COVER STORY BY KARA ROMANOW, ALI ACKERMAN AND ALARICE PADILLA

2014 REVIEW & OUTLOOK REPORT

THE 2020 IMPERATIVE

75 Industry Experts Identify Projects that Consumer Goods Companies Must Start Now to Compete Later

It's no secret that consumer goods companies must drastically change the way they do business in order to compete — and the pace of change needs to happen faster than ever before. Gone are the days of executing large-scale technology implementations at a leisurely pace. In 2014, consumer goods executives must often jump head first into new initiatives — like big data, digital marketing and omnichannel selling — without much of a safety net to protect their brands, businesses or investments. That's the exciting, yet challenging, world we live and work in today. But, what about five or 10 years from now? How can consumer goods companies best prepare themselves to stay in front of future trends, many of which are just educated guesses at this point?

In the 2014 Review & Outlook Report, we asked 75 of the industry's brightest minds — each of whom is driving change in the consumer goods industry in his or her own right — to look into their crystal ball and tell us:

"What one initiative must consumer goods companies pursue now in order to compete and grow in the year 2020?"

Their responses showed interesting shifts in priorities and strategies when compared to responses in this report in years past. Not surprisingly, big data and new marketing were identified as leading trends in 2012 and 2013, but this year, the lines are beginning to blur as IT and business executives come together to realize that many of the initiatives that require technology in 2020 cannot be defined nor confined by descriptions from the past.

While the themes of big data and digital marketing still weave their way throughout the report, the relationships between business priorities and drivers are quite striking.

If we roughly quantified the results by categorizing the articles into buckets, two themes reign supreme:

(1) All things data, including analysis, big data and data governance at 23 percent.

(2) An amalgamation of digital/social/mobile/consumer connections at 29 percent.

The remaining topics designated as 2020 priorities spanned omnichannel readiness, trade promotion management and optimization, business and technology readiness, health and wellness, and more.

Most interesting, however, is the amount of overlap between all of these initiatives and the recognition that one can't be accomplished without the other. Consumer connections can't be made without digital marketing often enabled by mobile technology in an omnichannel environment.

Perhaps Coca-Cola Refreshments Chief Information Officer Tom Miller described this melting pot of trends best when he wrote ,"It is a big data project, fueled by social digital marketing that reaches consumers on their mobile persona and delivered via cloud technologies."

Several articles took it a step further, discussing personalization of both product and marketing that enabled 1:1 relationships with end consumers, all of which is dependent on massive amounts of data that is analyzed to reveal compelling consumer insights.

Technology itself played a slightly bigger role than last year, with more best practices shared around infrastructure and change management, both viewed as essential to embracing the increasing pace of change. Many of the authors have lived through difficult implementations and we can absolutely learn from their experiences and advice.

Ironically, we didn't hear about the potential shortage of talent to help bridge the gap between the business and technology, as in prior years. The ability to translate both disciplines into tactical projects is still an elusive skill, which we hope is addressed by education and formal career planning. Retail execution is one other topic we expected to hear more about, and while still important, it seems to have taken a back seat to other priorities driving the industry forward.

Within each section, many common themes emerged. The man years represented by the expertise in this report is staggering and each article is packed with advice that should not be taken lightly.

So, get your highlighter ready — you will be inspired to take action on some great new ideas.

Cross-Functional / Information Technology (IT) Trends

Not surprisingly, the authors in this section are brimming with opinions about data and strategies for managing all of it, but they also stress the staunch need to act on the data and embrace change.

Keith Barringer

North America Lead for Consumer Goods & Services

ACCENTURE

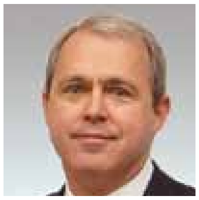
The shift from an analog to a digital shopping experience will present consumer packaged goods (CPG) companies with both new challenges and new opportunities in the global consumer market of 2020.

The digital world is enabling consumers to be more flexible in their choices and to shop anywhere at anytime through multiple channels, making satisfying their preferences increasingly daunting. Given this challenge, success will require that CPG companies develop a seamless, multi-channel approach that enables them to be more relevant and agile in responding to changing consumer demand.

Looking ahead, businesses will need to evolve from a six week to a six minute supply/logistics cycle, and they will also need to focus on four digital sales channels: B2C; B2B; B2B2C; and increasingly B2Things, or connected devices. To do this effectively, organizations must eliminate internal silos and form one shared, enterprise-wide strategy within their ecosystem that includes suppliers, distributors, retailers and consumers.

Additionally, as digital retailing blurs the lines between sales and marketing, CPG companies that engage with consumers directly through digital channels and build out their direct-to-consumer processes — such as virtual reality initiatives for sales planning and augmented reality for store execution — have the best advantage for creating new growth. They may also want to partner with technology companies that can help them accelerate their innovation agenda by gathering and basing decisions on consumer insights, engage consumers in product development and drive valuable consumer data and social connections that will shape marketing efforts in new ways.

Finally, to be prepared for 2020, CPG companies should partner with retailers, leverage social media to deliver consistently relevant consumer experiences and accept digital technology as the only viable way to economically compete and win in a changing environment that includes value-conscious, aging consumers in developed markets and the one billion new middleclass consumers in emerging markets.



Tony Bender

Global CIO

ENERGIZER

As we exit 2013, one thing is clear; the retail environment has never been more challenging. The "Great Recession" shook shopper confidence and created a new normal for shopper frugality. Consequently, traditional brick and mortar retailers are under intense pressure from online retailers. The Internet and social media have armed consumers and shoppers with vast amounts of information for comparison shopping. Promotional activity at retail is intense. Information is power and, now more than ever, the consumer is king.

What does this mean for consumer goods (CG) companies? Several key factors in the industry will continue to drive our agenda in 2014:

- **Retail Category Dynamics:** Establishing new placement and keeping existing distribution, at retail, will continue to be challenging. Category management by retail merchants is becoming more discerning. Retailers are much quicker to rationalize brands in each category to gain improved space efficiency and effectiveness. Slower moving brands and SKUs will be relegated to online channels or delisted. This will put marginal brands under pressure and further validates the need for advertising and promotion (A&P) investment for healthy brand building.
- **Online Channel Growth:** Expect further growth in online retailing from pure play online retailers, like Amazon, to traditional multi-channel retailers, like Walmart, Target, etc. Online is becoming the de-facto standard for shoppers. Traditional brick and mortar retail stores provide shoppers with "showrooming" venues to see and try products and then buy online. CG companies will need to establish significant bench strength in new social media and mobile skills to capitalize on this growth phase in the online channel.
- **CG Consolidation:** Look for more MA&D (mergers, acquisitions and divestiture) activity within the CG industry. It is becoming increasingly more difficult for CG companies to grow organically. Expanding into new markets is challenging due to a lack of distribution scale and the cost of introducing a new brand to foreign consumers. Many global U.S.-based companies have cash trapped offshore, to avoid U.S. taxa-

tion, which will increasingly be used to buy brands abroad to expand globally. Look for more global consolidation within the industry. Consolidation implies change. We must master change management in 2014.

Ellen Bzomowski

VP

VISICOM

In order to compete effectively in 2020, you will need to survive the deluge of data and react quickly to changes in it. To be competitive, the right investment in technology is needed. Today, you have choices. You can choose the right solution for the exact task that is required and integrate it into the larger infrastructure of other best-of-breed solutions. Take the time now to consider each component of your technological landscape. Does each solution do what it needs to do to help you be successful? Does it have the ability to change and grow with your needs? Living with mediocrity will not make you successful in 2020 — it is time that you demand the most from your systems:

1. Demand the best, most flexible solution for each need throughout your technology ecosystem — define the functionality required for as far out as you can see and choose the system that offers these capabilities plus the ability to change and grow.
2. Use the system to its full potential — Take the time to integrate the right data into those systems to ensure they give your employees, partners and customers everything that they need to be successful.

By 2020, data will be streaming at you from all sources at a steady rate, customers' demands will be higher than ever and the need for your organization to anticipate and react to these demands will be higher as well. Don't sell yourself short on technology — make the investments today that will ensure your ability to meet these needs in the future.

Lora Cecere

Founder

SUPPLY CHAIN INSIGHTS

Nine out of 10 companies are stuck. In our analysis, we find that organizations are unable to power progress on operating margin and inventory turns together in the same year. The answer lies with a new approach. Complexity has increased, and companies need to reach balance between profitability, cycles and complexity. They cannot today.

It is time to step up. We feel that there are new answers with digital technologies. There is an opportunity to build a cognitive outside-in system. The goal is to sense. The opportunity is to use new forms of analytics that enable translation to drive the intelligent response.

We are convinced that the redesign cannot be functional. It needs to be aligned organizationally. Outside-in is a new mental model. It is not about the evolution of existing processes. It requires new thinking.

Why is this important? Traditional supply chains respond, but they are inflexible and slow. They cannot keep up with the cadence of business. Customer requirements are complex. They are growing more so. The processes are too cumbersome to deliver on what needs to be done. Building the E2E value network needs to be a cross-functional initiative. For most, it is not. It needs to be about the redefinition of enterprise technologies and embracing/driving value from new forms of analytics. It starts with the customer. It needs to align to the growth strategy. While most companies say that they are building demand-driven end-to-end processes, most are putting lipstick on an old pig. We are now ready to move to the next level.

Matthew Cook

Director Business Solutions

DANONE NORTH AMERICA OPERATIONS

CG companies must reposition their application architecture to be:

- Lower cost
- More adaptable to changing business demands
- More easily replaced by better technology

Companies must free themselves from the traditional on-premise perpetual license applications model. This model is too expensive to maintain, too rigid, and is already a competitive disadvantage compared to cloud and software-as-a-service (SaaS) options.

CG companies must engage vendors who understand this trend and are prepared to offer adaptable solutions; where entry and exit costs are low so that new capabilities from new vendors can be readily exploited.

Lower total cost of ownership options mean CG companies can better leverage their traditionally limited IT dollars. This is already evident in such areas as data warehousing, where cheaper and faster in-memory databases are leaving traditional relational databases using disk storage in the dust.

To evolve, follow these simple guidelines:

- Look for SaaS and other hosted options as applications age out of their life cycles.

- Avoid big modifications to your ERP and instead look for ERP-compatible utility applications.
- Simplify and standardize your master data and system integration architecture; eliminate homegrown specialized applications or middleware.

By 2020 enterprises will use a constellation of apps — the output of one completely compatible as the input of another — that are constantly maturing and being replaced by newer and better options. This is the future CG companies must be ready for.

Kirsten Curtis

Director of Demand Planning & Business Intelligence Supply Chain Operations

SAFEWAY INC.

The CPG industry is in transition, and the companies that embrace change now will be best positioned to compete in the future. There are three broad changes occurring in the industry: technological disruptions, business model transformations, and shifts in the emphasis on risk and sustainability.

CPGs should partner with start-ups and tech companies to leverage new thinking in the arenas of mobile, big data and analytics. In the future merchandising could be replaced by crowdsourcing; consumers instead of vendors could drive price reductions; and the wall of a train station could replace the supermarket shelf as the place consumers buy groceries.

Regarding business model transformations, we're seeing transitions to omnichannel distribution models and increases in collaboration between vendors and retailers. Companies must decide the most effective way to reach their consumers and start building programs around it, and doing this alone won't work.

Finally, the emphasis on risk and sustainability will increase in the future, and CPGs need to better understand their supply chains now so they can mitigate potential risks and drive sustainability efforts in the future.

Richard Davis

VP, Business Planning

KELLOGG COMPANY

It has been said that three great revolutions have massively changed (or are changing) the world in such exponential fashion that it is unrecognizable after each of the occurrences. They have been the industrial revolution, the Internet revolution and the one occurring right now, the data revolution. The massive amount of data that is being generated today is not going to subside. In fact, it will accelerate at an incredible pace. There will be efforts made to make it secure, probably even regulate it, but the tidal wave of data will not be able to be contained.

Now, let's take the tidal wave of data, and combine that with the fact that future generations are going to be incredibly adept with technology. For the first time, consumers and shoppers are already more equipped with technology than the companies trying to get their attention and their loyalty!

For CPG companies, this creates a perplexing dilemma, how do we keep up? How do we make sure that we keep the technology and information management up to date to make sure that we can communicate, interact, service, and understand our consumers, shoppers and customers? Think of the old model: Recognize the business need, identify a potential technology solution, make the business case, drive the alignment organizationally, secure funding, design, pilot, implement… Well, unfortunately, the old model does not work. The data revolution timeline will not be forgiving enough for that model to survive.

The competitive advantage that all companies seek will come from knowledge. Intellectual capital will be generated with the use of data science. Analytics capabilities will identify previously unknown correlations, and causals, that technology even a few years ago couldn't have found if it tried. The knowledge and competitive advantage gained from it will grow rampantly as well. Late adopters could very possibly find themselves in a position where they have fallen too far behind to catch up.

Winning organizations will have leveraged capabilities in a much different fashion. They will earmark funds for capabilities while leaving behind the rigid (and sluggish) model of payback that is widely used today. They will have invested in data scientists. These teams will deliver value through their unique blend of skills — business, economics, statistics and analytics. They will ask questions, test and learn, and provide answers. Their benefit and value will be closely guarded, and they will very much become IP for the organization, much as brands, formulas, recipes and even patents have been in the past. The bets are already being placed by companies who have the vision. For those who do not, I wish them well.

Nick Dozier

CEO & President

ATLAS TECHNOLOGY GROUP

While technology is changing the way consumers shop, it should also be changing the effectiveness and efficiency of our organizations. While shoppers have access to more information than ever to make decisions, so do CG companies. There are those who are overwhelmed and paralyzed by data, and those who figure out how to leverage it as a serious competitive advantage.

Reflecting on 2013 and looking into 2014, the common thread for CG companies is a focus to maximize the return on resources. Retail square footage growth remains flat and a slowly recovering economy continues to create an extremely challenging environment for growth. Manufacturers have several options — bring disruptive innovation, steal share or become more efficient with their resources.

CG leaders want to empower their people to focus on value-added work with the highest rate of return. Our most valued resource, our people, must spend time utilizing their analytical, problem solving and storytelling skills to help retail partners have the right product, in the right place, at the right time.

Many opportunities exist to leverage data to proactively optimize the supply chain, enhance the ROI with retail field operations, and deliver relevant insights to influence better merchandising decisions. By doing so, companies can position themselves as collaborative, strategic partners with their customers resulting in mutual growth.

It will be exciting to observe the emergence of many technologies and their impact on the retail sector such as augmented reality, Bluetooth smart devices, interactive digital shopper marketing, RFID traction, cloud computing and NoSQL database management.

Britt Fogg

Founder & CEO

SHILOH TECHNOLOGIES

Now, more than ever, leveraging insights from data collected across the entire retail chain is required. It's a point of differentiation, a definite competitive advantage. In some instances, it is even becoming a barrier to entry. Consumer goods companies MUST have the capabilities to mine these insights if they want their products sold in the best and most forward-thinking retailers.

To realize the true selling potential of any product, and discover actionable insights, you MUST take into account the retail chain data collected from end to end. Data is available beginning with the raw materials, to manufacturing, to distribution, to stores/sites, and all the way through to the shopper and consumer.

It's not enough to just uncover these insights! You have to ensure the information is shared with the key people in the affected area of the retail chain. The insights must be in a format they can use, and a process put into place to implement changes to make better decisions, resulting in more sales.

If you don't change something along the chain, no improvements will have been made, and you won't realize the opportunities. This requires teamwork like never before between your technology, business units and business partners.

Don't take on a big data initiative without a solid business case and business team driving and supporting it. There is tremendous value in big data, but it won't be realized unless it is disseminated all the way through the chain and execution processes to make better business decisions.

Jonathan Golovin

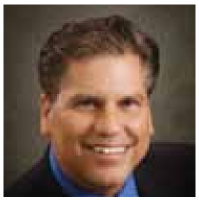
CEO

RETAIL SOLUTIONS INC.

How to achieve one shopping experience across all channels will continue to drive innovation at the front and back ends for consumer goods manufacturers and their retail partners. Creating a highly personalized customer experience means many things. It combines the concept of the "ubiquitous shopper" or the tracking of consumer behaviors in-store, on the Web and via social channels, with retail automation and hyper-local assortments and delivery capabilities. While robots in the store aisles or Amazon drones delivering packages to your doorstep might be a few years off, in-store technologies that leverage mobile phones to automate a lot of tasks previously done by humans, such as recommending products, providing more information on products, or helping with store navigation is already here.

Other consequences brought by the proliferation of technology available to consumers is the transparency of prices both online and in the store. As a result, traditional retailers will struggle with geographical pricing and charging a premium for goods. Brick and mortar stores will need to get creative and identify new incentives or value that the Internet and price can't provide. This might take the form of customer experience, promotions and discounts, quality/selection of perishable goods, or addressing real-time needs like what's for dinner.

No matter where you browse or buy, product availability is paramount to customer service and satisfaction. To compete today, in 2014 and in 2020, CPGs and retailers must collaborate more effectively. Ensuring better assortments, the right inventory balance and optimal pricing requires gathering actionable downstream data on consumer behavior and preferences and sharing it among partners in real time. This visibility and collaboration will deliver speed to insights, resulting in increased sales across all categories and inventory cost reductions.



Werner Graf

General Manager

TATA CONSULTANCY SERVICES

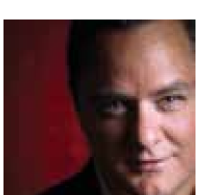
Steve Jobs once remarked, "you can't connect the dots looking forward; you can only connect them looking backwards". Albert Einstein once noted that he never thought about the future as "it comes soon enough". There's relativity in these comments for today's consumer goods leaders.

Note the distinction between an "initiative" and "vision": An "initiative" is one of those dots Steve Jobs was talking about. Given the speed of change in technology, a six-year attempt to connect the dots forward doesn't really make sense. A "vision" however, requires imagination of what you want to be in 2020.

All corporate "visions" answer fundamental questions: Who will our customer be? How will we serve that customer? etc. The strong company vision is often brilliant only in its simplicity and clarity in reply.

Today's CPG IT executive can be equally brilliant by asking natural follow up questions and aligning initiatives to the answers: Can I provide insight on customers and consumers? How will IT be part of my company's product? How will IT support customer interaction? Is IT fast and flexible enough to react to changing business needs and technology? Is IT structured to serve my internal stakeholders at the most competitive price point? Am I bullet proof in the face of an attack or disaster? Do I have the right partners?

Leaders don't just internalize their company's vision; they become part of it. No single initiative today will ensure competitiveness in 2020. Focus clearly on customers and consumers and 2020 will come soon enough.



Justin Honaman

Partner, Consumer Goods / Retail
North America Practice Leader

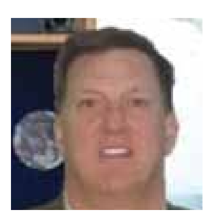
TERADATA

The integrated data hub will emerge as the dominant asset within CPG organizations and will be capable of ingesting many different data types and run any type of workload or application on top of that data. The demand signal repository (DSR) concept will continue to evolve and be utilized to solve specific customer business challenges (versus all retailer business problems). Integrating POS, loyalty, shipment, syndicated and other related data types from the top 15 to 20 retailers will become easier and more mainstream for CPG organizations. Note that a small subset of CPG manufacturers are significantly "ahead" in collecting, harmonizing and utilizing integrated demand data (and thus moving toward becoming a demand-driven, value chain-enabled organization).

These firms will accelerate investment in these capabilities and a gap will develop between the "fast-movers" and "slow-movers" in CPG. Retailers will easily recognize the differing partnership dynamics and either "require" CPGs to change to fit their model expectations or align more closely with CPG organizations that are focused on shopper engagement, category growth and retailer sales.

CPG marketing leadership will continue to press for fast-to-market analytics-as-a-service/insights-as-a-service solutions leveraging shopper, category and consumer data in a cloud environment. Meanwhile, from an IT perspective, cloud computing will progress the underlying infrastructure for many CPG organizations as more tech teams look to leverage managed services offerings.

Meanwhile, digital technology has permeated the path to purchase as web sites, social media channels and mobile apps are used by consumers for product research, price comparison and even product purchases. CPG organizations will actively encourage buyers to make purchases and talk about goods on their favorite social networks. As social media analytics evolve, companies will seek better ways to measure the ROI from their social efforts. The CPG organizations that enable consumers to quickly and easily locate and acquire their products as part of a social experience will have the best chance of success.



Patrick Kern

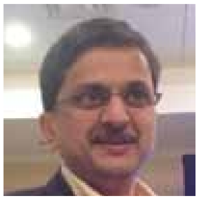
Director of Business Intelligence
Global Business Services (GBS)

THE PROCTER & GAMBLE COMPANY

To compete and grow in the year 2020, consumer goods companies must be able to engage and connect with "The Internet of ALL Things". The potential for electronic "things" in our life to convey useful information — to consumers, manufacturers, retailers, service entities or other devices on our behalf — is growing at an exponential rate.

This is way beyond computers connecting; rather, this is about sensors communicating with higher-order devices (including smartphones, Wi-Fi access points, Bluetooth devices, cars or other options). This is also not "locationally-contained", as this can occur in the home, while consumers are mobile or in any other physical place. Micro-energy possibilities are emerging, which make electronics semi-self-powered, which opens up a pervasiveness mankind has never seen before. An intelligent planet CAN emerge, that better serves consumers. The mind races, considering the parade of questions this poses:

- What is possible in such a near-future world?
- What is practical and/or desirable?
- What capabilities will improve the lives of people, everyday? What are the true "life problems" we should be working on that can lift mankind?
- What is the balance between acceptable signaling and inappropriate/intrusive transmission of data? Ethical and privacy issues must be considered and addressed.
- How can we leverage new technology to deliver better stewardship for products, services and solutions we now provide?
- How do we ensure better stewardship of the environment, resource/energy management, doing so in a way that this a win/win/win/win for suppliers, manufacturers, retailers AND consumers?



Ajith Madhavan

Head Consulting, Consumer Packaged Goods & Retail Industry

iGATE

In the last five years, a series of disruptive changes have buffeted the consumer goods (CG) industry. Consumerization of digital technologies, shifting demographic landscape, and the buoyancy in the emerging markets is fashioning a major and irreversible trend.

The growing sensitivity to issues, like sustainability, health and wellness, and inclusive sourcing are all forcing CG companies to relentlessly rearticulate the vision to engage with the consumers. No longer, companies can afford reactive and tactical initiatives to effectively engage with the consumer. CG companies will have to architect a strategy if they have to thrive in 2020.

Creating capability to discern "intelligence" and "bankable trends" by sifting through big data is the single most important initiative for CG companies. If direct interactions with the consumers are the industry's Holy Grail, then it is important to use technology to not only "connect" with them but also be able to understand their psyche. The inflection point has arrived, when companies need to make investments to unleash the full potential of technology to decipher the consumer behavior.

CG companies focusing on this aspect will be able to spot trends as they emerge or even before they emerge. It's time now for companies to re-orient their strategies rethink operational business processes and refurbish technology systems keeping in mind this perspective of consumer engagement.

Timothy A. McCreery

VP, Sales & Marketing – CPG

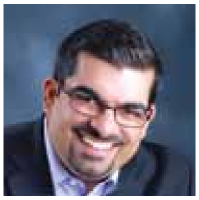
KENT PRECISION FOODS GROUP INC.

Our biggest concern is government and government policies. We are seeing, hearing and watching legislation that could be seismic in proportion to its concept. The issues we are facing and concerned with the most are packaging change requirements, increased regulations and definition of products.

While it may seem to many that regulations of packaging disclosure are simple and helpful, this simple change in a regulation could cost small companies their planned profit for years and large companies a marketing expense hit that will preclude them from delivering on brand promise of quality and innovation in the near term. The entire packaging architecture would have to be addressed and effort extended to deliver a clear and meaningful message.

Definition of products is another regulatory area that could radically change the costing of products and restrict the flow of healthy and low cost foods. If manufacturers are required to move out of GMO products or change their offering because the definition of "natural" is changed, consumers will pay dearly for these concept changes. Sourcing would become difficult, taste pallets upset and product performance all will suffer. In the end, the consumer will pay dearly to be regulated and the supply chain will be seriously choked. Has anyone seen the cost of the weekly food bill in your house? Inflation has hit and it will only get worse if these types of concerns are not met and worked out.

We cannot afford to let the minority make claims and demands that are not in the best interest of consumers and their budgets.



Alok Mirchandani

North America Head for CPG

HCL TECHNOLOGIES

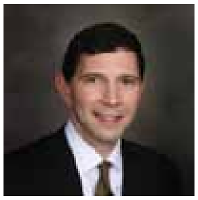
Most of us are familiar with the Oakland A's and the innovation Billy Beane brought to the game. Traditions in baseball have been challenged and a new paradigm has emerged, one that embraces science, an actuarial approach, and evidence-based analysis of baseball's traditional wisdoms.

Power of data, statistics and evidence-based analytics led to Beane's success, and has been a catalyst for bringing change in traditional IT organization's thinking — moving away from IT incident management to becoming proactive, by being process/KPI aligned.

More than 35 percent of an organizations' IT spend is stuck in applications support costs. One would question, how does a CIO get more out of the dollar spent in operations. Can traditional ASM help fuel transformation? In the age of digital transformation, how does one drive promotions effectiveness, for example, to enable the business with real-time data?

The power of bottoms-up transformation thinking applied to traditional applications management services, has enabled organizations to get closer to the business, and also generate growth by enabling process cycle time reduction. By simply creating the right level of visibility — operational metrics and how the application portfolio relates to the business processes; and enabling velocity — business KPI and IT SLA relationship, IT organizations can drive value to the business and create a predictive environment, thus, moving to a zero IT incident environment.

With limited budgets, CIOs are forced to think of alternatives and ensure they avoid the "watermelon effect". In that quest, a zero IT incident environment will only enable CPG organizations to innovate, compete and bring about a paradigm shift in how they enable business.



JD Spangler

Chief Commercial Officer

VESTAGEN TECHNICAL TEXTILES INC.

The new CPG currency is customer connectivity. No longer will rearview mirror research and analytics be sufficient. Going forward winning CPG companies will excel at direct connection with their customers. Winners will have direct connectivity structured to continually unlock the constant flow of clues customers provide about their future needs and behaviors.

Achieving this goal requires a hybrid team. These teams tightly integrate social engagement, advanced analytics, and data synthesis with sales, finance and logistics to produce seamless customer connectivity and unprecedented speed to action times.

- **Social Engagement:** Real-time conversations with product users. Never before have so many avenues existed to collect data on how products are being used, what's working and what's missing. Success starts with realizing this is a conversation. All good conversation needs to benefit both parties. Ask questions, provide answers and just listen. The key is to stop "selling" all the time.
- **Advanced Analytics:** Incorporating rapid evaluation of historical data to identify what to keep doing and what to stop doing with predictive modeling techniques that ensure future actions are more likely to succeed.
- **Data Synthesis:** Bringing it all together with unprecedented speed and clarity. Blending the science of analytics with the art of story telling. Putting it all into a format widely distributed to business leaders and immediately utilized to take action.

Now is the time for marketing to move from advertising to conversations, for math majors to join line business teams, and for IT to leave hardware and software administration to the cloud and lead strategic data deployment.

Ransom Stafford

President & CEO

LUMIDATA

Consumer goods companies will rightfully rely on new uses of game-changing analytics to compete in existing and emerging market structures.

In order for analytics to play its greatest role, traditional barriers and paradigms that exist between IT and the business areas must be broken down. Both will need to work as a cohesive team to exploit forward-thinking solutions. Engaging all relevant stakeholders throughout the organization will unleash major improvements across the entire end-to-end customer value chain.

While IT focuses on the growing dimensions of big data, line-of-business users are exploring that data in smaller and smaller segments, viewing their stores and consumer personas at a micro level. It's what we call moving FORWARD — going faster, richer, wider and deeper with demand data insights. Retail teams are reconsidering which products fit which store profiles, developing much more detailed regional and local profiles, looking to isolate just where those products will sell well. They experiment, they learn and they look at the data again and again to see if what they're attempting is working.

The enhanced IT-business partnership teams should make innovation the foundation of their data acquisition, application and analytics strategy. After all, innovation is what consumer goods organizations are best at — offering new products that meet the ever-changing demands of consumers. Experiment, collaborate and explore ideas from both inside and outside the organization. If the questions of "where and how do we need to innovate as a business priority?" are never asked, then your business will continue to lag behind those companies that do ask.

Filiz Yavuz

SVP of Business Process Engineering

PERRY ELLIS INTERNATIONAL

After having spent a whole day with my cousins and their families in a family reunion, I noticed that the three- to 14-year-old group came loaded with several mobile devices and multitasked while sometimes socializing with the rest of us that held tightly to a single mobile phone. As we fast approach 2020, the trend is to consume more data more quickly and more of it is coming our way. The next generation will not do research in the traditional sense and will operate in a more reactive mode based on intelligent signals that come to them.

Big data analysis and analytics at your fingertips will be the trend of the future business world for businesses to react to consumer and innovation trends. The idea is to cater to the "cluster of one", the individual, as IBM called it at NRF 2014. Those businesses that can build operational and analytical excellence that will cover their end-to-end supply chains and consume intelligent signals via mobile channels will be the winners.

The buzz around machine learning, data mining, predictive analytics and optimization techniques will continue to grow while the expectation from the business world will be to bring the outputs of these very complex concepts to a very simple platform where decisions can be made easily and data can be shared easily. It is time to start building the foundation for big data that will ultimately end up in our specific industries and allow room for making it look real simple in the end.

Innovation Trends

More so than in any other section, the following predictions take into account the increasing pace of change and the impact it will have on the way consumer goods companies innovate. Functions expected to be most affected include consumer connections, the need for transparency and processes for innovation.

Ivan Arrington

Senior Manager, Category & Shopper Insights

BUTTERBALL, LLC

Read any marketing journal and you are confronted with three emerging trends: Omnichannel sales, the rise of Gen Y and mobile consumption. Each of these is critical and winners will be identified before 2020.

But, if we look a bit further out, there is a quietly developing public health threat, predicted to emerge by 2020, that could drastically impact food manufacturing. The CDC believes that one in three Americans may develop diabetes by 2050. UnitedHealth Group is sounding a louder alarm, warning that more than 50 percent of Americans could be pre-diabetic or diabetic by 2020.

With the passage of the Affordable Care Act, both the U.S. government and the insurance industry will be motivated to improve the standard American diet and stave off the high costs associated with rising rates of diabetes (estimated by United Healthcare to be $3.4 trillion dollars over the next decade at current rates). Already, there is discussion of a "fat tax" and further regulation of refined food ingredients).

I believe that marketers will be asked to reformulate or reinvent top products and I think it will be difficult. A large U.S. food manufacturer just revealed that it took six years to remove trans fats from a best-selling snack product. We are fortunate at Butterball to have a naturally better-for-you product, but we still work every day to strike a balance between consumers' desires and their health.

Providing better choices is a good start. Preparing for regulation will ensure that brands and manufacturers remain viable.

Jim Carroll

Futurist, Trends & Innovation Expert

Going forward, the biggest trend impacting the consumer goods and retail sector is that the pace of innovation has clearly shifted to the speed dictated by Silicon Valley — which means that the innovation will now occur at the speed of Moore's law. (Remember, Moore's law explains that roughly, the processing power of a computer chip doubles every 18 months while its cost cuts in half. It provides for the pretty extreme exponential growth curve we see with a lot of consumer and computer technology today.)

The checkout process? It's now being driven at hyper-speed through the introduction of iPad-enabled checkout devices, which accelerates change. The introduction of ever more intelligent, connected packaging technologies shifts control of innovation from traditional packaging companies to tech companies, the makers of bits and chips and RFID and tags. In store interaction, with consumers more engaged with their iPhone than with a salesperson, now evolve at staggering speed as in-store promotion technologies no longer involve cool cardboard box end-cap displays, but hi-tech LED televisions wired to Facebook Like buttons. And of course, there's the Amazon helicopter drone delivery system. Science fiction? Maybe so — but if you think so, then I suggest you watch a few old episodes of The Jetson's cartoon show. Watch carefully, and you'll see that George was actually having FaceTime chats, read his news off the Internet, and has Internet-sensor, connected clothing. What was once science fiction now becomes reality faster than ever before.

This means that in the future, the consumer goods industry is going to have to learn to innovate at the speed of companies such Apple, Google, Twitter and Facebook, as opposed to a more leisurely pace of innovation found in the past. Clearly, Moore's law rules! Hence, my catchphrase — the future belongs to those who are fast!

Stephen F. DeAngelis

Founder, President & CEO

ENTERRA SOLUTIONS, LLC

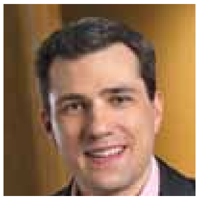
Ironically, the initiative with the greatest potential for impacting CPG companies by 2020 is taking place right now. Advanced personalization services are revolutionizing how CPGs develop and market new products, optimize inventories and supply chains, and predict and satisfy emerging consumer needs.

The intersection of big data and cognitive computing, just now becoming a reality, will present CPG companies unprecedented abilities to create rich consumer preferences down to very precise units, such as households, closets and cupboards. These identities will travel with the consumer across the shopping experience, impacting buying decision everywhere along the path to purchase, either digital, or brick and mortar.

The volume and exactness of data contained in these personalized preferences, along with the increasing ability of computing systems to reason and think like human beings, will give rise to increasingly sophisticated recommendation engines that will intelligently anticipate unmet, unrealized and unimagined consumer needs and tastes. And they will take into account broad and precise preferences for taste, scents, textures and cuisines as well as consumer conditions such as cooking aptitude, dietary restrictions, allergies, time constraints and sales and savings available nearby or online.

Achieving this requires a deep semantic understanding of consumers and their environments to uncover subtle relationships and valuable inconsistencies. Creating rich taste preferences presents unique challenges that demand sensory-based understandings of the consumer. Manufacturers and retailers will turn to technologies such as sensory identification to accurately model taste, scents and texture preferences.

In this new world order, consumers will be the ultimate winners, benefitting from highly personalized products and finely targeted recommendations that improve the shopping experience, consumer decision making, and ultimately, the products that define their lives.



Andrew Foust

Business Director, Convenient Meals

MCCORMICK & COMPANY, INC.

As an industry, we talk about people being connected like never before. Today's consumers are adopting new trends and tastes in many cases instantaneously, ultimately gaining control over how, when and where brands grow. E-mail, smartphones, web sites, social media, e-commerce and the like have broken down traditional geographic boundaries so that what's trending isn't just regional anymore — it is real time and it is worldwide.

To be successful, brands have to be fast and nimble with innovations and marketing solutions to meet growing demands. Even regional brands must look through a global lens — and adjust to the new reality that consumers play an increasingly significant role in deciding what could become the next big thing. This change in perspective has serious implications for planning and on how CPG companies are internally setup to respond to these ever-emerging trends.

The "Clever Compact Cooking" insight from the McCormick Flavor Forecast 2014® illustrates this idea. With 3.3 billion people — more than half the world's population — living in cities, there is a growing movement toward creating more efficient cooking within limited spaces. It is inspiring inventive urban dwellers across the globe to discover creative, cross-functional ways to prepare flavorful meals. Just look at what some of the latest small appliances can do — chop, mix and cook an entire meal in the space it takes to store a food processor. It's our job at McCormick, as a global flavor leader, to provide the tools — creative recipes, innovative multi-functional ingredients, new uses for kitchen appliances and more — to help consumers adapt to this trend.

Mike Friedman

Partner

KALYPSO

The approaches for delivering innovation have increased exponentially and will continue to rapidly expand. Take digital marketing, for example. Digital is all around us — so much so that it is easy to dive into new tools and lose track of the ultimate goal: delivering successful innovation. The key to competing and winning in 2020, then, is about maintaining the fundamentals for innovation success while leveraging new capabilities like digital.

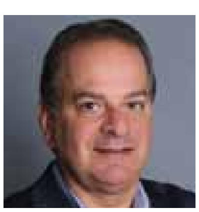
The good news is that the fundamental success formula for winning innovation has not changed. It's about (1) developing great ideas that deliver their promised experience and value, (2) building the brand, (3) communicating with the consumer and shopper, and (4) executing with precision.

Fundamental innovation good practices that deliver this success formula are ever more critical for companies to apply to their innovation programs. A first key practice is to conduct strategic experiments. Test new approaches for delivering the basics by leveraging digital capabilities. Take smart risks.

Secondly, measure, analyze and act. Understand what is working, what is not and why. Then, build this knowledge into the phase gate and portfolio processes to do more of what works and less of what doesn't.

Lastly, create a learning organization. Broadly reapply the knowledge gained across the organization. Constantly experiment and learn.

Companies that stay the course on the fundamentals for innovation success while leveraging new capabilities like digital will continue to win; those that get too caught up in hotly pursuing the latest capabilities and forgetting the basics will be disappointed.



Georges Haddad

President

BUZZ SOLUTIONS

The iPhone introduction in 2007 was a game changer. Since then, millennials have truly defined the notion of being connected. They gave essence to social media by belonging to communities; changed the media landscape by going digital for all their information needs; transformed the entire retail world by shopping and buying online. This is just beginning since the millennials' buying power will increase drastically by 2020. So what's next? Virtual stores. This generation is already expecting to get WHAT they want, WHEN they want it.

Imagine the newest brands available 24/7 at a press of a button in your own virtual store on your mobile device wearing Google glasses. Imagine shopping for shoes and trying them on as you see fit and clicking on the "pay it now" icon.

Technology is being adopted and is evolving fast to be the enabler. Once the next generation of 3D printing gets to the masses by interfacing with mobile phones — this will be the beginning of an open and direct dialogue with the consumer. New product development and its introduction cycle will be considerably shortened and CG manufacturers will be able to make important decisions faster.

CG companies must focus on enabling technologies to create virtual stores. This will enable the best CG companies to compete and grow by focusing on a consumer-centric hub.

Cheryl Perkins

Founder

INNOVATIONEDGE

Open innovation strategies will continue to move and shift in 2014 to better position companies for unique and profitable partnerships. We've been seeing the level of open innovation (OI) progress well beyond the traditional supplier engagements to multi-partner cooperatives. That ever-evolving complexity will continue to have an impact:

- OI capabilities will become even more sophisticated
- OI cultures are being cultivated with support from top leadership
- Basic three-to-five page agreements will become massive documents

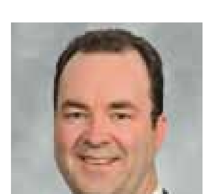
Additionally, some of the most forward-thinking companies are refocusing the emphasis of OI from its traditional process-oriented flow and onto creating value where it matters most: in the hearts and minds of those who innovate.

For instance, my friend Paul France, who leads open innovation over at MeadWestvaco, says that it's a company's people, not tools or processes, that ultimately implements a winning strategy. Paul says knowing "where to play" and "how to win" is a key strategy for growth in 2014.

Tara Korkowski is another voice that leads H.B. Fuller's external innovation strategy. She has spent this past year cultivating an open innovation culture by building an expansive network and earning buy-in from all levels of the organization.

In the intellectual property arena we find the Licensing Manager for Kimberly-Clark, John Onderko, maximizing the value of intellectual assets by out-licensing technology to third parties. These licensing practices will continue to evolve from traditional revenue models to more collaborative examples of joint-development and equity partnerships.

I believe we will see fewer companies looking at open innovation as a separate process coordinated by R&D managers. 2014 will be the year that marketing, supply chain, sales and other players lead open innovation activities at many organizations.



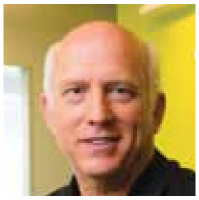
Bryan Seyfarth, Ph.D.

Director, Consumer Goods

SOPHEON CORPORATION

To achieve their 2020 growth goals, consumer goods firms need to begin now to examine their innovation investment processes, in particular portfolio prioritization decision making. Given the centrality of these decisions to the future growth of a company — after all, the initiatives where companies focus their resources today can have multimillion dollar implications for the future, and sometimes in as few as 18 months — it is surprising how lightly many companies treat this core business process. In fact, our experience is that the majority of consumer firms don't proactively manage this process at all, or they rely on a sprawling but out-of-date spreadsheet managed in a lonely corner of the organization. The result is often a lack of clear prioritization. High-value resources are stretched beyond capacity, and high-value projects miss deadlines because team members have their time sliced in too many pieces.

To avoid this negative cycle, companies need to make the business process of portfolio planning itself a priority. This means making portfolio decisions a regular agenda item in senior management meetings, and demanding quality data to support those decisions. Increasingly, companies are also leveraging technology advances that enable a "top-down" approach to resource planning making it much easier for functional managers to define and manage this complex data in a way that is relevant to enterprise portfolio management. Prioritization then becomes a cross-functional process in which resource investment decisions are made deliberately. The result: hard decisions are made to eliminate low-value investments, and high-value innovations have the resources they need to ensure success.



Dr. Larry Weiss

Founder & Chief Scientist

THE CLEANWELL COMPANY

Many of the products that we love are literally killing us. More than 140 million Americans suffer from chronic illness and that number is steadily growing. It is impossible to look at this epidemic of preventable chronic illness without coming to the conclusion that we are doing something very wrong and it is making us sick. Many of the trends in chronic illnesses directly correlate with trends in food, consumer products and technology. Walk down the center aisles of most grocery stores and you can predict future chronic illnesses, including obesity, diabetes, heart disease and cancer. Elsewhere in the store there are entire product categories that, used as directed, unknowingly expose consumers and their families to increased risk of asthma, dermatitis, eczema and allergies. And these are just the correlations that we know about.

How did this happen? We live in a consumer-driven economy where companies are rewarded solely for financial success while the health of the consumer is treated as an economic externality. With a few rare exceptions, consumer products are economically decoupled from any adverse health outcomes that may be associated with long-term use or exposure. This myopic focus on shareholder returns has created an economic ecosystem consisting of highly profitable companies, widespread chronic illness, and crushing healthcare costs.

It is imperative that we make every effort to redefine the economic architecture of consumer products so that public health becomes a product design parameter. There have been several recent and notable success stories in which networks of consumers enabled by social media have demanded greater transparency and safer products from some of the largest CPG companies. Fueled by growing consumer ingredient awareness, driven by concerns about chronic illness, and emboldened by success, energized networks of consumers and NGOs now represent a powerful and effective constituency in the marketplace. Companies that embrace this new economic architecture with responsible product innovation will likely be rewarded with consumer approbation, loyalty and business. Those that continue to treat the health of their customers as "somebody else's problem" risk sanction and failure.

The future is here, let's wake up and deal with it.

Sales & Marketing Trends

This is notably the largest section of our report and for good reason; experts blur the lines between today's top initiatives and focus on data as a key enabler to consumer connections through social media and mobile technology.

Zel Bianco

President, CEO & Co-Founder

INTERACTIVE EDGE

Consumer goods (CG) companies, particularly category management and shopper insights teams, deal with overwhelming amounts of data every day, ranging from the internally generated to retailer provided. With the CG industry becoming increasingly competitive, the ability to turn data into actionable insights is now a basic requirement to stay in the game. The question is no longer "How can we collect data?" but "How can we most effectively analyze and report on this data?"

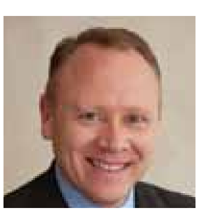
Self-service business intelligence (BI) is the best way to address this question as well as meet the goals of category management.

However, it is not enough for a company to merely adopt a BI platform. According to industry experts, although many companies have self-service BI in place, two-thirds of them express that they're struggling with it. Instead, it's crucial to implement an effective BI platform. CG companies need to deliver the right tools to the right users; providing the same tool to users with different abilities will seriously compromise the effectiveness of self-service BI. Differentiate between the casual users and the power users, and then provide them with the appropriate tools. Typically casual users want an interactive tool to view the data, while power users look for authoring and analysis capabilities to tackle it. Different need sets required different tool sets — it is critical to understand the differences.

An effective self-service BI platform today should address many areas including:

- Productivity by decreasing turnaround time
- Scalability by minimizing the need for training
- Flexibility by providing users a tool they're comfortable using
- Predictability by performing real-time "what-if" analyses

The resources required to implement an effective self-service BI platform are considerable but well worth it and necessary if you expect your company to prosper in the future.

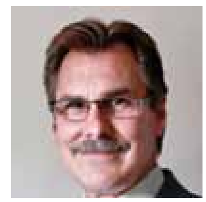


Todd Boerema

VP, Customer Marketing

NEWELL RUBBERMAID

As we look long-term, we believe consumer and shopper insights will be a key differentiator for consumer goods companies to create closer retail partner relationships, while offering consumers new choices to help them get more out of life. At Newell Rubbermaid, we are making significant new investments in consumer insights so we can develop new innovations, as well as work with our retail partners to better leverage our portfolio of brands in smarter merchandising programs. That means using insights to connect with shoppers in store at the right time with the right message. We've seen early success marrying key times of the year where consumers rely on our brands with a powerful in-store activation to drive incremental sales. For our Rubbermaid brand, one example is "Game Time" — the time in January through March, when consumers are preparing and storing food as they watch football or college basketball. Making our food containers available through in-store display placements in the right place at the right time enables shoppers to pick up something useful that they may not have been planning to purchase. Consumer and shopper insights enable us to customize programming with our retail partners, grow brand awareness and loyalty, while driving volume and increasing the size of a shopper's basket.



Peter Brandt

Director, Consumer Products & Retail

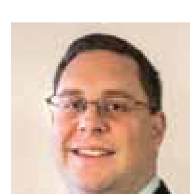
PERFICIENT

The industry has witnessed a revolutionary change in the way technology has penetrated everyday life. The impact of consumers going digital in a massive way makes marketing investments that better engage the connected consumer a top priority for consumer products companies that want to compete now and for years to come. The ways in which consumers interact with brands has evolved to include conversations on social networks to personalized marketing campaigns and promotions based on individual shopper profiles. Developing a successful strategy is a journey that will evolve over time and require agility and innovation.

Leading retail brands, like Amazon and Burberry, have set the bar high in developing consistent multi-channel strategies and personalized customer experiences. The "Amazon effect" is rapidly becoming the new industry standard as brands explore new ways to connect consumers to products using advanced data and predictive analytics. Burberry has mastered the convergence of in-store and online shopping experiences using digital "clienteling" tactics and in-store technology.

What should consumer products companies be doing now to emulate them?

The first step is to put systems and processes in place to support the customer experience. Connecting the dots with customer data from purchase history, loyalty programs and social helps extend the conversation with the consumer. Integrating core enterprise applications with consumer-facing applications that are intuitive, consumable and accessible over the Web, tablet and mobile device, and on social networks fuels the marketing engine needed to meet the changing demands of the empowered consumer.



Kevin Burr

VP, Product Strategy

STIBO SYSTEMS

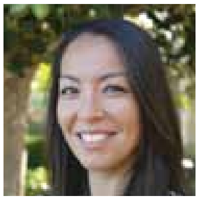
Regardless if it is 2020 or 2014, the biggest initiative for any CPG company must be to foster and nurture customer loyalty. However, in order to nurture this allegiance and establish lasting brand value, manufacturers must create a positive and consistent experience if they hope to grow profits.

While quality products and services remain very important, consumers expect exceptional customer experiences every time they interact with a brand. Accurate product, partner and customer information must be gathered and reviewed to understand an individual customer's buying decision and use of a particular product. The challenge for brand management is less about how to find and collect data and more about knowing how to put it to work.

After all, loyalty management is about measuring how loyal your customers are, how to continuously make your customers come back, how to make them recommend your business to others, and how to avoid your customers favoring your competitors (churn).

Yet, each system and process depends on accurate information on customers, products, partners and channels in order to form enduring customer loyalty and prevent issues that may drive customers to your competition.

As a result, CPG manufacturers are turning to master data management (MDM) in order to create a rich and satisfying customer experience and encourage repeat purchases. By gaining greater control over product information, customer information and other master data such ingredient information, companies can optimize the customer experience, increase customer loyalty and boost marketing efficiency — which we all know are critical to increasing revenue and brand equity.



Julia Chen Davidson

Global Consumer Products Lead

IBM INSTITUTE FOR BUSINESS VALUE

$4.2 Billion: The value of social engagement in 2017. What is it worth to you?

Social media interaction is currently the top Internet activity, with Americans spending an average of 37 minutes per day on social sites. By 2017, the global number of social network users is projected to reach 2.3 billion.

Consumer goods firms must invest in developing their social media competency now. For the 2020 marketer, granularity, context and intimacy will be the keys to making insight-based business decisions.

In an IBM study of consumer products CMOs, social media ranked first in the list of technology areas in which they plan to invest in the next three to five years. However, nearly 70 percent said they were underprepared when it comes to analysis and execution. Investing in the right tools, processes, and metrics to capture and evaluate the unstructured data produced by social platforms will lead to invaluable benefits in the future.

Social media analytics will enable companies to:

- **Develop the next level of consumer insight:** Derive deeper consumer sentiment to identify unmet needs and unlock motivations, preferences and advocacy.
- **Make the best decisions in real time:** Build models to predict behavior and recommend the next best action.
- **Stay ahead of the innovation game:** Infiltrate insight and feedback at the local, micro-segment level to deploy faster, cheaper and more successful launches.

In 2020, the real value of social media will not be just in consumer engagement, but in insights.

Dean DeBiase

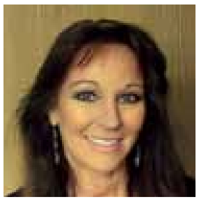
Executive Chairman

ÄKTA

Since the 1960s, technology has reinvented itself every 10 years or so, as we've gone from the mainframe and the Mini, to the PC, Internet desktop and, most recently, mobile computing. With cycles becoming more compressed and having more of an impact on consumer adoption and engagement, never before has technology had such an effect on human behavior and posed both incredible opportunities and threats to leading consumer brands. And just as consumer brand teams get good at adopting the latest technology trends, like mobile, the next one, like wearable environment-aware devices, come barreling down the hill.

These shiny new objects are attractive challenges (or distractions) to consumer goods professionals, who are thinking about the "Internet of Things" and how to leverage the capabilities of next-gen wearables, drivables and flyables. It's important to become more digitally savvy, but before you get too far ahead of your skies, hoping consumers will interact with your products through a Google Glass app, it may be smarter to step back and invest in creating remarkable mobile experiences (MX). With numerous choices, where well-designed MX can impact your brand, my top picks are **Enterprise**, **Product** and **Engagement**.

Though mobilizing the **Enterprise** through MX may not drive industry headlines, it's pivotal to become more agile, innovative and competitive — and essential to attracting a more talented workforce. You can enhance **Product** appeal, functionality and related content by embedding mobile into and around what you offer; brands that design MX into their product strategy will extend offer capabilities and expand market reach. And for brands that don't move away from broadcast-centric mindsets, driving customer **Engagement** will continue to be an uphill battle, unless they are MX's designed by and for the people.



Janet Dorenkott

Co-Founder & COO

RELATIONAL SOLUTIONS INC.

Know your customers! Today, customers are telling you where they are, what they are interested in, and how they feel, throughout the day. POS data tells you what they ultimately purchase. So how can you capture and leverage that information? One word… Infrastructure!

Unfortunately, POS is typically in reporting tools designed for specific retail teams. Occasionally IT integrates POS into a data warehouse. But integration alone doesn't make the data reliable or usable by end users.

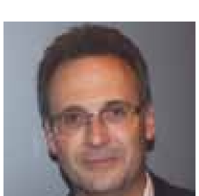
A proper infrastructure does more than just integrate data. It requires business rules to be applied. Data validation and cleansing should automate issues related to inconsistent UPCs, missing, duplicate or invalid data, bad EDI files, etc. The data model should support multiple-hierarchies, align retailer and internal products and calendars, apply business rules and unique measures. In this way, it harmonizes and aligns information across the enterprise.

With a solid infrastructure, companies can leverage not only POS and syndicated data, but ALL data. If you want to understand how sentiment is affecting sales, you need to apply rules to sentiment, and compare sales with sentiment across geography.

Using geo-location information lets you push targeted marketing out to potential customers.

If you want to understand what clicks are leading to your Amazon sales or compare online sales with brick and mortar stores, you need an infrastructure that supports that.

Manually coding this integration is not a manageable infrastructure. In the past, CG companies needed an infrastructure to ACHIEVE a competitive advantage. Today, it's required to MAINTAIN a competitive advantage.



Tom Farrah

SVP & CIO

DR PEPPER SNAPPLE GROUP

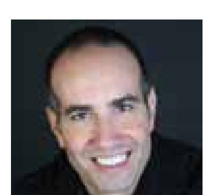
The CPG industry is facing some of the strongest headwinds in its history. Today's consumers and shoppers are more knowledgeable than ever. Their pace of life is fast and they have immediate access to limitless amounts of information through their mobile devices. Shoppers will use the information they are armed with to find the best deals, the latest brand variant and the quickest path to an available product. The days of fierce brand loyalty are giving way to the need for immediate gratification, and shoppers will forego their favorite brands to gain time back in their fast-paced days.

CPG companies invest huge amounts of time and money on product promotions, feature ads, price reductions and in-store activities to entice shoppers to purchase their products. But all of this is for naught if the activities are not executed flawlessly in store and if the products aren't available. CPG companies must focus on flawless retail execution, in order for themselves and their retail partners to be successful. Execution requires:

- Account teams to communicate fully the what, when, where and how of every retail activity
- Every channel and/or retailer in which the activity takes place is prepped and stocked with product
- All routes to market which deliver their products to retail are also prepped and have prioritized the activities they need to execute at store level

CPG companies must use the right mix of technology, information, communication and alignment to ensure they execute the right activities in store. Their products must be priced competitively, appealingly merchandised and available for the shopper to purchase. This is one of the oldest and most common problems faced by CPG companies, and still today the most complex and difficult to solve.

Investments in the cloud, big data, mobility and other hot technologies, are just that, investments in technologies. They will not solve complex business problems like this on their own. A well-developed and integrated solution can leverage those technologies as underpinnings, but must be laser focused on solving this problem. Flawless retail execution is a foundation today and will be the foundation of great companies who've mastered its execution in 2020.



Michael Ferrara

EVP, Sales & Branding

FUSION BRANDS

The people have spoken! The jury is no longer out on how marketers can effectively utilize social media. Unless you provide consumers with content that engages, informs or helps solve their problems, they are not listening to you. And they're certainly not communicating back their likes and needs or sharing your content. So, I'm amazed at how many company and brand social media channels continue to be primarily filled with hard sell-branded tactics rather than a content-driven marketing conversation that can facilitate meaningful brand relationships with consumers (or customers).

Good content marketing begins with the belief that delivering helpful, relevant information drives profitable consumer action. The idea of sharing content increasingly drives marketers to make proprietary intellectual assets available to influential audiences. Savvy content marketers create fresh information to share via all available media channels, online and offline. Those having the most success take an approach that involves a high ratio of valuable content that arrives without any visible sales agenda.

While most brands now view social media as more of an opportunity than a threat, the rapid evolution of consumer behavior has resulted in new avenues for brands of all types to tell their stories. It involves transitioning from a push to a pull strategy, from "me first" to "we first" thinking. Rather than talking about brands, we should be listening to our social community and also recognizing that our story is our community's story. By consistently delivering content that is vital and relevant to one's target audience, your brand will begin to play a more important role in their lives.

Michael Forhez

Director, Consumer & Retail Practice

CSC, AMERICAS CONSULTING

Omnichannel, other than big data, will probably be one of the other big discussions — and game changers — in 2014, not just because it holds the promise of making it possible to actually communicate with consumers in a way marketers have always dreamed but for its capacity to do so across all modalities, enabling commerce at the speed of thought.

Even as Amazon revs us up with the promise of deliveries with drones, retailers and manufacturers are partnering to make the promise of bricks-and-clicks a reality with the digital wallet. This means paying with your iPhone (or any smartphone) as you walk the store, as you look at products, as products and promotions are suggested to you in real time. Yes, you'll be tracked, and yes, everything you do will be recorded, parsed, analyzed and used, but we've grown accustomed to this (security and privacy concerns aside) and have begun to depend on, and even demand, the conveniences that go with real-time transacting.

The key, and the payoff, will come with the integration of all the disparate off and online systems and processes, both back room and front office. This is where loyalty and customer experience management (CEM) will combine with category and trade promotion management, and where supply chain intelligence is augmented with the kind of data that will make longstanding issues like out-of-stocks fade into a distant past. It's the promise of efficient consumer response (ECR) manifest.

Omnichannel — levering mobile devices — will increase speed to market, reduce the costs associated with creating and distributing new products, increase shopper engagement and transform the "brand" into something that goes well beyond the product for its own sake, tapping into our "I want it now" impulses. Omnichannel — a brave new world!

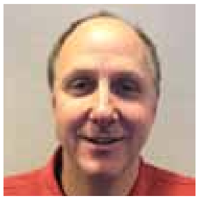
Dale Hagemeyer

Research VP

GARTNER, INC.

By 2020, CG companies will be engaging directly with consumers with individualized promotions in the retail store that marry up a desired promotional outcome with that shopper's personal and family profile. But this isn't an initiative for 2020. Instead, it is a set of competencies that will have to be mastered in the meantime. For example, loyalty programs have to be cleansed and expanded to provide more background on the shopper including past purchase and profile data. Also, data sharing and meaningful collaboration between manufacturers have to be stepped up. Finally, the ability to predict promotional outcomes has to be mastered. This is why trade promotion optimization (TPO) is so very relevant today as a first step.

But ultimately this new capability that we call context aware offers will revitalize retail selling and has the potential to shut out entrants like Amazon because it can reach the individual shopper right where the decision is being made, in real time, and with offers that are interesting to that person. This stands in stark contrast to the relatively untargeted promotions that exist today and are largely "noise" at the individual shopper level.



Rick Hall

SVP, Trade Promotion Analytics

NIELSEN

The most powerful weapon a CPG marketer has in today's ultra-competitive marketplace is price promotions. We've seen investments in price promotions double in the last 10 years, now representing the second largest spend behind the cost of goods sold. Yet, despite the increased reliance of trade promotions to attract cost-conscious consumers, there isn't the same analytical rigor placed on measuring trade ROI as there is with advertising. A closer look shows that nearly 40 percent of promotions prove to be ineffective. For CPG companies to reach their desired growth, this practice must change.

The mentality of just tweaking what we did last year won't work. CPG companies have an opportunity to optimize their revenue management programs and drive efficiency throughout the process. By introducing a disciplined and holistic process — supported with the right technology — manufacturers can ensure alignment of trade strategies throughout the process, leading to improved forecasting and ultimately greater trade efficiency.

It starts by measuring the performance of your recent trade promotions to understand the true sales drivers and then using these insights to inform your annual trade promotion strategy. Companies that employ the proper integrated technology can then align their strategy with their local weekly event plans (commonly called trade promotion optimization) and coordinate shipment planning and fund management and monitor retail execution (trade promotion management). Connecting these functions and providing proper visibility into the entire trade promotion process will maximize the impact of your promotions and help drive the growth of your brands.

Jon Harding

Global CIO

CONAIR/CUISINART

As we enter 2014, the rising tide of digitization of everything will continue to impact the CG industry — along with most other industries. The opportunities are now clearly there for greater engagement with our product consumers via technology-driven initiatives. More valid consumer insights than ever can be obtained by analyzing the millions of posts online about a company's products and services.

Capturing a consumer's social media identifiers when they interact with your company through call centers or online gives much greater opportunity to connect with them and customize product offers via social media. Conversely, it is now vital to be able to quickly filter out negative posts about your company and its products and respond appropriately through the consumer's choice of communication channel. So, the implementation of some kind of social media analytics and engagement technology is a critical success factor for CG companies in 2014 and beyond.

As well as enabling faster reaction and effective response to online commentary about products, the analysis of social media data will provide a new platform for increased collaboration between the CG company and the retailer as they talk about consumer demand for the manufacturer's products. The ability for the CG company to demonstrate that they have social media "under control" is another differentiation versus the competition.

2014 is definitely the year to start the journey to effective social media analytics if your company has not already embarked on this journey. An effective collaboration between marketing and IT is an essential first step on this journey.

Scott Hendrick

SVP, Chief Transformation Officer & CIO

THE SCOTTS MIRACLE-GRO COMPANY

Over the past 15+ years, many companies were successful increasing the efficiencies of back-office functions, like supply chain operations and corporate finance. The resulting savings left many executives with decisions to make: funding growth, increasing bottom-line profits, or providing shareholder-friendly investments.

However, to be competitive over the next decade, there will be a continued shift in focusing on the front office (e.g. sales, marketing) within companies, as well as on the consumer. A key winning ingredient is mobile technology; companies that have the foresight to effectively leverage mobile technologies for employees, retailers/distributors, and consumers are going to be in the best position to capitalize on an engaged workforce that is successful in driving consumer value and company profits.

Regarding the consumer, the question is no longer "how can companies convince consumers that their products are the most desirable?" Rather, the question is "what will the best companies do to seize the opportunity to empower consumers in their purchasing effort, with a smart business model that monetizes the consumer behavior?" Mobile technology is paramount in this effort.

Mobile technology will also be essential to maintaining an engaged and effective workforce. In the next decade, people of all ages will expect to leverage mobile devices in an efficient manner to help them perform almost every facet of their job. For example, with efficient Software-as-a-Service CRM solutions, cheaper devices, and/or IT departments that are developing app writing competencies, sales forces will be more easily equipped to provide a more efficient and higher quality service for their customers.

Alan J. Langhals

Principal Consumer & Industrial Products Industry

DELOITTE CONSULTING LLP

Looking forward to 2020, one has to believe that the "disruptive innovations" of today within CPG — the "Internet of Things", artificial intelligence, robotics, 3D printing, augmented reality, big data analytics, synthetic biology, crowdsourcing/funding — will be standards of the marketplace. The information influence generated by these and other digital innovations will create an exponential shift in the way companies compete, react to market demands, and interact with customers and consumers.

Recent research conducted by Deloitte Consulting in collaboration with the Grocery Manufacturers Association has revealed that leading CPG organizations are already experimenting, and in a few cases leveraging, these innovations to capitalize on a rapidly evolving set of consumer preferences.

An example on a more practical scale for today's CPG organizations, big data, advanced analytics and mobile technology have created the opportunity for CPG manufacturers to connect and transact with consumers on a personalized, 1:1 basis. By leveraging digital signatures from mobile applications, smart sensors and intelligent links to geo-spatial information, CPG companies are able to present the consumer with dynamic pricing and personalized promotions at the moment of purchase decisions.

To achieve this, CPG companies must be far more granular in their marketing and sales processes. Today's market leaders are putting in place the foundational analytics and planning capabilities to (a) capture immediate value from micro-targeting consumers in the traditional pricing/promotion model, while (b) experimenting with more 1:1 pricing/promotion models. This will serve to upend traditional mass marketing and trade promotions while transforming the manufacturer-retailer-consumer relationship of the future.

Chris Lemmond

Senior Director, Marketing & Commercial Operations

1WORLDSYNC

The one thing certain for 2020 is change. And one thing to bet the house on is the ascendance, evolution and influence of digital consumers. Companies that have the savvy and the key capabilities to deliver to these consumers will win.

Think of digital consumers in three ways. The first, and simplest, is to think about their use of devices, which are constantly changing, sometimes unpredictably. Smartphones, tablets, laptops, watches, (glasses, drones?)… the list goes on. Who's to predict which devices will dominate in 2020?

The second, more important way to think about digital consumers is to understand the contexts in which they will interface with brands and brand information. Where will consumers be and in what situations as they discover, research, share, form an opinion on, recommend, and purchase products? Could the automobile be the most important informational "hub" location for consumers in 2020 because it's so central to so many contexts? (Will there be an Apple iCar?)

It's really about the information. To think about digital consumers is to think about the information that they will demand and expect, in every context. They will expect information to be current, accurate and rich, including images, videos, claims, specifications, ingredients, reviews, social-cohort recommendations, purchase sites/locations, and certainly more to come.

The companies best positioned to deliver to and win with digital consumers are the ones that understand the vital importance of information and its context. They're building strong capabilities around governance and delivery of their product data. That's one thing to control as they face a mostly unpredictable future.

Valeria Maltoni

VP, Digital Strategy

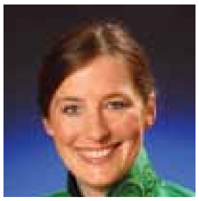
PM DIGITAL

The mandate for CPGs: make the experience better, keep putting out great products and let service inform a more responsive organization. CPGs are grappling with the ramifications of three main themes:

1. **Technology adoption:** With mass use of mobile devices, technology is starting to go from novelty to necessity in people's lives. Beyond getting the product right, smart companies are making an investment in understanding their customers and adding a compelling service layer to the experiences they provide by measuring what matters.
2. **The moving line between physical/virtual, individual/social, and private/public:** Digital/social behaviors leave a data trail. Where relevance might delight shoppers, excessive targeting remains a turnoff. If technology is more about understanding what's going on that matters, the human need to feel safe and cared for underscores the importance of focusing on making digital outreach appropriate.
3. **Attention-deficit:** The more choices, the greater overwhelm; signal comes from relevant, imaginative, caring, and bold gestures. Value flows to those who create guideposts to help customers understand their needs, find the right options, and buy by mapping the experience to the job to be done.

As most companies are using a similar marketing toolkit, standing out is the product of a thoughtful approach. Understanding the motivations, context-driven intent, and tasks people want to get done, and deliver content and interactions that map to them, remains an area of opportunity.

Organizations need to design coherent digital presences based on business outcomes-based commercial models to drive traffic, awareness and growth to their brands.



Colleen McClellan

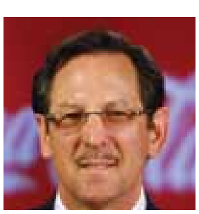
Digital Marketing & Insight Manager

MCCORMICK & COMPANY, INC.

The consumer-centric marketing model begins with personalization, but to develop long-lasting consumer relationships, brands need to establish an always-on approach that enables them to learn from their consumers while simultaneously increasing the brands' relevance and fostering repeat engagement.

With today's cluttered marketplace, CG companies must develop their own tools and campaigns that fluidly adjust to consumer needs, demands and preferences. Platforms that offer incremental value and are meaningful and responsive will earn the consumers' loyalty and trust in ways yet to be seen, delivering intuitive repeat engagement.

Take FlavorPrint, for example, a personal advisor for food that combines personalized content with custom engagement. FlavorPrint first develops a picture of a family's palate by responding to their flavor preferences, pantry items and cooking style. The consumer benefit is contextually relevant recipe and product recommendations that evolve as the consumer continues to engage. Ultimately, it — like other successful digital platforms — offers that added layer of personalized interaction that consumers crave.



Tom Miller

CIO

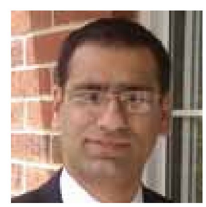
COCA-COLA REFRESHMENTS

One initiative that will catapult companies into the competitive landscape of 2020 is one-to-one marketing. It is a big data project, fueled by social digital marketing that reaches consumers on their mobile persona and delivered via cloud technologies.

Success in 2020 will be based on meaningful connections and personalized experiences. Consumer goods companies must begin the journey toward customer intimacy now. Sophisticated market segmentation is today's table stakes, but by 2020 1:1 marketing will be the norm. Knowing what each person wants, needs, doesn't want, might want but may or not need, loves, hates, cares about, should care about, etc. is the secret to connecting with consumers in a way that builds valued relationships.

To prepare, companies need to wade into the swamp of social digital marketing and big data analytics, getting their feet wet with the muddy experiences that will guide their efforts in the years to come. As companies discover the intricacies of business to consumer social engagement they will develop a deeper understanding of the fine lines that enrich versus deter brand affinity. They will learn how to navigate the channels that exist between their brands and the consumers without alienating other important players in the value chain.

By 2020, technology will be connecting consumers to anything and everything they want. It will also protect them from annoyances. Companies that want to be valued by consumers in 2020 will start to slowly build those relationships now and enrich them over time.



Rajiv Puri

VP Retail, CPG, Manufacturing Industry Group – U.S.

MINDTREE LTD.

A.D. 2020: Meet the hyper-connected consumer aided by social communities and technologies such as smart aisles and intelligent shopping carts which are guiding her in the store. Cut to home, she doesn't worry about what she and her family needs daily — the digital cart blinking on the fridge sends orders to replenish her daily needs. The mundane tasks we care about in 2013 will be completely taken over by the "Internet of Things". The most real and compelling opportunity is now to anticipate, emotionally connect and entice her with the right offer at the right time, influencing and decoding what she may need next based on what not only she, but her entire network is saying and doing.

Cut to 2014: Given the brand persona of 2020 will have a greater say from consumers than ever before, one of the most critical endeavors will be to define a Unified Digital Platform aided by integrated insights. The platform should aid CPG organizations in effectively engaging with consumers in their digital life at every point where they rendezvous with the brand — be it a retail store, a sports event, at home or the screen of a pair of smart glasses. Engaging with the consumers will have to be bi-directional where in consumer insights and inputs generated as they interact with the brand, will be rapidly captured, analyzed and percolated through the CPG organization to drive activities ranging from product innovation to brand positioning.

Based on our experience from similar initiatives with key CPG clients, we believe that to be truly effective, this platform will need the backing of a digital operations model that can adapt to the on-going changes. The ensuing seamless and insightful digital organization will deliver both competitive advantage and efficiency.

Steve Rosenstock

Associate Partner, Consumer Products

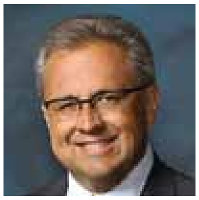
CLARKSTON CONSULTING

Historically, consumers have relied upon traditional brick and mortar retail outlets for the majority of their purchases. However, with the Internet firmly established as a key player in the shopping cycle — either as a destination for purchase or a vehicle for research and advocacy — the ability for consumer products companies to manage the evolution of various channels of distribution will become an increasingly critical part of their strategic agenda.

While it is reasonable to expect that certain consumers shop in certain channels (e.g., budget conscious consumers within the dollar channel), often individual consumers consider multiple channels for purchases. To manage, manufacturers will need to better understand who is shopping in each channel and cater distribution of their products to meet those consumers' needs.

Retailers will continue to invest in the growing strength of their brands by expanding their offerings into tangential categories that meet the needs of their shoppers. Walgreens, as an example, is building on its brand association with health and wellness and has a stated mission to lead the "blurring of retail channels" by selling fresh fruit in its stores and providing immunizations and pharmacist consultations. This represents an opportunity for manufacturers to expand distribution of their products into "non-traditional" outlets, while also providing guidance to their retail partners expanding into new categories.

Considering this proliferation of channels, manufacturers should assess how and with which retailers they are making investments, particularly around items such as trade spend, packaging and human capital, to ensure that they are positioned for success.



Johan Sauer

Practice Leader, Consumer Goods Consulting

COGNIZANT

Consumer goods companies must transform how they engage consumers along a changing path-to-purchase. They must redefine the capabilities required to engage them in a consistent, authentic and relevant fashion, at a specific point in time. Today's functional silos, fragmented data and limited analytics' capabilities simply will not cut it. To affect this transformation, we suggest three critical actions:

Understand your shopper's paths-to-purchase. Consider this scenario. A shopper uses search tools to find the best product ratings (perhaps a niche product with no ad budget), comparison shops retailers' online ads for the best price and has the product delivered to her doorstep for free. This scenario obsoletes the traditional CPG broadcast ads, circulars/rotos, display and temporary price reductions, the backbone of traditional CPG go-to-market stalwarts of "blast it, stack it and watch it fly."

Establish an enterprise capability to provide digital and social insights. Digital and social capabilities are typically fragmented across agencies and brand teams. Leading companies are building enterprise analytics-driven capabilities to discern what is important and relevant. This is more than "social listening"; it's filtering out the noise to hear the true consumer voice… on innovation, product quality, brand language and demand signals.

Enable cross-functional processes and collaboration capabilities to quickly transform insight to action. New, integrated marketing and sales processes are required to respond to — and monetize — analytics' insights. We can segment "markets of one", but if messages, images and content are not aligned, the segmentation delivers limited value. It's time for an integrated, collaborative "digital front office" versus point solutions and interfaces.

The CPG industry is at an inflection point. Will you adapt… or will you perish?

Don Scheibenreif

VP Industries Research – Consumer Experience

GARTNER, INC.

In Gartner's 2013 Predicts report for the CG industry, I wrote that technology is making it possible for CG manufacturers to construct and leverage their own proprietary databases of opt-in consumers for the purposes of true lifetime 1:1 marketing. In fact, we expect by 2016, a CG manufacturer will be able to leverage comprehensive individual profiles for its top one million consumers. As we look to 2020, we only see this trend intensifying as CG companies look to own more of the direct relationship with the end consumer, versus relying on retailers or other third parties. Recent inquiries from CG companies indicate growing interest in constructing their own comprehensive databases on their consumers for the purposes of true lifetime marketing on a 1:1 basis. This is a logical response to the changes taking place as a result of the nexus of forces — the convergence of social, mobile, information and cloud computing. As more consumers live more of their lives online, the opportunity to harness that information from multiple touchpoints, on an opt-in basis, will provide CG manufacturers their own source of insight and competitive advantage to inform product development, marketing communications and customer service, to name a few.

We recommend IT professionals work jointly with marketing to develop a road map on how to collect, harmonize and leverage a single source "360-degree view" of consumer data and how that fits into the company's overall measurement and analytics framework. Selecting the right vendors who can match your scale and ambition is also crucial.

Fred Schroeder

President & CEO

ADESSO SOLUTIONS

Technological advances by Tier 1 companies are placing small to mid-sized businesses (SMB) at an increasing disadvantage. Many SMBs struggle with basic trade promotion management so forget big data, supply chain and trade promotion optimization. But as much as technology changes some things, dealing with retailers remains the same. Retailers are still going to demand, deduct and even divert to maximize profits via manufacturer trade spending. The problem with SMBs is they are in it all alone. Limited resources, sometimes limited skill sets and limited vision keep many in their own world giving too much money away. If they have a TPM solution, many leverage only a small portion of it. And that's just managing the money, not making it work as hard as it can.

Step one is to focus on TPE, trade promotion effectiveness. It goes beyond TPM to an in depth analysis of both syndicated and internal data combined with best practices at key retailers to develop trade spending plans that maximize ROI.

Step two is to form or join a community of other SMB CPGs and leverage consistent complexity. The fact is that while trade spending is very complex, it is consistently complex regardless of the brand or category. By leveraging the experience and insight of other SMBs in dealing with different retailers and their own unique go-to-market strategies, the community can have benchmarks and potentially shared resources to maximize their collective trade promotion effectiveness at each of the key retailers.

Sue Sentell

CEO

GLADSON

While it's hard to predict the most innovative sales and marketing strategies for 2020, one fact remains clear: Shoppers' expectations will continue to influence the requirements retailers pass down to their suppliers.

And by 2020, there will be no shopper expectation more widespread than the demand for complete, accurate and consistent product information available 24/7 to support a product purchase — whether it is made in the store or on their phone or tablet at home.

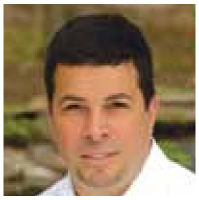
The ability of CG manufacturers to help retailers satisfy shoppers' online product information needs is important today and will be critical by 2020, based on the growth of CPG online commerce. According to a recent Deloitte study, consumers will increase their online purchases of food, household and personal care products by 67 percent in the next year and by 158 percent in three years.

In 2020, the success of sales teams will depend on their ability to satisfy retailers' requests for product content quickly and accurately to ensure brand visibility and customer satisfaction as well as speed to market for new product rollouts, which is increasingly vital.

For brand marketers, success will be determined by empowering sales teams to meet retailers' requirements while also engaging consumers through marketing platforms with compelling and consistent product content.

CG organizations need to take steps today to establish scalable, efficient and flexible processes for product information management. This includes putting the right resources in place for creating images and capturing product data, updating and maintaining product content, and distributing content to your retailers. From digital marketing to category management to custom product details for each retailer's e-commerce site, requests for product information will intensify in quantity and complexity.

Now is the time to ensure that your organization can respond quickly, accurately and efficiently to compete and grow in 2020.



George Telegadis

Managing Partner

AH GOO BABY, LLC

As a boutique baby gear brand, approximately 55 percent of Ah Goo Baby's web site visitors (primarily females aged 24-44) are on some form of mobile device — either phone or tablet. Of the 55 percent mobile users, about 60 percent are phone users and 40 percent are tablet users; over 70 percent are Apple users, 20 percent are Android users and the other 5 percent are on other devices. Our top three browsers used are Safari, Chrome and Firefox in that order.

Mobile is the trending growth platform. As a result, the previous one-website-for-all approach has now morphed into a site that must intuitively recognize and adapt at real time to screen size, display resolution, device, operating system and browser used by each unique user accessing your site.

Small businesses with limited web budgets should consider a Joomla-based site, as it is open-sourced (no software license costs) and highly supported in the development community. If your site sells products, for e-commerce consider Virtuemart, which is an open-sourced e-commerce component developed for Joomla sites. JTouch for Joomla and Virtuemart will automatically "sniff" your customer's display size, resolution and operating system in real time, to adjust the way your customers will see the main template based on the device of each user. On the desktop side there are literally thousands of low-cost templates that easily and inexpensively provide a very professional look and feel to your site for desktop users, while allowing enough customization to provide a very unique look to your site.

All of these main software pieces are free to use (with the exception of templates), but you do need to put in the work to get everything up and running. If you don't have an IT staff person and your time is better served focusing on other things, there are plenty of third-party web development firms specializing in Joomla and Virtuemart that can manage that site creation for you. The makers of JTouch (Griddy Designs) also have a web development arm. Developers will come at a cost regardless of the type of site you build, but with the Joomla / Virtuemart / JTouch site structure, you will have a very powerful site without any of the software license fees.

Scott Trevena
Chief Technology Officer

WIPRO PROMAX ANALYTICS SOLUTIONS

Understanding the consumer's response to a promotional activity is at the very foundation of trade spend management. Shopping is a repetitive requirement for us all. Keeping the pantry stocked and food on the table calls at the fundamentals of our survival instincts.

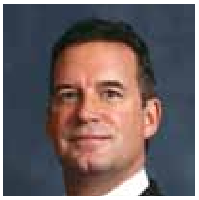
In 2014, CG companies must pursue the next phase of trade promotion management, which is modeling and trade promotion optimization (TPO). Understanding the replenishment and consumption cycle and the circumstances that shape the pattern of every phase is the quest of every grocery marketer. At its core is the science of statistics. This sound and proven mathematical approach gives the planner an objective and analytical understanding of the past and a methodology with which to predict likely future consumer behavior.

Using an advanced modeling/TPO solution together with highly experienced Modeling specialists, CPG companies can build a comprehensive model of the outcomes they're trying to achieve. A fully integrated TPM/TPO solution takes into account all available information resources that inform the planning process and lets planners dynamically adjust underlying causal drivers to assess the impact these changes will have on their plans.

In less time than it takes to assemble a typical trade promotions plan, your team could model a range of possible outcomes, fine tuning its approach or examining entirely different strategies.

In the background, it can also monitor important parameters (such as compliance with business rules and potential clashes) to engineer the optimal plan for the business.

To stay ahead of the game and ensure you not only retain but, more importantly, grow market share by 2020, it's imperative your business plans ahead and implements a TPO/advanced modeling strategy today.



Jon Van Duyne
Senior Executive Advisor

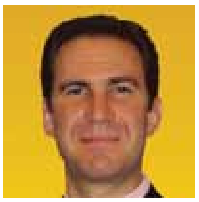
BOOZ & COMPANY

The last few years have seen the evolution of a number of technological and macro-economic changes that will have a major impact on shaping food retailing and trade promotion operations by 2020. Since the Great Recession, it's generally acknowledged that consumer price sensitivity is here to stay. That shift, combined with the maturing of online grocery options, the aging population and retail outlet over-capacity will continue to put pressure on everyday prices. As a result, it's certain that food retailers will continue to look to manufacturer-funded promotions to offset these pressures.

This continued demand for trade funding combined with technological changes will have a major impact on trade promotion management operations inside consumer products companies by requiring them to address a number of key disruptive shifts including:

- Increasing amounts of data
- An expanding number of promotional opportunities driven by digitization
- Faster post-event analysis response to both retailers and sales operations
- Emphasis on more granular measurement of event and overall trade ROI
- Managing and monitoring trade operations across all components of a consumer's digital path to purchase

In order to be well positioned for 2020, consumer products companies should acknowledge that these trends could have a serious impact on their ability to maintain, let alone increase, the ROI of trade investments. Companies that will be leaders in 2020 have already assessed the impact of these changes on their trade operations and subsequently developed strategic roadmaps that focus investments on capabilities that address these trends for the mutual benefit of their customers and themselves.



David Warschawski

CEO

WARSCHAWSKI

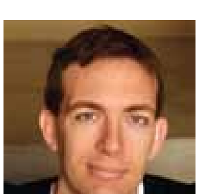
The most important element for creating marketing success this year and in the future is not the tactic or tool you choose to employ. What will ensure you create the greatest and most consistent marketing success is getting clarity and unanimity of what you are really selling and to whom. Let me explain.

I'm not talking about what product or service you're selling. I'm talking about doing the research to help you determine what makes your organization highly unique and relevant for your target audience. What is the winning positioning and emotional connection you can make that will truly differentiate you from your competitors and make you stand out? Until you get clarity on this, all your marketing communications efforts will be less than optimal.

Getting clarity on who your target audiences are by order of priority goes hand in hand with this. As specifically as possible, define your most preferred, your secondary and tertiary customers by demographic and psychographic information.

Once you have clearly identified your preferred customers in order of priority and outlined the unique emotional benefit you consistently want to provide them — you are in the driver's seat. Now, and only now, will all of the marketing decisions that you make and the tools and tactics that you use be optimized for the highest level of success.

By focusing on getting clarity and buy-in from senior leadership on these elements, I guarantee that your marketing will be more successful and create better ROI than ever before and that you will be exceedingly well positioned for future success.



Dmitri Williams, Ph.D.

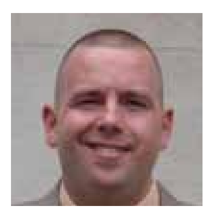
Associate Professor

UNIVERSITY OF SOUTHERN CALIFORNIA

You are focused on your relationship with your customers. What you're not focused on are their relationships with each other. In an increasingly networked world, consumers not only impact each other more than ever, but your ability to understand and leverage that process grows as well. Having a "social strategy" can no longer be about maintaining a Twitter account and counting Facebook likes. No, the social strategy of 2020 includes understanding the customer-to-customer (C2C) relationship, collecting the right data on it and influencing the right people.

The science shows that this C2C factor drives between 10 percent and 40 percent of all consumer spending, so it must be taken seriously. What should you be doing now? Start collecting the data you need today so that you're in a position to make it actionable tomorrow. If you don't know what a Facebook AuthToken is, you're behind. If you think that the person who Tweets a lot is your most valuable customer, you're shooting in the dark. Social data in 2020 is about bottom-line actions, not just talking.

Spotting this "social value" allows you to acquire the best customers, retain the ones worth more than you realize, and learn what approaches will generate extra dollars as you influence the influencers. The savvy CRM of 2020 includes an understanding of how promotions do and do not impact C2C. It will include a data-driven approach to piggybacking on the right friendships and relationships in a virtuous circle where customers become closer while embracing your products.



Adam Winzens

Replenishment Manager

HASBRO

The implementation of big data initiatives will be a driving force in 2014 through the CPG community. It is becoming a critical success factor that all vendors utilize every resource to drive efficiency and bottom line growth. Each CPG company is competing for consumers, while maneuvering through a landscape of increased costs and reduced space. Also, the shift in the marketplace from appealing to the masses has turned to a more individualized marketing experience. In an effort to adapt to these retail landscape changes, it is the responsibility of the vendor to understand this consumer, and react accordingly to maximize sales efforts. The way to do this is through big data. From a retail execution standpoint, big data is an aggregation of many forms of data such as POS, enterprise data, social media metrics, mobile device metrics and various forms of unstructured data. The culmination of this data is the future of truly understanding the consumer and where your consumption thrives or falters. Not just understanding POS, but understanding who, where, when and WHY the POS is happening or lacking. The answer to these questions will ultimately allow vendors to be agile and efficient in the forecasting and planning process, while improving the quality of decisions being made. In 2014, introducing these advanced metrics and identifying which data sets will have the greatest impact on their respective businesses will become a major priority. The big data initiative, along with the proper internal talent, will allow for bottom line growth and supply efficiencies in areas such as product offering, on-shelf timing, store selection and consumer attributing.

Craig Witt

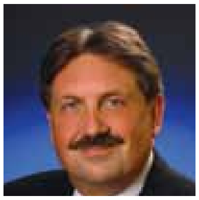
SVP of Sales & Marketing

SPRING MOBILE SOLUTIONS

Consumers want what they want, and they want it now. It's a fact today, driven by the speed of social media. And the need for instant gratification will become even more evident in the future, when consumers, no doubt, will select their favorite brands based on the ability of companies to deliver products tailored to their specific desires at a moment's notice.

To keep consumers engaged with their brands during the next decade, CPG companies will have to adopt a creation-on-demand model, which allows them to anticipate and quickly adapt to their customer's needs and offer customization at unprecedented levels. While true creation-on-demand may not be possible for a number of years, the CPG sector should consider technology they can leverage now and into the future to drive greater information gathering, more targeted marketing and specialized sales.

A good technological foundation is comprised of mobile technology, big data analysis tools and process improvement apps. But this technology in the hands of your sales team is not enough. All players in your supply chain — from the local store owner to the regional distributor to manufacturing management — must utilize these tools and the resulting information to predict the products and combinations of features that consumers want and determine how to deliver them with maximum speed and efficiency.



Jerry Wolfe

CIO

MCCORMICK & COMPANY, INC.

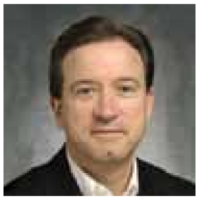
For the CPG industry — and the brands and retailers that define it — the connected consumer is either a driving force of growth or a disruptive, strategic threat. By 2020, a new landscape will lay in clear view, its foundation formed through initiatives already underway today. Perhaps nothing will have a greater impact on who adapts successfully than the idea of brand as service — which is the concept of making the brand more digitally accessible and relevant at all connected consumer touch points.

The creation of useful brand content available to the ecosystem of partners in service to the consumer is vital for the brand to truly become a service. Imagine the brand as a digital API (application programming interface) in a way that consumers can experience utility and have needs met in an increasingly personal manner. For example, at McCormick & Co. we view mealtime as a five-stage process — inspire, plan, shop, prepare and celebrate. Brands can serve as a valuable digital assistant at each step along the inspiration to action cycle, wherever, whenever and however the consumer desires.

Today, we only can scratch the surface of possibilities. Brand as service capabilities begun in 2014 will mature into an essential means to effectively participate in the global CPG ecosystem of 2020. Untargeted advertising will recede into history while brands and retailers collaborate in new ways to unlock one-on-one opportunities to connect with the consumer through digital services. Through this collaboration we will be able to meet ever-evolving consumer needs, leading to sustained engagement and long-term, profitable growth.

Supply Chain Trends

Experts get tactical in this section, although the strategic themes of business and data integration to enable growth are nods to a multi-disciplinary approach.



Jake Barr

CEO

BLUEWORLD SUPPLY CHAIN CONSULTING

Companies must pursue integration of people, process and product execution more tightly than ever before. The traditional solve equation won't work in this environment. Business simply continues to get more complex with more variables at play. Energy cost variability, complex infrastructure integration, growing shortages in skilled labor, increasing thresholds for capital investment and pressure for greater differentiation in product portfolios are just a few of these.

Out-of-the-box techniques are required to operate efficiently at maximum use of available capacity and generate benchmark free cash flow to invest back into the operation, while delivering breakthrough service on a complex product portfolio.

A near real time "single view" of operating reality and predictive identification of potential failures to minimize or avoid their impact will emerge as a foundational requirement. The best firms will leverage this to shape market activities out of what would have been failures. End-to-end supply chain optimization will extend beyond the four walls of a single business unlocking greater savings, "raining money" on the companies involved and the end consumer.

Companies must avoid taking traditional approaches to linking/integrating their business. Solutions are emerging that can help address this without investing scarce capital in infrastructure to secure the needed technology and delivering time to value in a few months versus years. The new business reality is that a supply chain will forever more have interchangeable partners/components with the need to integrate on short timing. The cloud will be the problem solver space moving forward.

Doug Bethea

Director, Consumer Goods Solutions

DATALLIANCE

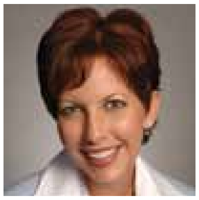
In order to further reduce supply chain costs in 2020, CG companies need to work now toward being even more efficient in the way they respond to consumer demand.

Clearly, CG companies need to keep increasing collaboration with retailers in ways that enable them to synchronize product flow from factory to shelf as closely as possible with actual demand. Key enablers will be a broader use of POS data and other data sharing techniques.

CG companies must also do everything they can within their own operations to further reduce the cost of downstream product flow. One important way they can do that is to take greater advantage of the opportunities available to them when the retailer gives them the role of replenishing the DC or store. In particular, the opportunities to reduce both order processing costs and transportation costs.

When a supplier is managing replenishment — as they do in a Vendor Managed Inventory (VMI) relationship — the cost of traditional ordering is eliminated. Even more importantly, the supplier has a combination of visibility and control that enables them to more fully optimize shipments. Leveraging technology to enable things like advanced truck building, pre-shipment availability checking, and multi-store shipments can significantly reduce cost. Expanding those programs to a greater percentage of sales can further increase savings.

CG companies that go the "extra mile" to focus on ways to leverage their replenishment programs to reduce their "cost to serve" will have a cost advantage over the coming years. Those that don't will not fare as well.



Karin Bursa

VP

LOGILITY

In *CGT*'s October 2013 report "S&OP: Worth the Effort", more than half of participating consumer goods companies said their sales and operations planning (S&OP) process relies on a foundation of spreadsheets. Add to this, research from the University of Hawaii, which found 20 percent to 40 percent of all spreadsheets contain errors.

Building your S&OP process on spreadsheets is building on shaky ground.

The S&OP process strives to bring all elements of the supply chain together in alignment with corporate goals. The process is designed to remove guesswork and encourage fact-based decisions as you evaluate multiple business scenarios. For many companies, a robust S&OP process has been critical to their success in today's highly competitive market.

However, it is not possible to build a successful S&OP process when the foundation is riddled with errors. Spreadsheets are a familiar tool, but pushing this tool too hard can lead to executive S&OP meetings based on inaccurate, out-of-date information. Even a fraction of a percent error in one cell can cause too much or too little inventory down the road, costing millions of dollars in trapped working capital or lost sales.

One of the most critical moves for companies to make now is to break free of a spreadsheet-driven S&OP process and adopt supply chain solutions that easily handle the complexity of planning thousands or millions of SKU locations and enable you to anticipate and adapt to changing market conditions. Relying on spreadsheets will sabotage your ability to compete today, much less in 2020.

Robert Byrne

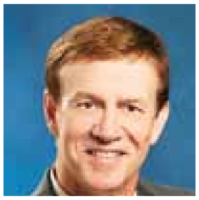
Co-Founder & CEO

TERRA TECHNOLOGY

Demand planning is failing. Rapid innovation, reliance on promotions and a growing online channel continuously distort consumer behavior, making traditional planning systems and processes obsolete. The last major demand planning innovation was in 1960: with Holt-Winters (triple) exponential smoothing. Meanwhile, technology is transforming virtually everything else around us. For example, the paper road atlas that travelers relied on 10 years ago has been completely replaced by GPS units, which have been replaced by phone navigation apps with real-time traffic, bringing a step-change in performance, efficiency and safety. This kind of evolution has been lacking in demand planning until recently with the advent of demand sensing.

Dealing with volatility requires understanding customer and consumer behavior as it changes and always being prepared, especially in uncertain markets. Leaders have turned to demand sensing technology to make business decisions based on what will actually happen, instead of what they hope might happen. This technology automatically processes reams of current customer data (including POS data) to identify patterns and extract meaningful information. The result is a paradigm shift, much like the introduction of automated trading systems to financial markets. Within a few years, the competitive advantage of automated trading transformed the securities business — by 2009, roughly 60 percent of all U.S. stocks were traded this away. While less than 5 percent of global shipments are currently planned with systems that sense demand, it is growing quickly.

With the prospect of continued volatility and competitive markets where growth increasingly depends on stealing share, the smart use of data to better understand customers is on track to become a competitive necessity well before 2020.



Charlie Chase

Chief Industry Consultant

SAS MANUFACTURING & SUPPLY CHAIN GLOBAL PRACTICE

One of the best ways for a consumer goods manufacturer to create an efficient supply chain is by using a multi-tiered causal analysis (MTCA), a process that applies in-depth analysis to measure the effects of the marketing mix on consumer demand at the retail level.

MTCA integrates sell-through data and syndicated scanner data into the demand forecast to determine the effects of consumer demand on supply. A causal model is applied to sense, shape, and predict POS data using factors such as retail price, sales promotions, media gross rating points (GRPs), and in-store merchandising vehicles like displays and temporary price reductions (TPRs).

A second causal model is developed to forecast supply replenishment using historical POS data and the POS forecast as the main explanatory factor, taking the time lag between POS and supply into account along with other factors, such as wholesale price, forward buying and trade promotions.

The two primary objectives of MTCA are to support and evaluate business strategies based on the effectiveness of marketing actions. By tying the performance of a brand, product, or retail SKU to internal replenishment shipments, the outcome of making a change to the marketing mix can be simulated and evaluated to determine the full impact on supply. The key benefit of MTCA is that it captures the entire supply chain by focusing on marketing strategies to shape demand and link them to supply.

Brian Girouard

VP, Consumer Products, Retail & Distribution Sector

CAPGEMINI

The recent holiday shopping season reminded us that delivering product to the consumer's door or to the store at the agreed upon time, often for free, is not only essential but increasingly difficult. In a recent report, Capgemini Consulting and Kane is Able, identified key supply chain trends impacting the consumer products industry. One trend highlighted was "All-Channel Fulfillment".

All-Channel Fulfillment allows for simultaneously receiving and processing orders from multiple channels and fulfilling them from the source that provides high consumer satisfaction and low cost to the shipper. Inventory is visible and optimized across the entire supply chain (vendors, DCs and retail stores) to reduce stock outs, while also providing the lowest possible fulfillment cost per order. Systems all perform in concert, from inventory and planning to order management and supply chain execution.

Consumer goods companies can improve All-Channel Fulfillment with the following actions:

Ship retail e-commerce orders direct from the manufacturer's warehouse. Manufacturers ship products to the retailer's warehouse only to have the retailer's e-commerce orders ship directly to the consumer. We recommend eliminating the extra time, freight and handling by having the manufacturer ship products directly to the consumer on behalf of the retailer.

Collaborate to zone skip. For e-commerce orders shipping long distances, parcel companies benefit from charging long-distance rates for each shipment, even though the orders move in bulk to local stations for final delivery. We suggest that shippers band together to zone skip and avoid high parcel rates.

All-Channel Fulfillment supports a better customer experience and gives the consumer the ability to shop anywhere and receive their product at their desired time… consistently.

Danny Halim

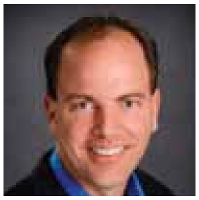
VP, Industry Strategies

JDA SOFTWARE GROUP

In 2020, consumers are expected to design their own products. They may create or customize the flavors, ingredients, materials and sizes of their desired products. They can get their ideas either from friends or other consumers on social channels. They may place their orders from smartphones, smartwatches or smartglasses. They are specific about how fast they want the goods to be delivered. The traditional supply chain roles and functions will have to be refined and redesigned as a result. Consumer goods production will be designed for flexibility instead of by batch. Inventory needs to be fluid, stored in any form, anywhere, shipped timely to meet customers' expectations.

Consumer goods companies must be willing to continue supply chain innovation and organizational change in order to be ready for the new consumerism. Despite talks about big data, many companies still lack consistency in how they make use of structured data, such as POS data. These data are often used to develop shopper insights and assortment/merchandising plans, but not connected to the company's supply chain planning and policies. If companies can use one set of numbers to drive marketing, merchandising, advanced planning, visibility, analytics and, most importantly, fast and accurate execution — in other words, connecting all these functions, significant, strategic benefits can be gained.

Newer technology platforms beyond the traditional ERP are actually available to enable most, if not all, of these functions today. The question is, however, whether companies are organizationally ready to take advantage of the new and innovative technology.



Kevin Klock

CEO

TALKINGRAIN

Investing and focusing on supply chain infrastructure and demand planning will be key to compete in 2020. A few years back at TalkingRain, we made the pivotal decision to become a leading branded sparkling water company and, therefore, we needed the backbone and stability to support that goal. In our case, we might not have reacted quickly enough nor had been prepared for the demand, making our need for a stable supply chain process an urgent one.

We quickly identified and cultivated key relationships with vendors who could support our business and help to strengthen our distribution methods. We sought out partners and co-packers to install new sparkling lines, helping us to deliver product faster and within market. We contracted five additional factories over the course of two years to help support the increase and demand in production. We invested in technological enhancements to our infrastructure, helping us to streamline our order placement, inventory management, and all supply chain processes to remain competitive. Our operational resiliency also needed to improve so we brought on new talent across the board that was driven and agile enough to help take us to the next level.

All in all, though it was a hectic and demanding time in our history, taking the time to slow down and put the right processes in place was the best decision we ever made.

Stephanie Miles

SVP, Commercial Services

AMBER ROAD

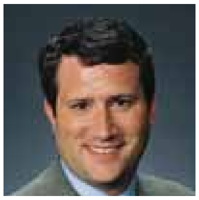
As the Roman philosopher Seneca said, "luck is what happens when preparation meets opportunity."

To compete and grow in 2020, CPG companies should view IT as an enabler for global revenue growth rather than a cost center. Today and in the future, the most profitable companies have and will have leveraged their IT investments to reach new markets faster and more efficiently than their competitors.

As economic policies remove market barriers, CPG companies must be ready to launch into emerging markets. The demand for high quality CPG products will grow with consumer awareness and a growing global customer base. Food and product safety, brand recognition and sustainability interest will drive a dramatic increase in CPG exports (and their subsequently related imports) in the years ahead. The leading companies will employ strategic sourcing and distribution strategies based on trade programs. Automating manual processes of cross border transactions today will prime supply chains for rapid expansion into new markets.

The velocity of global trade changes will increase between now and 2020. Adopting technologies that keep pace with daily changes to duty and taxes, license requirements, individual country regulations, documentation and trade agreements will allow companies to rapidly comply and adapt. Automating these same processes while creating a control tower of global visibility will enable companies to scale efficiently, reach new revenue, and protect margins.

As global markets grow, so will the risk for supply chain disruptions. Having a resilient supply chain requires an embedded IT interconnection with external parties to orchestrate an efficient response. The reliability and quality of information will continue to be a cornerstone of agile global supply chains with IT being a key piece of the solution.



Mark Osborn

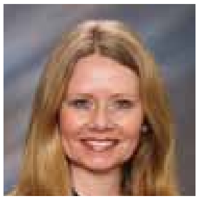
Global Lead, Consumer Products Industry Marketing

SAP

At SAP, we're seeing more consumer product companies employing integrated business planning. A highly collaborative, cross-functional planning process, integrated business planning is designed to help companies reconcile varying dimensions of consumer demand in order to optimize demand and supply plans across targeted business functions and extended business networks. This enterprise-driven approach, which brings together critical elements from business processes such as marketing, sales, finance and supply chain, gives companies a way to manage the complexities of our dynamic global economy.

Because of our 24/7 social lifestyles, today's consumers are more aware of global socioeconomic, environmental and political issues, which all have an impact on consumer values and buying decisions. Effective integrated business planning takes these external factors into account, and brings together real-time market and demand data to accelerate planning cycles and enable a faster and more profitable response to dynamic demand. It also allows companies to begin modeling potential demand scenarios in order to predict possible outcomes and results.

Integrated business planning helps manage complexity by encouraging simplicity. One common data platform that delivers consistent enterprise information across business functions creates one singular view of demand. Thus, making corresponding supply execution less complex. Companies with an effective integrated business planning process in place will find that they can more easily mitigate demand and supply risk, accelerate cross-functional planning cycles and build supply chain resiliency. In short, they can simplify the processes that drive more efficient business.



Diane Palmquist

VP, Manufacturing Industry Solutions

GT NEXUS

Consumer goods companies must begin connecting with trading partners beyond just using portals and one-to-one communication. They should begin mapping out ways to deploy a "many-to-many" network approach in their supply chain to meet consumer demands and mitigate risks while preserving margins. By 2020 all companies will need to have in-place a multi-enterprise collaboration solution for global trade that resides in the cloud and can be accessed by all parties across all tiers. Why is this a top priority?

- **Relationships with Suppliers are More Important Than Ever:** Achieving operational excellence means collaborating and partnering with suppliers in new and innovative ways. Failure by a supplier anywhere in the chain can have a crippling impact on business. A delay in production of the smallest product component can mean millions of dollars in lost revenue.
- **ERP Solutions Aren't Enough:** The important data needed to execute in the supply chain resides in the supply chain — beyond the four walls of the business and beyond the realm of ERP. It's essential to harness and share this data with all trading partners. When the important data and latest updates are bogged down in an ERP, there's automatically a divide or delay between what trading partners see, and what the actual latest information is. Consumers today are too demanding to afford lost time and inefficiencies in supply chain execution.
- **By 2020, Consumers Will Demand More Responsible Production:** Supply chain visibility and transparency will be essential. There's been a massive shift in power towards consumers. They demand products that are not only reasonably priced, but they demand goods that are produced under safe, ethical conditions that pose no harm to humans or the environment. Tracking goods from origin to delivery is a top priority.

Andy Smith

President, Consumer & Industrial Logistics

GENCO

It's all digital, all the time for today's consumers. Information is within an arm's reach anytime, anywhere, and seamless interaction across e-commerce and store channels is the new normal.

To be relevant in 2020, consumer goods companies must reinvent their supply chains to better meet rising consumer expectations — or risk becoming irrelevant.

Accompanying the current increase in online shopping is a trend of smaller, more-frequent orders. Accordingly, companies are shifting from a model of stocking large volumes of inventory to a new model and motto — tighter, leaner, more accurate.

So, how can companies maintain a lean inventory while still providing flexible, on-time customer service?

It starts with a robust, Tier-1 warehouse management system (WMS). Although tighter inventories create vacant warehouse space, inaccurate data can lead to other problems. Poor visibility or forecasting can magnify issues in lean inventories — so a cumbersome or outdated WMS is more of a liability than ever.

Conversely, a best-in-breed WMS provides both the power to collect, analyze and quickly respond to data, by generating analytics in real time. With fewer bulk shipments, other efficiencies must be identified. The proper WMS creates those efficiencies, while reducing errors in mixed pallets, improving inventory accuracy and increasing on-time shipments.

When implemented and used well, the right WMS is more than technology; it's a valuable asset that can reinvent your supply chain to better focus on customers, keeping your company flexible and agile enough to stay profitable through 2020.

Patrick Smith

Managing Director

TOOLSGROUP NORTH AMERICA

Most consumer goods companies have multiple strategic, tactical and operational planning functions, but these are often disconnected hierarchical processes that can create disjointed plans. The next generation of supply chain planning will integrate these functional silos into cross-functional decision making that accelerates business performance.

We see companies moving toward near real-time, dynamic and adaptive planning, often called "predictive replenishment". The world is becoming more computer-controlled — supply chain planning will benefit from this megatrend. By integrating supply chain planning and execution, companies will accelerate the velocity of planning. They will move toward closed loop, adaptive planning processes.

A key here is to reduce latency via higher frequency decision-making and fresher data. Capturing downstream demand signals will help identify demand trends, provide advanced warning of problems, and remove the latency between the supply chain plan and reality. Companies will be able to respond more quickly and intelligently.

To accomplish this, we also see companies leveraging a lot more new data and increasing their visibility down to the SKU-location level. Enhanced granular visibility will significantly improve planning and forecast accuracy and enable an "outside-in" approach to demand management.

What will enable this trend? A big shift in planning technologies, especially in demand modeling, causal forecasting and machine learning.

What initiative should companies skip? Don't try it all at once.

Lisa Whinnie

EVP, Chief Customer Officer

AFS TECHNOLOGIES, INC.

Within the next six years, mastering the flow of data and reducing limitations in supply chain connectivity will be critical for long-term success. The need for all constituents to have access to accurate product information on a timely basis has increased as the drive for margin preservation accelerates in all segments of the supply chain. In spite of the ongoing efforts of the GS1 Standards Initiative, data sharing inefficiencies still exist and must be addressed now.

As technology solutions continue to mature and global markets become more sophisticated, CPG companies who master data sharing will have a significant competitive advantage.

Data synchronization will guarantee trading partners have accurate and reliable data at all times and it will ensure the right product arrives at the right place at the right time. Additionally, it will enable efficient business practices, drive down supply chain costs and most importantly, help the supply chain operate more efficiently.

Companies of all sizes must master the process of sharing standardized data in order to remain competitive. However, each segment of the supply chain, be it sales agents, retailers, distributors or operators have different systems and varying technical skills available to translate the GS1 data to their own system. Overcoming this anomaly would be a game changer.

CGT would like to thank all of our 2014 Review & Outlook Report contributing authors.

If you're interested in participating in the 2015 edition of this report, please contact *CGT* Editor Ali Ackerman at aackerman@edgellmail.com.

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