaS solution, no hard coding customization is allowed. Client needs have been able to be met through development that is shared across the install base and through the extensive configuration possibilities that include custom KPIs, entry fields, workflows, reports, and screens which all can be altered by the client administrators.

Technology architecture/delivery options: All cloud-based, multitenant SaaS for functionality but database is individual. Hosting is with Amazon Web Services; data can also be covered by Azure if legally required.

Service partners: Deloitte consulting, BPX, and Strategic Solutions (LatAm).

Technology partners: Amazon Web Services for cloud services and hosting.

User experience: The entire visualfabriq front end has been fully upgraded and transferred to React. The user front end is better performing and reflects enhanced visualization. It continues to have an intuitive and action-oriented tile-based landing page. KPI trees are an interesting way to look at things because they provide a deeper view without drilling down. It is very graphically oriented with both charts and grids being exposed simultaneously based on preferences. The "ghosting" feature is also very useful on the calendar. It allows a user to see the prior year or a competitor's promotions as a shaded box as a reference point when evaluating or planning a promotion. This can also be used with HQ teams for Go to Market strategy development. Another favorite calendar aspect is the ability to visually see which promotions drive more profit/incremental volume, incremental sales/less incremental profit, and simply more net sales. This visual helps the planner quickly evaluate promotion options that can be repeated based on the promotion objectives. The planning process is very stepwise, and a greyed-out circle on the navigation panel informs a user where they are in the process. Best practice sharing across the client base is facilitated by the integrated Zendesk tool and hosting two user groups a year. Joint Customer Business Planning is facilitated by enabling a sales person's ability to present "in-mode" hiding manufacturer cost etc. and also through exportable PDF proposals. The system has the capability to plan regular and EDLP pricing strategies, register risks and opportunities, and create revenue plans, which provide bottom up input into budget creation and LE's that can be tracked. Revenue planning is delivered holistically and simply through the three modules [Demand Forecast (DMF), Trade Promotion (TPM), and Trade Spend (TSM)] on one platform, closing the entire S&OP planning loop.

POI rates visualfabriq UX as Above Average on the strength of the ergonomics and numerous profitability management and innovative AI trade capabilities.

Vendor trend: Very positive growth trend and a strong roadmap going forward. Investment in people and product have been steady. The company has consistently been able to win deals with companies across the 3-tier structure. POI believes the work it is doing on machine learning and the REACT front end capabilities will pay dividends as an early mover advantage. The change to an unlimited user enterprise subscription model vs. per user/seat model is good and has been appreciated by their customers. Roadmap of new offices demonstrates growth: North America August 2018 (NY office established), AsiaPac (Australia office, 2020), LatAm (New Mexico office, 2019).

Strengths: Visualfabriq is resonating with client needs to unlock their data sources, generate relevant insights, and empower their teams to make better/faster decisions—at a lower cost of ownership. A very robust trade management tool that enables price management, promo what-if optimization, promotion planning, internal/external sell out predictions, improved baseline creation, and volume forecasting. Visualfabriq is a forerunner in AI usage for trade

management. 80% of a tier one client's planning is accomplished through new AI capabilities and models. There is flexibility to utilize the AI models or have users input baselines, lifts, etc. The value is in the flexibility as an organization learns to trust the system. This is especially true with clients that don't have robust historical data. One customer was able to reduce their demand cycle from four weeks to one. It has transformed the cross-functional process to lite-touch and is now a 90% automated process. There is a high level of change management that accompanies system implementations and visualfabriq works with clients to move an organization through the change. Visualfabriq utilizes a standard deployment "templatized" process that drives successful system implementation between 4 and 7 months depending on the data availability, quality, and change management. It has the ability to handle significant amounts of data. Everybody makes this claim, however, we watched the system load 15,000 promotions in just 30 seconds. Visualfabriq offers two major and two minor releases per year. Similar offerings for retailers/gas stations and E-tailers keep it relevant to areas for collaboration.

Challenges: Visualfabriq has a tremendous passion for optimization and advanced topics but must also remain focused on those CG companies that use spreadsheets and just need to move to TPM. It also has the challenge of being a relative newcomer to the space, which can often favor larger, more established players.

Adjacent offerings: POS data management and cleansing, remote retail monitoring, and demand forecasting and pricing with AI.

Key differentiators: Visualfabriq was created to fill a need in the European market which was lacking in suitable, reliable systems that could address the market complexities, data quantity, and diversity in a user friendly, performant system. The expertise and passion for TPM/TPO/ROI and machine learning to deliver their clients the tools they missed while working in the industry will aid in visualfabriq's growth and client retention. Also, the willingness to offer data management services is quite unique for a vendor of their size, if not for the market as a whole. Baseline creation and forecasting. Visualfabriq is one of the few organizations that allows access to the predictive models and enables a client to get under the hood and understand, align, and facilitate the modeling in a repeatable way (Note: model review is by key client members and not all users).

Outlook & prognosis: Given solid growth, excellent vision, clients of all sizes, and a strong/insightful user experience, we expect visualfabriq to continue to be a very strong option for European companies. Global expansion is consistent with numerous deployments in the U.S. and Mexico. We feel confident their passion and drive will overcome any obstacles. The key will be to hire and partner with the right people when entering new markets to help speed to market success.

Evaluate visualfabriq when: When your organization is looking for a total trade and revenue management package (TPM/TPO/ROI) from a company that has deep expertise. Also, consider visualfabriq if your organization would benefit from reducing the burden of sales planning/analytics and is open to automated promotion/plan "intelligent" recommendations through AI.

Avoid visualfabriq if: If you wish to customize and create a one-off solution, or want a basic/transactional TPM.

Distinction: POI Best-in-Class for Financial Orientation and Simulation, Analytics Visualization, TPO Ergonomics, Data Management, and AI.

Wipro Promax Analytics Solutions (WPAS), a wholly owned subsidiary of Wipro Limited.
promax.wipro.com

Profile: A TPM /TPO vendor that is part of a global services and technology company. The Promax solution suite provides complete promotion planning, execution, management, tracking, and optimization capabilities that are highly automated.

Geographic presence: Europe (24%), AsiaPac (44%), North America (30%), Latin America (2%).

Total consumer goods users (seats): Confidential.

Tiers represented: All.

Solution offerings: TPM and TPO.

Major product sub-segments not covered: None, all are covered.

Analytics: WPAS includes the full analytical stack such as multi-causal uplift models, cannibalization/halo effects, pre and post-promotion evaluations (very nice side by side ROI evaluation), price/profit optimization, and predictive planning. The system decomposes the data and manages in-store and period matching, removing syndicated data anomalies, with no user intervention. Users are now able to visualize either an individual promotion or the average across a group of promotions to see the true decomposition of both volume and the manufacturer/retailer revenue return of promotions. Coupled with this are modeling and sales analytics capabilities that enable clients to optimize a promotional program with real-time predictive analysis to guide optimal execution. Promax Optimization based on objectives and constraints, while pricing on any causal, is on the near-term roadmap and in development. POI likes how it visually shows the gap between what a user predicts vs. what the system predicts. Cannibalization shows all brands impacted by the promotion as well as those benefitted, not just my own brands. POI likes the "clash" capability that allows users to view where promotions exist in the same week for matching customer and PPG. This helps users identify where potential clasher/overlap occurs. Users can look into the R models to see the data in a plotted line chart to get a better fit, grab outliers, and explain in text why they were removed. It has some unique and insightful views and renders well visually. Note that promotions optimized with the TPO offering can be pushed into Promax Advanced (TPM) or another TPM system (see CRM technology partners below). Promax has HQ capabilities to analyze and allocate spending budgets by account, optimizing the use of trade funds and ROI. On the Promax develop roadmap is optimized HQ annual planning and roll-ups. This includes an automated 18-month historical review to understand the results and best price, timing, and outcome based on the objectives and constraints chosen. It will be a huge benefit to teams that need to optimize go-to-market strategies. The system has real-time monitoring and analysis of promotions and the ability to manage execution and course correct. Promax sales analytics and reporting capabilities provide in memory reporting that is fast and has high level visual dashboards and powerful pivot table capabilities. Promax has a configurable P&L studio that allows clients to define their own metrics and KPI's inside the system without the need for code customizations. Wipro works with client teams to build confidence and accuracy and helps an organization move through advanced analytics change management.

POI rates Wipro Analytics as Above Average.

Configuration/Customization: Wipro Promax delivers all clients a standard release of the software, and the system is highly configurable. Yet, Change Requests (CRs) are developed for various clients globally. The benefits of delivering and supporting a standard release along with the capability to customize client specific requirements are enabled through the use of backend configuration, licensing, and system settings to expose specific functionality or custom code to select clients whilst disabling it for other clients.

Technology architecture/delivery options: On-premise, hosted or public cloud.

Service partners: None at present. Wipro has talent around the globe to support Promax implementations and provide ongoing services. However, they are open to working with external partners if the client prefers.

Technology partners: Microsoft Azure and Amazon Web Services for hosting, Microsoft Tech Stack, Sales Force.com for SFA and CRM, SAP: Hana and Demand Signal Management, Mobility, RetX and FMS, Microsoft Business Intelligence for reporting and visualization, ThinkVine for Marketing Optimization Mix, Opera Solution for advanced analytics & insights including signal hub, JDE, Oracle, CISCO, EMC, HP, IBM.

User experience: Wipro Promax has had a consistently nice UX across the platform. Yet, they have continued to invest in this area and with the upcoming release, the entire UX has been re-designed for even greater usability. The goal was to reduce complexity and heavy user maintenance through automation. Wipro teams have worked through a process of simplification to optimize TPM workflows. The system has much better filtering and a user can use a wild card to simplify the search. In the old version the user had to work through seven planning tabs and then check the pre-evaluations and later go to a different screen to evaluate the ROI. In the new version, all the data to make a promotion decision are on one screen, and there are "focused" columns the user needs to enter. Data, causals, metrics, deals, and forecast are all on one page. Their reporting is moving from "reporting" to driving insights that provide the why and "tell me" which products I should invest in. They are continuing to hone the process and capabilities as AI becomes more deeply imbedded in the process. The calendar has the ability to overlay last year's calendar to see what happened vs. plan and also enables a retailer view. The visual representation with color coded status and traffic light indicators highlighting financial viability of the promotions is exceptional. POI likes the ability to work and finalize a scenario and then just right click to "publish" and push it to the TPM solution for execution. Promax is ergonomic and favors both field and HQ users.

POI rates Wipro Promax UX as Above Average.

Vendor trend: Wipro Promax has been experiencing modest growth, which is less than their fair share based on the Wipro company resources, market presence of the parent company, breadth of services available, Promax innovation, and above average TPx capabilities.

Strengths: An integrated, but also a modular approach to TPM and TPO plus the ability to deploy TPO on top of an existing TPM. The ability to layer TPO deployments on top of third-party TPM, which is a major element of the current WPAS strategy for TPO.

Challenges: Wipro Promax (WPAS) is part of a very large company. It has an excellent TPM/O platform and services combination that can win globally. It needs to continue to deliver the innovation the market is demanding and introduce cutting-edge solutions that will address the new challenges of the CPG industry.

Adjacent offerings: Wipro Holmes is a cognitive AI platform that can be used in the TPM process to improve auto invoicing and settlement process. Wipro sight shelf Analytics helps track shopper behavior and purchase intent within a store optically and ensures optimal product availability on shelves and promotion placements in the store are best maximized. Wipro insights driven shopper marketing to provide a personalized shopping experience with (offers, pricing, etc.). Data Services are separate modules that work together and can be procured and layered as business dictates. In addition to what is represented in this report, Wipro offers a full suite of services to address foundational organizational needs: process reengineering and optimization, organizational change management, analytics as a service, business process outsourcing (deduction mgmt., sales analysis, and promotion management), application and infrastructure outsourcing.

Key differentiators: Length of experience as a combined TPM and TPO offering. Depth of data management and data science resources as part of a company with 175,000 employees. Wipro has a wide array of individual services within its management, implementation, and consulting practices. The facets of Wipro offerings have been designed to develop and evolve a strategy for a client's long-term improvement, execute the strategy, then maintain the benefits of the strategy through continuous improvement. This is demonstrated by the long-term clients that stay and expand capabilities over time. Not solely unique to Wipro, but one of a few vendors that enable top down and bottom up planning. Using the budgeting functionality, business targets are distributed to planning accounts and then validated against optimized plans created with the predictive strategic planning capability.

Outlook & prognosis: WPAS is already a global player with a well-balanced client footprint. The organization needs to continue to execute well in the marketplace, fulfill its roadmap, and drive to the front of the innovation line.

Evaluate WPAS when: You want a combination of global support, deep services (data management, data science, analytics, or consulting), multiple delivery options, good quality TPM and TPO in one, and industry expertise. Additionally, if you have a TPM investment that you don't want to walk away from, but wish to layer on TPO.

Avoid WPAS if: No reason to avoid.

Distinction: Desktop UX, Post Event Analytics, and Remote Promotion Monitoring.

Promotion Optimization Institute Best-in-Class Distinctions

Within the functional set described above, we believe there are some significant differentiators that merit mention as a group. We have touched on some of them already, but as we work to strengthen this market by encouraging their adoption, we wish to highlight the following vendors as being "Promotion Optimization Institute Best-in-Class."

POI Best-in-Class Recipients

Functional area	Recipient(s)	Why critical to TPx?
Desktop UX	Acumen, Kantar, SAP, UpClear & WIPRO	Drives engagement from users, increases total business visibility and reduces administrative burden; drives next best action.
HQ Analytics & Insights	Accenture, Data Ventures, Kantar, Periscope By McKinsey	HQ pricing, promotion; go-to-market enablement of optimal promotions.
Field Analytics & Insights	Exceedra Professional, SAP	Enabling field personnel to build and execute a better promotions by having the key insights available how and when they need them.
Financial Orientation & Simulation	Cornerstone, Exceedra, Periscope By McKinsey, SAP, visualfabriq	Financial accountability, customer P&L management with an RGM focus.
Post Event Analytics	Blacksmith T-Pro Solutions, Cornerstone, WIPRO	Automated post event "what-if" analytics to drive enhanced promotional effectiveness.
Collaboration - Internal	Accenture, Acumen, Data Ventures	Holistic company engagement to leverage enterprise insights, gained by the use of core capabilities, results in increased buy-in from cross-functional partners.
Collaboration - External	Periscope By McKinsey, SAP	Collaboration between vendor and manufacturer &/or retailer for continuous improvement.
Analytics Visualization	Accenture, Exceedra, Kantar, Upclear, visualfabriq	A good graphic, layout or image says it all.
Dashboard	Accenture, TABS	Dashboard with standard yet flexible business measures. Is the launch point for further drill down.
TPO Ergonomics	Blacksmith T-Pro Solutions, Cornerstone, Exceedra, Kantar, visualfabriq	TPO can be complex with constraints, objectives and simulation. It has to be made easy and actionable.
Calendar	Accenture, SAP	An intuitive calendar is a focal point of the plan. It has to be visual, informative, and easy to change or drill down into the promotions.
Remote Promotion Monitoring	Data Ventures, WIPRO	Need to be able to remotely monitor the promotion in-flight, as a dashboard element in TPx, in order to better take immediate action.
S&OP Capabilities	Exceedra, Periscope By McKinsey	Sales volume planning inputs that flow into the demand planning/forecast/Integrated Business Planning (IBR) process.
Data Management	Blacksmith T-Pro Solutions, Data Ventures, TABS, visualfabriq	Sales volume planning inputs that flow into the demand planning/forecast/Integrated Business Planning (IBR) process. *This does not include data management through services.
Artificial Intelligence (AI)	Data Ventures, Kantar, visualfabriq	Capabilities that can learn and predict full year promotion calendars based on a set of objectives and constraints. Provides answers to questions or options the user hasn't thought to ask. CPG applicatons in: pricing, GTMS, promotions, deductions, etc.

NEW

We are pleased to highlight these distinctions to draw attention to how critical these capabilities are; both to CG manufacturers and solution providers. However, we caution users against assuming that "Best-in-Class" is automatically the best fit for them. In a world of good-better-best, "good" may be good enough, but it is always instructive to know what "best" has to offer in order to evaluate how it can create a competitive advantage by improving all aspects of the trade promotion cycle.

Vendor Assessments

Figures 1 through 6 are company and product assessments for the vendors covered in this research. Note that the ratings do not comprise a normal distribution (i.e. an equal number of Above Average and Below Average ratings) because there are many solutions in the marketplace that are not included for various reasons. Hence, ratings are absolute versus the market, and not relative versus other vendors featured in this report. The source for all figures is POI's primary analysis conducted in 2019.

Figures 1 – 3: Company Assessments

Company Assessment

Vendor/Category	Company Viability	Geographic Strategy	Responsiveness & Track Record	Deployment Capabilities	Market Understanding	Vertical/Industry Strategy	Partner Leverage	Company Vision
Accenture	Above average	Above average	Average	Above average	Above average	Above average	Above average	Average
Acumen	Above average	Above average	Average	Below average	Above average	Above average	Average	Average
Blacksmith - FORGE TPM	Above average	Above average	Average	Above average	Above average	Above average	Below average	Above average
Blacksmith - TPro Solutions	Above average	Above average	Above average	Average	Above average	Above average	Average	Above average
Cornerstone Capabilities	Above average	Above average	Above average	Above average	Average	Above average	Below average	Average
CPGToolBox	Above average	Average	Average	Average	Above average	Average	Above average	Average

⬤ = Above average   ◐ = Average   ◯ = Below average

Company Assessment

Vendor/Category	Company Viability	Geographic Strategy	Responsiveness & Track Record	Deployment Capabilities	Market Understanding	Vertical/Industry Strategy	Partner Leverage	Company Vision
Data Ventures	Above average	Average	Above average	Above average	Average	Above average	Below average	Average
Effectmakers	Below average	Above average	Average	Average	Above average	Above average	Below average	Average
Exceedra	Above average	Above average	Above average	Above average	Above average	Above average	Average	Above average
Kantar Consulting	Above average	Above average	Above average	Above average	Above average	Above average	Average	Above average
Periscope By McKinsey	Above average	Above average	Average	Average	Above average	Above average	Above average	Above average
SAP	Above average	Above average	Above average	Above average	Above average	Average	Above average	Above average

⬤ = Above average   ◐ = Average   ◯ = Below average

Company Assessment

Vendor/Category	Company Viability	Geographic Strategy	Responsiveness & Track Record	Deployment Capabilities	Market Understanding	Vertical/Industry Strategy	Partner Leverage	Company Vision
TABS Analytics	●	◐	◐	◐	●	●	●	●
UpClear	●	●	●	◐	●	●	●	●
Vistex	◐	◐	◐	◐	●	●	○	◐
visualfabriq	●	●	●	●	●	●	◐	●
WIPRO/WPAS	◐	●	◐	◐	◐	●	●	●

● = Above average   ◐ = Average   ○ = Below average

Figures 4 – 6: Product Assessments

Product Assessment

Vendor/Category	Product Aptness & Flexibility	Delivery Flexibility	TPM Functionality	TPO Completeness	User Experience	Analytical Capabilities	Product Vision	Configurability
Accenture Cloud TPM	●	◐	◐	◐	●	◐	◐	●
Acumen	●	●	●	●	●	●	◐	◐
Blacksmith - FORGE TPM	◐	●	○	TPro-See below	◐	◐	◐	●
Blacksmith - TPro Solutions	●	●	◐	●	●	●	●	●
Cornerstone Capabilities	◐	○	◐	●	●	●	●	●
CPGToolBox	●	○	●	None	◐	◐	○	●

● = Above average   ◐ = Average   ○ = Below average   None = No Capabilities Currently Offered

Product Assessment

Vendor/Category	Product Aptness & Flexibility	Delivery Flexibility	TPM Functionality	TPO Completeness	User Experience	Analytical Capabilities	Product Vision	Configurability
Data Ventures	●	●	◐	●	◐	●	●	●
Effectmakers	●	●	●	None	◐	◐	○	◐
Exceedra	●	●	●	●	●	●	●	●
Kantar Consulting	●	●	●	●	●	●	●	●
Periscope By McKinsey	●	●	◐	●	●	●	●	●
SAP	●	●	●	●	●	●	●	◐

● = Above average   ◐ = Average   ○ = Below average   None = No Capabilities Currently Offered

Product Assessment

Vendor/Category	Product Aptness & Flexibility	Delivery Flexibility	TPM Functionality	TPO Completeness	User Experience	Analytical Capabilities	Product Vision	Configurability
TABS Analytics	●	◑	None	●	●	●	●	●
UpClear	●	○	●	None	●	●	◑	●
Vistex	◑	●	●	●	◑	◑	◑	◑
visualfabriq	●	○	●	●	●	●	●	◑
WIPRO/WPAS	●	●	●	●	●	●	◑	◑

● = Above average   ◑ = Average   ○ = Below average   None = No Capabilities Currently Offered

NEW Vendors Entering the Market
(Not part of the TPx Vendor Panorama evaluation)

This section is dedicated to new vendors entering the TPx space. We have not completed a full TPx evaluation of these capabilities as they are still in the "pilot" phase, but as they are coming to market in 2019, POI is providing awareness of these emerging vendors. Unlike the POI TPx Vendor Panorama, responses are developed by the specific vendor team.

Absolutdata absolutdata.com

Geographic presence: North America (70%), Europe (15%), AsiaPac (15%).

Total consumer goods users (seats): Approximately 20-30.

Tiers represented: All.

Solution offerings: TPM and TPO.

Major product sub-segments not covered: Tobacco, consumer semi-durables, and durables.

Absolutdata products and services deliver scalable business impact across the enterprise by combining cutting edge AI and ML with its heritage in analytical frameworks, business understanding, and technology. Absolutdata's NAVIK AI Platform has pre-built solutions, customizable solutions, and enabling services to get an enterprise AI-ready. The growing set of AI-powered SaaS solutions include NAVIK TradeAI, NAVIK SalesAI, NAVIK MarketingAI, and NAVIK ResearchAI. The services teams build custom solutions based on NAVIK AI.

Absolutdata's NAVIK TradeAI trade promotion solution combines AI, ML, rich data, and advanced analytics to create ready-to-implement promotional calendars. It provides actionable guidance to users, basing recommendations on custom machine learning and AI models engineered for each client.

- Real time goal-based trade promotion recommendations based on rich internal and external data

- Promotional calendars at the individual retailer level
- What-if scenarios to adjust business goals, trade spend levels, retailer objectives, and quickly get ready-to-implement calendars, including expected ROI
- Machine learning models get smarter over time from results, external data, and emerging trends
- Simple user interface for fast onboarding and high adoption and usage rates

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Symphony RetailAI symphonyretailai.com/solutions/revenue-growth-management

We have deep CPG and AI experience through our wealth of experience of working with CPG companies through our decades of Symphony RetailAI products and services. We are a part of the Symphony AI group of companies, funded and focused on high growth, AI-enabled, business-to-business solutions. Symphony AI has been growing rapidly and is already the largest private B2B AI solutions group.

Geographic presence: Currently in beta mode.

Total consumer goods users (seats): Currently in beta mode.

Tiers represented: All.

Solution offerings: TPO.

Major product sub-segments not covered: Tobacco, alcoholic beverages, consumer semi-durables and durables, soft and hard lines.

Symphony RetailAI is a global provider of a Revenue Growth Management solution for CPG manufacturers powered by Artificial Intelligence. The solution solves the 3 W's of promotion planning (what product, which promotion, and when should that promotion happen) to optimize margin/revenue while considering business constraints to find the best plans and search through millions of combinations in the fastest possible time. The suite features CINDE, a personal decision coach, to enable CPG teams to work smarter and faster to incrementally increase revenues and profits.

Our scalable, cloud-based solution uses AI-enabled insights to identify watchpoints for the user and recommend adjustments required for the plan in-season. Our partnership with syndicated data providers enables us to scale up for a CPG client at a rapid pace. Symphony RetailAI's revenue management solution uses machine learning and artificial agent design to better predict sales performance but also discern how various levers – such as assortment, price, and promotions – shape purchase behavior. Acting on prescriptive and preemptive recommendations at scale, CPG organizations can thus optimize customer plans within and across retailers.

Key features include:

- Self-healing models that monitor and correct for drift
- Population-based metaheuristic optimization algorithm motivated by analogy to biological evolution that rapidly manoeuvres through constrained non-linear discontinuous solution space to converge on set of Pareto-optimal solutions within minutes
- Next-gen UX/UI design that focuses on easy decision-making with the fewest clicks

- Glass box design that emphasizes explainability and transparency of logic
- AI agent (CINDE) that monitors internal and external data for threats and opportunities, and triggers recommendation of optimum response actions

Other Enablers (Not part of the TPx Vendor Panorama evaluation)

Once again, we highlight capabilities that we see as adjunct to the TPx solutions featured above and having potential to dramatically improve promotional outcomes. **Unlike the POI TPx Vendor Panorama, responses are developed by the specific vendor team.** These enablers are as follows and:

Elder Research elderresearch.com

Planning for Success with Analytics: Small analytics teams embedded within larger organizations must be successful to survive, but analytics is a disruptive technology, and many organizations fail the first time they attempt a major analytics initiative. Analytics creates value by building upon several layers of technology working in concert with trained individuals to solve specific business problems.

Breaking down silos and navigating organizational changes throughout the analytics life cycle can be difficult. Success requires a thorough understanding of technological and organizational capabilities, limitations, and opportunities and then building a common vision for analytics throughout the organization.

Developing a Roadmap for Success: Elder Research has engaged over 200 organizations in different stages of analytic maturity with the goal of "teaching to fish" — enabling our clients to build their internal capabilities to elevate and ensure their analytic success. Elder Research conducts an Analytics Assessment that provides a roadmap of opportunities to improve the analytic capabilities of the organization. This analytics roadmap ranks each opportunity along three dimensions: Cost (both direct and indirect), Return on Investment, and Actionability. Our goal is to help identify low-cost, high-return actions that will help build analytic momentum.

Results: Elder Research's guidance to CPG, retail, and organizations in other industries has led to many successful strategy initiatives and project-based work. Highlighted below are results stemming from our work in Analytics Strategy, Data Strategy, Trade Allocation, Pricing and Promotion Optimization, and Mixed Marketing Models.

- **Analytics Assessment:** A Fortune 500 CPG corporation had no centralized analytics capability or long-term strategy. The executive team hired Elder Research to assess its current analytics needs, develop a strategic roadmap, and build an analytics center of excellence.

  Elder Research facilitated an onsite, strategic assessment of current processes, culture, technology, and capabilities that impact analytics and data science. We also created a long-term, multi-year roadmap focused around speed of delivery and agility in the marketplace.

  In the first year after our assessment, we established an Analytics Steering Committee as well as an Analytics Center of Excellence who went on to complete more than 30 quick wins and projects in the first year alone, each resulting in an ROI of dollars saved, additional sales captured, or time saved.

- **Data Strategy:** The enterprise analytics division of a large fast-food chain was developing a strategic plan for sustainable and pervasive use of data across their business but was concerned that their strategy would not meet the future needs envisioned by their executives. Elder Research reviewed strategic planning documents and provided a report guiding the internal experts through several "stretch" areas for consideration.

  The success of this engagement has grown into a partnership with the enterprise analytics division to provide project development and implementation support. We identified over a dozen opportunities to use more advanced analytical techniques in their business as well as provided guidance on how to communicate the gains from these methods to executive leadership.

- **Trade fund allocation optimization:** A Fortune 500 CPG corporation needed to figure out how to optimize allocation of their 900-million-dollar budget to promote over 5,400 brand and account combinations to reach target growth.

  We used optimization solutions to allocate the budget based on targeted growth rates, but many other solutions are possible, such as a solution based on net and gross sales. Historical data or customer segmentation can also be included into the model.

  The result saved our client over 2,000 employee hours annually. A process which previously took 5 employees about half their time over several months to complete now takes 1 employee a half-day with employee review. Our efforts also provide an unbiased baseline for TFA allocation discussion with clients.

Eversight eversightlabs.com

Eversight is a recognized leader in AI-powered pricing and promotions. Global brands and retailers rely on the Eversight platform to optimize pricing in response to market conditions and to deliver higher ROI on promotional spend. Eversight's Pricing Suite and Offer Innovation Suite solutions are driving strong margin and sales volume improvements for leading companies such as Coca-Cola, General Mills, Raley's, and Rite Aid.

Offer Innovation Suite: The AI-powered tools in Eversight's Offer Innovation Suite allow consumer goods manufacturers to develop precise promotions tailored for shoppers and retailers. The Offer Innovation Suite is an industry-leading capability that enables:

- **Market sensing:** analyzes promotion performance and identifies which offers need to be optimized, enabled by third-party data integration and AI

- **Smart Offer Bank:** develops outperforming promotions optimized for customer segments, specific retailers, or markets

- **Performance tracking:** evaluates promotional execution and compliance with guidelines

Benefits:

- Compelling and profitable promotions

- Grow revenues by 1-12% and grow profits by 5-20%

Retail Pricing Suite: Eversight's Pricing Suite was designed to help retailers become more agile and adaptive in an ever-fluctuating market. The solution offers:

- **Dynamic Learning Lab:** Retailers can now collect and analyze real, current data about different price points and constantly react to changes in the market. This empowers brick and mortar stores to be forward-looking in their pricing decisions instead of depending on noisy historical data

- **Improved Performance:** The Retail Pricing Suite drives sales and margin improvement by continuously generating experiments that flex prices up and down in real-time across the store network, identifying price points optimized towards desired category objectives and arming brick and mortar with a way to compete against online-native retailers

- **Continuous Coaching:** The AI-based system coaches merchants toward high impact decisions. It collects and analyzes data automatically and surfaces key data points and recommendations to help pricing teams be more strategic. Its exception-based software surfaces high-impact areas of opportunity for human decision making. By automating these processes, Eversight frees up team members to focus on leveraging physical stores as assets in today's highly competitive landscape.

Benefits:

- Efficient prices that accurately shopper demand

- Grow revenues by 1-3% and grow profits by 2-5%

Omnium omniumcpg.com

Omnium helps clients leverage their complex data and insights to make better decisions to solve their toughest problems. Our strategic approach, backed by data science, mathematical techniques, and deep industry experience, is proven and reliable.

Omnium prides itself not only on its data-driven, mathematical approach, but also on its commitment to building strong, long-lasting relationships with our clients. Your challenges are our challenges. Your team is our team. Your success is our success.

Sales Analytics: What do we do with all of this data? Our data scientists will help decipher the numbers, analyze trends, and gather insights to understand the true impact of your previous strategic decisions and account activity. Getting a clear picture of what's working and what isn't from your historical data is crucial in informing and developing your future business strategy.

Strategic Counsel: What's your next strategic move? Our experts will develop strategic business recommendations for your organization, whether it's taking a price increase, adjusting your investment by account or product group, seeking external funding, or assistance with customer negotiations. We'll help show you the way.

Customer Planning: What are your distribution, pricing, and promotion goals? We sit down and work directly with your team to develop an annual sales plan with required investment by account and products.

Execution Tracking: You've executed the strategy and the plan. Now what? We provide guidance on selling the strategy to your customers and dig deep to analyze the effectiveness of the execution, assess the expected results, and offer strategic direction to change course if required.

PwC Strategy& strategyand.pwc.com

PwC Strategy&'s Performance Analyzer is reimagining Revenue Growth Management (RGM) for the CPG industry. Performance Analyzer offers a truly unique, integrated RGM platform that brings the power of sophisticated analytics to users broadly across the CPG organization. Our clients have been proven to unlock up to 5% revenue growth and 5-20% operating income improvement leveraging insights from Performance Analyzer. Whether you are looking for opportunities to improve your price-pack architecture, analyze profit pools and market trends, or optimize your promotion investments, Performance Analyzer provides a single, harmonized and cleansed model of your business and the advanced analytic capabilities to help you get practical answers.

Analytics' Features & Benefits: Performance Analyzer's suite of revenue management applications have been specifically designed for CPG companies. The application incorporates Strategy&'s 30+ years of intellectual capital and best practices developed working with industry leaders to drive value from RGM initiatives. The applied analytics leverage leading-edge AI and machine learning, visualization, and simulation technologies – without a steep learning curve, so companies can start optimizing price, product, placement, and promotions right away. The application suite helps CPG companies better manage pricing, assortment, mix, customer and channel profitability, consumer promotions, and much more – all within one unified application. Our clients have transitioned from "...spending 80% of [their] time getting the data ready, [to] now spending 80% of [their] time actually driving insights.1"

Flexibility & Configurability: Performance Analyzer has been meticulously engineered to provide the utmost flexibility to each of our clients. An SAP® Certified Solution, and SAP's recommended answer for RGM, the platform is highly configurable and extensible. Performance Analyzer integrates with any ERP, any TPM, any source of consumption data, and many other data sources. The application enables easy configuration of business rules, analytics, and assumptions globally and by market to ensure the analytic rules and algorithms meet the needs of your unique business. Our analytics suites are modularized such that the application can grow with you as your capability matures. Finally, our clients can extend the already sophisticated analytics offered by our extensive suite of application modules and connect any modern BI or 'smart-insights' tool directly to our proprietary data model.

User experience: As an end-to-end revenue management solution with user experience top of mind, our solution provides real-time analytics accessible from any device delivered through a modern HTML5 application. Because it is one platform and one integrated business model, any stakeholder - from Marketing to Finance to Sales and the C-Suite - can view their pertinent analytics while driving cohesive decision making across the business.

Summary:

Unlocking value through Revenue Growth Management can be challenging but is critical in today's competitive landscape. You are not alone - over 80% of CPG companies face challenges with revenue management and 59% struggle to translate past revenue insights into future action2.

PwC's Performance Analyzer transforms CPG companies' revenue management capabilities with one, unified solution. Gone is the need to rely on point solutions, disconnected analytics, and unreliable data to get answers and insights. Performance Analyzer unlocks the power of Revenue Growth Management to identify and track opportunities for creating sustainable, profitable growth and gain competitive edge.

Performance Analyzer is *revenue management done right* - our team is ready to help you transform your revenue management practices and positively impact your bottom line!

Revenue Management Labs revenueml.com

Revenue Management Labs is not your typical consulting company; we have been in your shoes and recognize that there is a consistent, fundamental gap between expected and delivered results. We are devoted to enabling our clients to develop and execute practical solutions in order to maximize long-term revenue and profitability. We are a full-scale partner that will help you take revenue management strategy to customer implementation and drive results.

Some of the answers we can help you find:

- Optimizing price position
    - Do I have the right price?
    - What is my ability to take price?
    - How do I successfully increase my price?
- Improving spend efficiency
    - Should we be offering price concessions?
    - At what price should I bid?
    - Where can I decrease spending while minimizing impact to sales?
- Leveraging your portfolio
    - What value do my products have vs. competitors?
    - How should we price our new products?
    - How does my portfolio interact when we adjust prices?
- Capturing Channel Opportunities
    - How do we motivate our partners to drive sales?
    - How do we minimize channel conflict?
    - What level of investment should we be devoting to each of our channels?

What makes us different:

- **Customized Solutions**

    Each of our engagements is customized to individual client needs. Every company has a unique structure, strategy, and goals mandating a personalized plan.

- **Practical Execution**

  RML believes that consulting goes beyond delivering a 100-page PowerPoint deck. A strategy is only as good as its implementation and that is why every engagement includes an execution plan to ensure project ROI is realized.

- **Enabling Partner**

  We are more than just a service provider to our clients, we are partners. This means that we are dedicated to helping develop your internal revenue management capabilities so that you can be self-sufficient.

Our team:

Our professional background is diverse. We are not career consultants. Our team has executed in industry and is keenly aware on what it takes to shepherd changes through an organization.

Our scale gives us the leverage to execute globally.

We are also specialists with full time statisticians, data scientists, and engineers on staff to drive impactful quantitative insights.

Switchboard Sales switchboardsales.com

Switchboard is the leading e-negotiation platform for the consumer products and retail industries providing users with 40% more time to sell, buy, and grow.

E-negotiation is the bridge between the manufacturer sales team – whether they are focused on standard planning, TPM/O, or excess inventory – and the retail buyer. E-negotiation dramatically decreases the administrative burden of creating, responding, tracking, archiving, and searching for emails and attachments for each and every single customer, and replaces it with a common cloud-based platform to manage the sales negotiation process.

Switchboard can reduce the estimated 26 hours of administrative work per salesperson per week down to ~10 hours per user per week. The four main benefits for manufacturers are:

1. More time to expand client base and to address existing clients' pain points, which will strengthen relationships.
2. Less time searching, editing, and tracking emails, spreadsheets, deal sheets, deal terms, marketing support across multiple stakeholders.
3. Easily assess which products are performing best in which types of retailers (mom and pops, big box, independents, etc.) and forecast sales for the year more accurately.
4. Match manufacturing to selling and better target products to buyers who want them.

Switchboard's proprietary "6-Step Process" allows users to devote 40% more of their time to helping customers with sophisticated and frequently changing market needs, and unlocks growth currently limited by a decades-old, inefficient deal negotiation process. Switchboard's software platform achieves this through:

- **Standardized negotiation process:** common platform that supports trade, marketing, and excess inventory offers.
- **Centralized data:** cloud-based solution captures proposals, modifications, final agreements, product catalogs, and much more.

- **Standardized contract formats:** unified contract format that captures the 95% of information that is standard between parties.

- **High visibility:** immediate reports, activity notifications, reminders, intuitive UI for everyday use.

Manufacturers must stay competitive and unlock the full potential of their sales teams by providing them with the appropriate tools and technology. Switchboard is the faster, cheaper, modern way to sell.

TradeEdge Market Connect edgeverve.com/enterprise-solutions

TradeEdge Market Connect is a two-way data exchange that enables exchange of transactional data such as sales, order, inventory, invoice, and master data such as product, pricing, promotions, or similar information between a manufacturer and its channel partners.

- The data exchange can be configured to accept data in a variety of formats and received over multiple protocols.

- The data exchange technology is complemented by a shared services offering which, when partners don't send data on time, follows up over emails and phone to ensure compliance and timeliness.

- The platform can easily scale from acquiring distributor data in emerging markets to point-of-sale data from large modern retailers or syndicated data providers in the developed markets. The platform delivers cleansed, validated, transformed, harmonized, and enriched data for business decisions, analytics, and reporting.

Vendors not included this year:

The following vendors chose not to participate in the 2019 POI TPx Vendor Panorama:

- Nielsen

- Sequoya

The following vendors were in the 2018 TPx, but are not included in the 2019 TPx report:

- Adesso

- Blueshift

- Flintfox

- RI

These vendors are actionable in their specific regional geographies. POI has chosen to reduce vendor number down to facilitate ease and readability of the report.

Conclusion

Managing trade promotions is mission critical in reducing unproductive trade spending, forecasting volume projections, and as a means to improving revenue and profits for both manufacturers and retailers. TPM is a very mature space that offers relatively low risk for CPG companies that are looking to adopt it. Deployment times and costs have dramatically reduced in the last three years. While TPM has transactional benefits, TPO enables the ability to drive substantial cost savings and efficiency. Advanced Analytics and optimization options run from solution-only platforms, Holistic Enterprise Planning platforms, potential for AI, numerous services options, and multiple architectures from on-premise to cloud. POI's overarching recommendation, however, continues to be that CPG companies first determine the "problem they are trying to solve" and then seek out the solution(s) that will move their field sales personnel beyond transactional and enable them to "sell more, and drive profitably" thus creating a competitive advantage.

About the Author

Pam Brown is POI's Chief Commercial Officer. In this role, she creates and executes POI strategy, advisory, and research. She elevates practices and CPG and Retailer relationships. Pam began her career executing at retail, and through promotions advanced to leading retail execution teams for Unilever. For Kayser-Roth she led all Sales and Broker teams west of the Mississippi. In her 14 years with Del Monte she carried many roles. She was the Director of Sales Strategy and Operations which included: Sales Systems and Reporting, Sales Operations, BI Analytics, Sales Training, and Sales Policy. Pam's final role at Del Monte was the Director of IT Governance and PMO, which included planning and leading enterprise wide technology engagements. Pam has current, extensive knowledge in TPM, TPO, ROI, Revenue Management, Advanced Analytics, Change Management, Sales and Sales Effectiveness, Demand Planning, Supply Chain, and other relevant best practices areas. Over the years she has researched, designed, and deployed Enterprise wide solutions to meet business needs. She understands how to execute and gain user adoption of new systems for physical retail and eCommerce. She has advised solutions providers on enhancements to core capabilities and partnered with other CPG manufacturers to share, learn, and drive best practices in today's challenging retail and consumer goods environment for mutual benefit.

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About the Promotion Optimization Institute

POI brings together manufacturers, retailers, solution providers, analysts, academics, and other industry leaders with the specific objective of collaboratively improving the promotion and distribution of consumer goods. Members of POI share cross-functional best practices in both structured and informal settings.

Additionally, members benefit through our industry alliances, the Certified Collaborative Marketer (CCM)™ program, and industry-leading summits around the globe.

POI aims to instill a financial and metrics-based discipline not typically found with other trade groups. The goal of our innovative approach is collaborative promotion optimization. The focus is on the customer/shopper through sales, marketing, and merchandising strategies.

Executive advisory boards keep us apprised of industry needs and help us provide desired outcomes for members, sponsors, and academia.

For more information:

Visit poinstitute.com

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