USING ADVANCED ANALYTICS TO OPTIMIZE SCENARIO PLANNING

COVID-19 was a black swan event that stormed across the globe in early 2020, catching the world off guard and especially consumer goods companies that had to respond rapidly and in unimaginable ways. Products such as non-perishables, toilet paper and bottled water flew off the shelves. Supply chain disruptions prevented reliable, go-to staples from reaching supermarket shelves. Online sales skyrocketed, overwhelming companies that had treated e-commerce as a secondary sales channel. Traditional scenario planning proved insufficient.

Signals Analytics recently held a series of roundtables with senior marketing, analytics and consumer insights personnel from major consumer goods companies. We wanted to know which aspects of their operations had been disrupted by COVID-19 and to hear how they envisaged using advanced analytics to improve their scenario planning going forward. We also shared our position on best practices for approaching analytics in an organization for short and long term planning, especially in light of COVID-19 and other market changes such as the rise of direct-to-consumer and e-commerce.

This white paper was borne from those discussions.

THE BIG QUESTION

IF YOU COULD WAVE A MAGIC WAND, HOW WOULD YOU USE TECHNOLOGY TO MAKE THE PLANNING PROCESS EASIER AND MORE EFFECTIVE?

To have more robust ecommerce data. We can get the data at brand level, but it's hard to get it down to that EPC (electronic product code) level. More granularity would help us know what we can do in the e-commerce space.

– CONSUMER INSIGHTS, PET FOOD MANUFACTURER

When a business question arises, the process of arriving at an answer can take months. We would want more instant access to robust data – so answering the business question doesn't take so long.

– MARKETING, CANNED GOODS MANUFACTURER

Getting data from a syndicated partner is fairly easy. But when you start looking at customers and retailers, you get flat files via FTP. This makes it very difficult to pivot quickly. If we could move closer to newer ways of sharing data – such as using an API (to automate data transfer), this would allow us to be more responsive when it comes to making business decisions.

– DATA & ANALYTICS, CONFECTIONERY MAKER

The magic question is: how do we work with our IT teams and data scientists to safely and nimbly process the data and quickly get insights across to our teams?

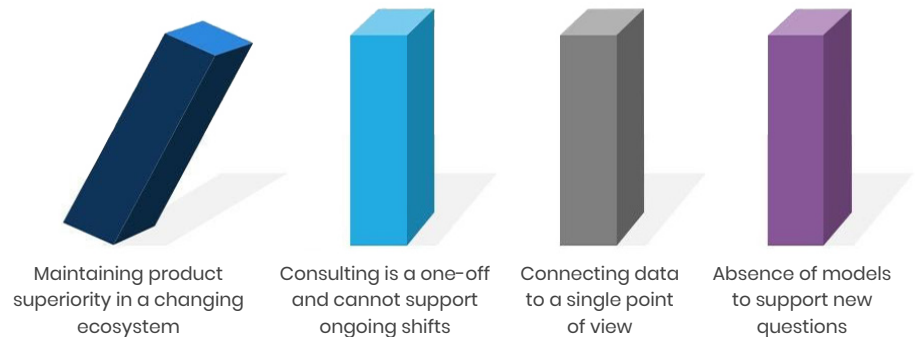**– SOCIAL MEDIA MEASUREMENT, FAST CASUAL RESTAURANT CHAIN**

Organizationally, how do we re-organize as an insights function? We have different silos, and I think it would be ideal to be able to work in a Scrum-type environment where we come together daily instead of periodically.

– CONSUMER INSIGHTS, CPG COMPANY

APPLYING ADVANCED ANALYTICS TO THE STRATEGIC PLANNING PROCESS

The major retailers didn't have their shelves stripped bare in early 2020 because of a lack of products. After all, we are living in an era of abundance where farmers produce enough food for 1.5x the world's population. The proximate cause of all those empty shelves was that the supply chains carrying the products were disrupted because of factory closings and consequently became disconnected due to overwhelming demand for specific offerings.

CHALLENGES IN SCENARIO PLANNING

| Maintaining product superiority in a changing ecosystem | Consulting is a one-off and cannot support ongoing shifts | Connecting data to a single point of view | Absence of models to support new questions |

Similarly, companies weren't caught off-guard at the outset of the COVID-19 pandemic because of a lack of data. Rather, the root cause was the absence of a toolkit to connect and use the data to formulate a response. Some multinational retailers saw first-hand the effects the pandemic could have on their business when Chinese cities began shutting down in January 2020. But it appears these companies failed to incorporate the data into their strategic planning process and, consequently, they suffered the same effects all over again when the virus entered Europe and then the U.S. in February/March.

If 2020 has taught us anything, it is the need for proactive scenario planning. This requires having data that is:

- **Connected**. This means collecting data from multiple sources and fusing it into a single source of truth that can be tapped into for multiple purposes. Information gathering across different sources needs to be done in a strategic way, so you know which data addresses which business questions, and vice versa. Asking hard questions and varied questions can lead to new data sets which can then address new questions as they arise.

- **Timely**. Data must be constantly updated so that insights remain timely and actionable. In traditional scenario planning, one-off strategic reports are limited to the confines of the data collected at that point in time. Having data that continually updates gives you the ability to monitor changes in your ecosystem and update and improve predictions as time goes on.

- **Integrated**. It does no one any good if data exists but only in a silo. Effective scenario planning can only happen if all data is analyzed and all stakeholders have access to it and consider its implications. Consumer sentiment and changing needs may not only impact short-term marketing and messaging but can play into very strategic and long-term options for a company like identifying potential partners and acquisitions, realigning product portfolios and ingredients, assessing competition and other business moves.

Consulting projects are one-off and cannot support the immediate shift that is required in such a short time. Internal data projects typically do not have models flexible enough to adapt to new business questions in real-time.

PROACTIVE SCENARIO PLANNING REQUIRES DATA THAT IS
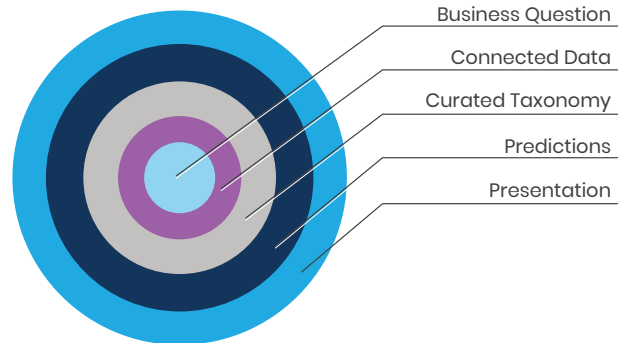
Connected

Integrated   Timely
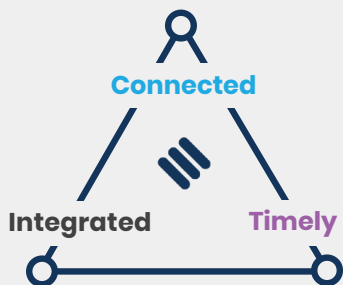
APPLYING ADVANCED ANALYTICS TO THE STRATEGIC PLANNING PROCESS

It all starts with asking the right business question, a connected data set and being able to apply specific taxonomies to extract granular insights and make good predictions.

Business Question
Connected Data
Curated Taxonomy
Predictions
Presentation

In the wake of COVID-19, a business question could include:

- Are consumer sentiments shifting demand to or from some key product lines as a result of the pandemic? What changes should my business make in our product offerings as a result of the above?

- Has the crisis opened up any new white-space opportunities, e.g. mood foods, products designed for a remote lifestyle? Can we identify any opportunities by looking at data from adjacent product categories?

- Which channels are enjoying most growth, and what are consumers buying there? How do we optimize our marketing strategies to align with consumers shopping on those channels?

Once you have a specific business question or goal – and somebody taking ownership over answering it – then the data becomes an invaluable tool.

"The gut feel of executives has never been more wrong than now, because they've never gone through something like this pandemic. The whole strategy of putting more feet on the street (of sending sales people to stores to observe and negotiate better shelf presence) is no longer an option. Analytics is now set up to play a stronger role than ever before."

– **Andy Walter**
Strategic Advisor, Signals Analytics, and former VP, Global Commercial Services of The Procter & Gamble Company

BUSINESS NEEDS – HOW TO USE DATA TO ADDRESS KEY BUSINESS QUESTIONS AND PRIORITIES

During the roundtables, the various participants shared with us their big business questions in light of COVID-19. Most participants reported growing demand for products, although in each case this created new challenges for scenario planning.

1 Short and long-term demand planning

The VP of data and analytics for a canned goods manufacturer said the company typically relies on historical data to predict future demand. When COVID-19 hit, the company saw unprecedented demand for its products. As a result, all the work that had been put into understanding what was fuelling demand – and using that information to finetune demand planning – became obsolete. The immediate focus shifted to keeping the supply chain moving in order to meet demand.

Business questions:

- **In the immediate term, how much do we need to manufacture and ship to meet wildly unpredictable demand?**
- **How will future demand play out? If and when a vaccine comes out, how quickly will things return to 'normal'? How can we mitigate the prospect of excess inventory?**

2 Developing customer relationships across multiple channels

The director of global strategic insights for a CPG multinational said the acceleration of e-commerce and direct-to-consumer have posed new challenges for the business. The company recognizes that the store shelf is no longer the key to building brand awareness and consideration. As a result, there is a need to merge competitive landscape analysis of the e-commerce and in-store sales channels.

Business questions:

- **How do we develop brand awareness across multiple channels, including online?**
- **What product benefits are people talking about online?**

3 Comparing ROI of different eCommerce channels

The chief technology officer for a major farmer's co-op, also spoke of unusually strong demand for food and drinks – mainly from e-commerce, which is up 30%. The organization usually conducts strategic planning on a monthly basis, using the traditional steps of integrated business planning. Now, with the sudden spike in demand, the organization would need to become more data-centric and conduct strategic planning in a 'connective way'.

Business questions:

- **What is the true ROI of different e-commerce channels?**
- **What can we do on the marketing side to create loyalty among newly acquired e-commerce customers?**

4 Transitioning to direct-to-consumer

The marketing director of a multinational consumer goods company specializing in beauty and cleaning products, said sales on third-party ecommerce platforms (e.g. Amazon, Walmart.com and Target.com) soared following the COVID-19 outbreak. Because of the pressure on their own supply chains, many retailers have asked the company to consider shipping items directly to consumers. The problem is that the company only knows how to deliver products in bulk using freight shipping, and has no experience shipping individual products one at a time.

Business questions:

- **Will new users continue to stay loyal to our brands?**
- **Will people continue to shop the way they're shopping today, or will they revert back to pre-COVID shopping habits?**
- **Will ecommerce level off at a certain percentage of revenues, e.g. 20-30%, much like the wholesale club channel levelled off around 10% years ago?**

5 Leveraging new data sources

The VP of commercial analytics for a global food manufacturer said sales have surged in 2020 after being flat the previous 10 years. The focus is now on sustaining that growth in 2021-22. In the past, the company did category forecasting by analyzing and extrapolating the results of the rolling five-year compound annual growth rate. Now, it is journeying below the category level and down into subsegments and sales channels for insights. Moreover, amid diverging macroeconomic projections between different countries, the company recognizes the importance of incorporating new category-agnostic data sources (such as economic forecasts and proposed legislation) in its predictive models.

Business questions:

- **Which countries will suffer deeper, longer recessions? Which will recover more quickly?**
- **Will countries clamp down on ingredients linked to co-morbidities (e.g. sugar) and what types of measures will they use (e.g. restrictions, excise tax, warning messages)?**

WHAT ADVANCED ANALYTICS CAN ACHIEVE

DATA & ANALYTICS

CHIEF DATA OFFICER/ CHIEF INFORMATION OFFICER

- Access countless data sets that are strategic to the business
- Harmonize disparate data sets in single platform
- Connect insights to business goals

CONSUMER & MARKET INSIGHTS

CMI LEADS AND ANALYSTS

- Access countless data sets that are strategic to the business
- Harmonize disparate data sets in single platform
- Connect insights to business goals

BUSINESS

BRAND/MARKETING

- Optimize product positioning and messaging
- Measure consumer perception and sentiment
- Elevate product placement
- Boast competitive differentiation
- Enhance response to compelling events and hype cycles

PRODUCT INNOVATION

- Identify new areas of investment
- Identify partnering and licensing opportunities
- Optimize product portfolio and product development process

CONCLUSION

During a rapidly evolving situation such as a global pandemic, it is critical to have the ability to answer important business questions in days, not months. With traditional forms of strategic planning, there is always a risk that the conclusions become outdated before even making it on to the page. If a vaccine comes out before your crisis response is complete, then all that planning becomes obsolete. And then what? What is the impact of the vaccine? Will there be another disruption? Or will the trends seen during the pandemic continue?

Because the Signals Analytics platform is configurable to the needs of your business, a chief data officer, head of innovation or CMI lead can incorporate findings into existing business intelligence tools to unearth trends that impact multiple categories, unleashing value across different business units.

Signals Analytics uses patented AI technologies to collect, connect and give context to data from thousands of sources and provide actionable business insights. Data refreshes on a continuous basis, ensuring insights remain timely. By leveraging the platform, your business can continually conduct and update scenario planning to stay ahead of evolving market conditions.

In this age of infinite data availability, the only way forward is with a connected, continuous and configurable data analytics platform. With such a platform, your company can continually refine and update its questions and assumptions – always staying one step ahead of the game.

PROVEN VALUE AND IMPACT

3x more
successful product launches

10x faster
time to insight

50% fewer
product modifications after launch

90% accuracy
in classifying multiple unstructured data types

ABOUT SIGNALS ANALYTICS

With next-generation advanced analytics, Signals Analytics powers the future of market intelligence with the scale and speed of AI. The configurable data platform connects and classifies countless rich, external sources into unified contextual data, and augments analytic applications with unparalleled accuracy and scale to surface granular trends and predictive insights. Patented machine learning, NLP and data automation technologies leapfrog traditional approaches of data collection and management to help organizations maximize the impact of advanced analytics.

Our Platform

Our platform contains all the elements of a data fabric with end to end configurability, requiring no new code to deploy new verticals, categories or to enable answers to new business questions. More than 40 FMCG categories are supported in more than a dozen data catalogs, which are underpinned by curated taxonomies and patented NLP and other unique AI-led capabilities like product clustering and brand and author refinement. Business-ready analytic apps and open API and data mart integrations means that organizations can readily tap into the power of advanced analytics to drive successful business outcomes.

For more information visit signals-analytics.com

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