

Data activated

How consumer-products organizations can drive performance and create competitive advantage through data-driven insights

In boardrooms around the world, data has taken on a reverential, or even mystical, quality. With it comes the power to shape the future and, to some extent, rewrite the past. With more of it – and thanks to technological advances, the amount of data organizations can store and analyze at any given time is virtually limitless – the opportunity to create competitive advantage and drive outcomes grows.

But in this landscape, the real power lies not in the breadth and depth of raw data, but what it reveals about the organization, its operations, and its customers. Put another way, data is only as good as the activity it inspires. Further, the business will benefit most from those actions taken quickly; true transformation depends on the ability to scale. Thus, we see that it is not the mere presence of data or the generation of insights that drives performance and creates competitive advantage, but the activation of a comprehensive and cohesive data strategy.

> In part one of our series, *Impact* < Insights < Data, we examined the value of insights-based decisioning and how consumer-products organizations can leverage data analytics to more accurately anticipate market shifts, better understand business dynamics, predict customer behaviors, and manage risk. In this paper, we examine precisely how organizations can design and implement a holistic data strategy to enable the generation, implementation, and activation of such insights. We will review both the technical and cultural aspects of this shift, as well as the steps consumer-products organizations can take to unlock the value of activated data.

The science and serendipity of data

In some organizations, there is a misconception that data analysis is solely a science; it is also an art. For mature organizations, a comprehensive data strategy is equal parts both: science in the sense that data can be used to understand and address existing business challenges with laser-like precision, art in that there is an inherent creativity and imagination in combining vast and varied sources of information to identify connections and patterns that were never before realized.

"If you insist on always starting with a business challenge, then you're missing the inspiration of data – the serendipity of it," says Ron Tolido, Capgemini Chief Technology Officer.

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A comprehensive data strategy is multidirectional: the organization can take a problem and work backwards to solve it; it can also take information and identify breakthrough insights, or true moments of inspiration. In this way, the data strategy is both proactive and reactive, inductive and reductive. It is capable of developing solutions to existing issues while also identifying points of action to address the not-yet known.

There is value in both approaches and, in fact, a combination is best. While a reactive or deductive strategy can address specific challenges, such as the need to reduce costs or eliminate redundancy, a proactive or inductive approach can help organizations set themselves apart from the competition. It is this second, perhaps more unconventional, application that presents an opportunity for differentiation by identifying emerging consumer trends, predicting surges in materials costs or anticipating so-called economic, political, and cultural "black swan" events.

Further, for many consumer-products organizations, the advantage is not in having data, but in knowing how to use it. Businesses must be able to separate points of meaning from the noise, to recognize what will deliver impact and what is merely interesting.

"What are you hearing when you put your ear to the curb?" asks Jason Fisher, Capgemini Sector Leadership. "How do you then correlate those findings with other data and contextualize it so that the business can determine if the event is impacting the organization or if it is noise?"

"What are you hearing when you put your ear to the curb?" -Jason Fisher, Sector Leadership – Insights & Data

Data as a commodity – and a unifier

As data takes on new importance across the organization, every business person must become more comfortable in dealing with data – its preparation, analysis, visualization, and application. These individuals must moonlight as data scientists, even if they are business strategists or marketers by trade. Meanwhile, IT should help enable these capabilities within the business. They must develop a highly automated data pipeline that provides access to the right data, as well as easy-to-use, self-service tools that allow the business to activate the data strategy.

In this landscape, data is not an option, but a commodity. It acts as a unifier within the organization, identifying opportunities and guiding the business as to how, when, and where to capitalize. In order to produce actionable and relevant insights, the data needs to be close to the action, which means that it must be developed in close proximity to the business. For this reason, data must be rooted throughout the organization and serve as a central operating feature of each business function.

Hothousing – intense, face-to-face workshops that bring together people from IT and various business functions, as well as data and analytics teams – is one way for organizations to create a data strategy that aligns goals and outcomes. Working in this way helps link data to the business, while also breaking down the divides between IT and other functions. Collaborative by design, hothousing also instills a sense of ownership in various stakeholders, which can help spur embrace of the solution. The application is not a directive from the metaphorical ivory tower, but a common goal identified by a single team. Thus, this approach can help improve the focus, agility, speed, and collaboration needed to generate insights and the ability to act on them.

A federated approach to data

Another critical aspect of the organization's data strategy is managing the complexity of this multidirectional process. The dynamic nature of most data sources, coupled with everincreasing amounts of information and rapidly advancing technology, all but requires organizations to constantly adapt and evolve those aspects of the business that are data-dependent – which is to say, all of them. Much to the chagrin of many organizations, complexity and maturity are directly proportional. Thus, the reward for developing a deep, comprehensive data strategy often is not clarity, but more complexity. Further, the urge to centralize – for more grip and manageability – may quickly be in full conflict to the ambition of the business to be as close to the key data as possible.

To help address this issue, we urge our clients to take a federated approach to data. By that we mean that we acknowledge that data can be at different places and can be owned and used by different entities. At the same time, it must be united under a common architecture that explicitly enables connection and collaboration across the business. This is increasingly supported by AI and intelligent automation. As such, data can reside and be used independently, but stops short of being autonomous. Using this approach, organizations can benefit from the speed and agility of small-scale and near-business deployments while still building enterprise-wide capabilities, fetching data across multiple levels and analyzing the information as it relates to any category, such as store, brand, channel, or product.

One of the most common examples of this concept can be seen in the creation and management of data lakes. Unlike data warehouses, which lacked the order, structure, and discipline to be truly useful, lakes were created with clear boundaries as to what will be collected and who will own the repository. The lake is self-sustaining, but it is not free-functioning; it is connected to other lakes, as well as alternative data stores. Owners have the ability to use the lake for the specific purpose it was intended while also allowing it to feed into the broader network architecture.

While this is the promise of data lakes, some organizations have found the real-world application to fall short. Improper management and unclear parameters have prompted some data lakes to become virtual dumping grounds, not unlike their predecessor, the warehouse. For this reason, it is important for organizations to remain judicious as they collect and store data, selecting only that information which is accurate, high-quality, consistent, unbiased, and meaningful. It is of the utmost importance that these foundational aspects are met before the data is leveraged for analytics purposes. After all: junk in, junk out.

"Data lakes are beginning to be a bit like data warehouses in the sense that a lot of information is being put in without giving thought about the broader strategy," says Capgemini's Swaminathan Rajamani, Vice President – Insights & Data. "In many organizations, there is the growing sense that the lake has become a swamp. To be effective, we must first preserve the sanctity of each lake."

"There is a growing sense that the lake has become a swamp." - Swaminathan Rajamani, Vice President – Insights & Data

Think big, start small, scale fast

For many consumer-products organizations, one of the most significant obstacles to creating a comprehensive data strategy is the tendency to get stuck in the initial stages of the program, be it pilots, proof of concepts, or use cases. For many, the rapidly changing landscape, along with constant advances in technology, makes it difficult to commit to a widescale program. Some shun progress in the pursuit of perfection.

Addressing the fundamental need to scale data initiatives requires both technical and cultural elements. One of the benefits of hothousing is that it addresses both sides of the equation: the goal of the process is to develop a solution that is inherently technical; at the same time, the process relies on human connections – bringing people together from across the organization to solve problems collaboratively.

Looking more broadly at the organizational culture, the organization must expect change and embrace it. We encourage our clients to adopt a culture of experimentation, wherein we identify goals at the outset of a program but adapt the approach in near real-time based on outcomes. We aim for consistent progress as opposed to perfection.

In most organizations, the key to embracing this type of mentality, both with leadership and employees alike, is

by establishing momentum through results and creating appetite for more. We often frame our engagements under the banner "Think big, start small, scale fast." Our approach is designed to deliver so-called "quick wins" which demonstrate the value and impact of insights-based decisioning on relatively small, simple use cases as a way of building demand for larger initiatives.

With all programs, it is important to build scalability into the model and keep it top of mind throughout the process. In some cases, we see the fail-fast mentality work against organizations, as they become so fixated on proving a concept that they fail to consider its utility for the organization at large. To avoid this possible pit fall, every proof of concept should be underpinned by a business need and/or its relevance to the entire organization.

Finally, with respect to culture, the organization is in need not just of a data leader, but a sponsor. This is an individual who understands the entirety of the business and believes in the power of technology to create positive change. Perhaps more importantly, he or she has the trust and respect of other stakeholders and can persuade them of the importance of a cohesive digital strategy. He or she will shepherd the organization from insights to action.

Enabling speed, flexibility, and scalability for consumer-products organizations

Capgemini's OutPerform helps consumer-products companies accelerate their journey to insights-driven decision-making. Our approach uses end-customer data across every touchpoint to solve business problems, produce tangible business outcomes, and uncover new opportunities. Our approach is equal parts science and art – helping organizations address the challenges they have while also illuminating the opportunities they may not yet be aware of.

OutPerform as a point solution to improve regional sales

Capgemini partnered with a global non-alcoholic beverage manufacturer to establish a system data lake, including the development of a consistent federated data lake model, as well as a foundational data-analytics capability. The project goal was to help the company streamline decision-making, improve organizational collaboration and realize new business value. It was intended to assist all entities within the customer ecosystem, including individual downstream business partners in the value chain, business units, and global functions.

During our engagement, Capgemini worked with 13 business units across three regions to gather and analyze more than 2,500 KPIs, 2,000 user stories, and up to 17 years of history from four sources and more than 40 input file formats. Together with the client, we developed an Azure-based architecture in three data centers, a regional data warehouse, and business-unit reporting cubes. Capgemini also conducted business workshops for each business unit to explain the new Azure environment and its capabilities, as well as train business leaders in how to use the platform. As a result of this program, the client has improved its data availability to business users to just 30 minutes, allowing various business leads to access near real-time insights into regional sales and local demand. The project also connects the organization with bottlers and other supply chain stakeholders to assess the ability to increase sales and ensure product availability.

OutPerform as a cross-functional data foundation

Capgemini worked with a global consumer goods company to create a cross-function federated data lake. The primary goal of the organization was to gather and analyze data from across the organization that could assist in real-time decisionmaking by providing better access to timely, relevant, accurate data.

To create the data foundation, the organization identified nearly 20 capabilities, including supply chain, R&D, sales, e-commerce, and marketing. Capgemini worked with the client to form and launch two teams: one that worked within business units to capture the correct metrics and KPIs, and a second tech-focused team that was tasked with building a pipeline that could support these data sets, as well as other data sources, such as social media and third-party databases. As an initial step, the organization focused on procurement, using the newly created data foundation to improve the accuracy of the buyer's console, which is a monitoring tool used to review how vendors are fulfilling orders, where to source materials, and how goods are put in place.

As a result of this program, the organization was able to create a cross-functional agile data foundation that helped improve planning accuracy, refine vendor strategies, and reduce the timeline to deliver goods to shelves. While initially limited to procurement, OutPerform helps enable a truly customer-centric approach, by looking at the overarching task, as well as tangential issues, such as cost to serve, returns, or standardization. As a next phase, the client intends to extend the data foundation and roll out this capability to other areas of the business including logistics, marketing, and R&D.

OutPerform is not a simple tool or technology – it is a journey-based approach, meaning that it is embedded in the organization and unites the business across all markets and functions. In this way, it addresses both the technical and cultural aspects of change, focusing initially on speed and momentum through a battery of quick wins while also building long-term engagement and adoption.

"Our approach helps clients build the capabilities that are needed to create a data democracy," says Capgemini's Shuvadeep Dutta, Global Principal Architect & Advisory Lead. "The key is to link data to the organization's vision and align them to business goals."

OutPerform helps organizations ensure that the data is accessible and useful to a dynamic group of stakeholders. Further, by incorporating cultural elements such as hothousing and executive sponsorship, our approach creates a multidimensional change-management strategy, addressing both technical skills and capabilities, as well as the more cerebral aspects of change.

"Our approach helps clients build the capabilities that are needed to create a data democracy."

- Shuvadeep Dutta, Global Principal Architect & Advisory Lead

OutPerform differentiators

How OutPerform helps organizations embrace insight-based decisioning to enable short-term gains and long-term viability:

	Purpose and impact	OutPerform is designed for impact, taking vast quantities of internal and external data from both structured and unstructured sources and turning them into true insights about the business, the competitive landscape, and the customer.
	Science and serendipity	OutPerform works both reductively and inductively, helping organizations find solutions to existing problems while also illuminating trends, patterns, and events that the business may not be aware of.
D	Speed and agility	OutPerform accelerates the release of benefits, generating meaningful insights from day one and demonstrating return in just two to four weeks.
	Federation and integration	With OutPerform, technology-based insights are infused into every function of the business, across all markets and geographies. Our approach preserves the sanctity of each data program while ensuring alignment to a single architecture blueprint.
CHINP	Flexibility and governance	OutPerform can be implemented in any number of ways: as a stand-alone system, a bolt-on to existing programs, or as a services overlay. Capgemini takes a customized approach to each engagement, focusing on the unique needs of each organization.
K N K N	Sustainability and scalability	OutPerform is designed to help organizations scale their data initiatives. Our approach is underpinned by a business need, as well as relevance to the entire organization.

Capgemini OutPerform consumer-products domain applications

Capgemini consumer products OutPerform for Marketing

Capgemini insights to engage with consumers and shoppers, building mutually valuable relationships that deliver reach and penetration and tangibly drive path to purchase.

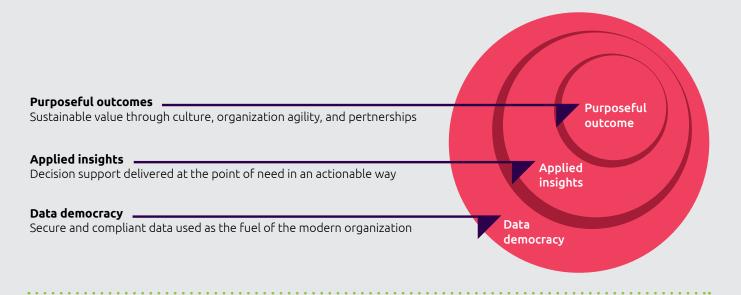
Capgemini consumer products OutPerform for Commerce

Capgemini insights to develop and run an effective channel strategy and optimize the route to market, driving customer collaboration and putting powerful tools/insights in the hands of sales teams.

Capgemini consumer products OutPerform for Operations

Capgemini insights to build smart manufacturing capabilities and supply networks that can meet changing consumer needs and distribution dynamics through greater speed, agility, and efficiency.

OutPerform supports the insight-driven journey across three key layers



Conclusion

For traditional consumer products brands, unlocking the value of activated data may be particularly challenging. After all, this is an industry that has, in many ways, relied on hunches and history far more than facts and figures.

But today's landscape requires more than guesswork. As consumer products organizations welcome data from third parties and work to build their own repositories, they gain the capability to know more – about their competitors, their customers, and the world in which they operate. At the same time, simply having data is not enough. The real value lies in the ability to activate that data, to unlock its value by generating insights that help predict market dynamics, anticipate social trends, identify consumer-preferences, and manage risk.

Our approach is designed to help consumer-products organizations design, implement, and scale a holistic data strategy. We address both the technical and cultural aspects needed to become an insights-driven business and work with clients to create a true data democracy – one in which every member of the organization understands the value of data as a science and its potential as an art. We invite you to reach out to our authors to find out more about how Capgemini can help your organization drive performance and create a competitive advantage through activated data.

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About Capgemini

With more than 190,000 people, Capgemini is present in over 40 countries and celebrates its 50th Anniversary year in 2017. A global leader in consulting, technology and outsourcing services, the Group reported 2016 global revenues of EUR 12.5 billion. Together with its clients, Capgemini creates and delivers business, technology and digital solutions that fit their needs, enabling them to achieve innovation and competitiveness. A deeply multicultural organization, Capgemini has developed its own way of working, the Collaborative Business Experience[™], and draws on Rightshore[®], its worldwide delivery model.

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