



## A N A L Y S T C O N N E C T I O N



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Program Vice President

### Using Data to Digitally Transform Consumer Products

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*In today's digitally connected enterprise, massive amounts of data are created on a continuous basis across the breadth of the end-to-end value chain. The consumer products (CP) industry has experienced a dramatic increase in connectivity across the entire value chain — with suppliers and customers — that shows no signs of slowing down, in fact, it is accelerating at a rapid pace. As the volume and variety of data created continue to increase, and companies look to extract insights, consumer products manufacturers must seek to identify the opportunity to leverage analytics to drive value for their business. Indeed, companies that are able to harness data and seamless analytics within the context of broader digital transformation efforts are more likely to win in the marketplace.*

The following questions were posed by SAP to Simon Ellis, program vice president for IDC Manufacturing Insights, on behalf of SAP's customers.

**Q. What are the key drivers of change in the consumer products industry?**

- A. The consumer products industry is under enormous pressure to change. Digitally savvy consumers are increasingly looking for not only personalized product (and service) experiences that matter to them as individuals but also seamless purchase experiences across their channels of choice. This requires CP companies to think differently about how they engage with their consumers at scale and how they can meet requirements for personalization and engagement in novel and unique ways.

Digital transformation, as well as the largely untapped digital technologies that have the potential to enable new capabilities, is a key part of both current and future engagements with consumers. While digital transformation can be about using digital technologies to enable new and persuasive business/engagement models, it is also about being more efficient and effective in delivering things such as speed and transparency for consumers. Digital transformation will both improve the ability to connect and personalize today and enable new engagement approaches tomorrow.

IDC forecasts that 90% of the industry growth over the next decade will accrue to companies that are successful in engaging directly with consumers. While this may mean direct-to-consumer selling, it is most likely to be about a "brand relationship." The successful engagement will be one that turns data and information from consumers into product and service offerings that meet or even exceed consumers' expectations. The 90% is a projection, of course, and the actual results may be higher or lower, but the point is that to succeed in the future, CP companies will need to engage with their consumers in a new way.

**Q. Traditional CP companies face disruption from unexpected, often digitally enabled competitors. How are they responding to these threats?**

A. Over the past five years, an increasing amount of the growth in the CP industry has come from small, nimble, and often new competitors in the marketplace. Most of these competitors have been digitally enabled, with many of the business models being built on digital competencies that would not have been possible in an "analog" world. For example, companies, such as Mink, that use 3D printing as the basis for their product assortment and fulfillment can meet the personalized needs of their consumers in ways that a more traditional fulfillment process could not.

Of course, we are not saying that merely being digitally enabled ensures business success; it does not. A poorly considered digitally enabled business model can fail as quickly as a business model that is not so enabled. The reality, though, is that digital transformation is clearly a key element in being prepared for success. Indeed, digital transformation is affecting the very foundations of how consumer products companies compete, changing the way that they solicit new product ideas, design products, manufacture and run the supply chain, and engage with customers and consumers.

Traditional CP companies appear to be responding in a few different ways. Many of them are beginning the journey of digital enablement by putting the basics into place, things such as advanced analytics or an Internet of Things (IoT) platform. Others are partnering with companies that have digital capabilities but are not competitors, and still others are simply acquiring smaller digital-native businesses. Unilever's acquisition of Dollar Shave Club is a good example of this.

**Q. What role do analytics play in broader digital transformation efforts?**

A. Analytics are not new, of course. CP companies have been using analytics for decades to leverage data-driven insights for their business. The change has come in the amount and variety of data that is available to the business as well as the speed with which the data must be analyzed and turned into insights to drive better business decisions. In fact, as digital transformation efforts proceed, it is conceivable that there will be no distinction between analytics and business process and that digitally enabled businesses will have the capacity to sense, analyze, optimize, and act based on massive volumes of internal and external data in real time and directly in the context of the business process.

An example could be demand planning. As IoT-sourced real-time data becomes the norm, an analytics-integrated demand management system could act as an automated alternative to traditional demand planning, with the opportunity to dramatically reduce forecasting errors and improve service performance. It's conceivable that a digitally enabled, analytics-integrated forecast could lead to automated adjustments to production plans and materials procurement.

I would also suggest that analytics capabilities specifically are increasingly an urgent opportunity. At IDC, we talk a lot about the "analytics gap" where a company's ability to analyze incoming data is rapidly falling behind the volume and velocity of that data. We believe that CP companies are now beyond the point where building one's own analytics facility is sufficient; it's increasingly necessary to look for analytics platforms that can enable the kinds of capabilities that we articulated previously. For example, we spoke with a company that recently had a product recall. While the company did the recall effectively, an audit of the process revealed that information about the problem had existed within the business well before the recall; it just hadn't been available to the right person, at the right time, to avoid the problem. Had real-time analytics been embedded into the product quality process, it is likely that a recall would never have been necessary,

**Q. Are you seeing best practices emerge from CP companies that are pursuing digital transformation?**

A. Yes, though more "emerging" than "emerged." There is a tendency for companies to retroactively define everything they've ever done as digital transformation, so some judgement is required. It's also important to recognize that not all things digital must be necessarily disruptive. We view digital transformation as a continuum ranging from things that are evolutionary (companies can do it now for efficiency or effectiveness) to things that are revolutionary (companies can do it in the future as a part of reimagining their supply chain).

Certainly, analytics are playing an important role in digital transformation, though they can also contribute enormous value to consumer products companies that either have not yet embarked on a digital journey or are in the earliest stages. The most persistent question we get in the context of digital transformation is whether analytics should be embedded within specific applications and tools or whether a separate and distinct platform is required. In part, it depends upon what is expected of the analytics, but it is also an IT architectural consideration more than a question of customer or consumer experience. What digital transformation can enable, however, is a shift to business process applications that are "consumer grade" and the capabilities that we have historically defined as analytics will increasingly become a seamless part of the business process experience, regardless of the chosen IT architecture.

Some consumer products companies are looking differently at innovation and the sourcing of ideas from social media and other external sources. The analytics that underpin these new data sources are critical to extracting insights and are seamlessly integrated with the innovation funnel process. In addition, some businesses are taking much more sophisticated approaches to fulfillment, bringing in weather and traffic data, and using seamlessly embedded analytics in their supply chain application suite to provide the data insights.

**Q. What kinds of emerging benefits are you seeing?**

A. We are already seeing less system disruption and better business agility through the use of digital commerce networks, advanced analytics, and better integration of demand and supply networks. Some consumer products manufacturers we have spoken with believe these capabilities can cut business recovery time by as much as 50%. We also think that digital enablement can mean more effective product innovation and the development of promising ideas through crowdsourcing, more comprehensive analysis of disparate data, and even the use of cognitive/artificial intelligence technologies to better assess the potential of ideas. IDC estimates that digital technology enables a 10% systemic reduction in innovation costs and a 30% reduction in new product lead times.

Perhaps most importantly though, digital transformation efforts that are integrated seamlessly with data from social media and emerging IoT applications are providing insights into the changing behavior of shoppers/consumers — both established demographics and an emerging generation of new consumers — something that was not possible previously.

**ABOUT THIS ANALYST**

*As a program vice president, Simon Ellis is responsible for providing research, analysis, and guidance on key business and IT issues for manufacturers. He currently leads the Supply Chain Strategies practices at IDC Manufacturing Insights, one of IDC's industry research companies that address the current market gap by providing fact based research and analysis on best practices and the use of information technology to assist clients in improving their capabilities in critical process areas.*

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