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TECH & INNOVATION

Winning with a data-driven strategy

Making decisions based on hard evidence requires
a major shift in culture, technology, and mind-set.

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The entire ethos of Spanish hotel chain Ilunion is built on innovation, and its most powerful tool for solving problems is now data. In January 2017, Ilunion started giving detailed information about the company's bookings and revenue to managers and staff so that they could make smarter decisions. The company's system consolidates more than 12 million data points from different sources and presents it via user-friendly dashboards. For example, a pricing analytics tool recommends changes to room rates based on real-time supply and demand. Another dashboard shows key metrics such as revenue, average room price, and occupancy rates for each hotel, segmented by market and channel. That allows managers to spot problems early on so that they can take corrective action. Ilunion is now rolling out access to meaningful operational data in other areas of the business — for instance, the company's health club and laundry services divisions — to sharpen decision making and inspire process innovation.

Ilunion was founded in 1989, five years before Amazon's founding and more than a decade before the phrase *digital native* was reportedly first uttered. Yet Ilunion's leaders, and those of other more established companies and organizations that have incorporated data and analytics into the fabric of the business, have been able to accomplish what many digital startups were designed to do from their inception: exploit data to hone and evolve their value proposition. For companies old and new, in nearly every industry, this data-driven approach is no longer something to aspire to. It is quickly becoming a strategic imperative, one that can make or break a company's ability to retain customers, grow revenue, and maintain its competitive advantage.

For companies old and new, a data-driven approach is no longer something to aspire to. It is quickly becoming a strategic imperative.

This imperative is reflected in one of the findings from PwC's latest Global CEO Survey: Seventy-seven percent of CEOs reported that they planned to pursue operational efficiencies to increase revenue in 2019. A disciplined and comprehensive embrace of data will be essential to meeting this goal. It will require that everyday decisions and actions be informed by the latest 360-degree information on a situation, rather than gut instincts or historical precedent.

More traditional organizations that have internal hurdles to overcome both culturally ("that's not the way we do things around here") and practically (legacy infrastructure, siloed business units) might seem to be at a disadvantage. But that doesn't mean they can't transform their situation, as long as their intentions are clear. And digital startups can also benefit from focusing on several areas that enable a data-driven strategy.

Barriers to transformation

If becoming data-driven were straightforward, every business would do it. Yet PwC's CEO Survey reveals that despite the widespread understanding of data's critical role in companies' strategic agenda, the gap between the insights that are needed by a business and those that are actually accessible has not closed in the past decade. Unaddressed, the situation is likely to grow worse rather than better, as data volumes increase at an accelerating pace.

Why is it that when established organizations sit on decades' worth of rich data, they struggle to exploit it to powerful effect? For one thing, traditional companies tend to have trouble corralling data into usable and actionable

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intelligence. In our experience, common reasons are siloed data, poor data reliability, and a lack of analytical talent. Companies can also be impeded by incompatible legacy systems and the fact that different types of data may exist in different formats across the parts of an organization, making them hard to compare or combine reliably.

In many cases, investment in platforms intended to collate high volumes of data hasn't solved the problem. Such plans often progress without a specific use case in mind, or they lack the flexibility to extend the technology to subsequent needs. In other cases, data initiatives have concentrated on individual units, rather than on the core of the organization. Without broader company buy-in, initial momentum has faltered.

How to become data-driven

For data to be transformational, it needs to be business-critical, from the top to the bottom of the organization. The right insights then need to be readily accessible, interpretable, and actionable at the point of need — a situation enabled by technology and a culture of making data easily available.

Digital-first businesses understand this necessity and have used it as an organizing principle for everything they do. More established companies can get there too, by linking data to the business agenda, creating a data-driven culture, bringing data-generated insights to life, and implementing the requisite technological infrastructure. These efforts are detailed below.

1. Link data to the business agenda. The power of data lies in what teams do

with it. Companies must clearly define their use cases, mapping them to the broader agenda. Those that succeed typically ensure that data-driven decisions are embedded in their business strategies and innovation plans.

A prerequisite is viewing data as an asset with a clear link to business impact. Leadership and board sponsorship of data programs is critical. To complete the circle, entity-level insights must be fed back to the head office and must inform group-level business plans.

The software company Adobe has created a data-driven operating model (DDOM) for running its digital business. The DDOM dashboard shows the overall health of a business and maps a customer's entire buying journey, from discovery to try, buy, and renew. It's like a turbocharged CRM system, driven by real-time data. Through the DDOM approach, Adobe can base detailed customer models not just on transactions but also on behavioral and experiential insights and digital touch points. As a result, Adobe can more accurately predict when a customer might be thinking of switching to a new vendor, or whether a customer is a good candidate for other Adobe offerings, allowing the company to take the right action, e.g., cross-selling or upselling, at the right time.

At Transport for London (TfL), the local government body responsible for the transport system in greater London — including more than 100 million passenger journeys on the London Underground metro system every month — performance analytics are now housed in a central shared-services center. This center communicates directly with individual lines of business, with clear requirements for accountability.

Traditionally, TfL's shared-services unit had produced periodic performance reports, but the reporting structure had not changed much over time, so individual business units were not checking the reports. The finance department decided to change the reporting structure to bring it more in line with the various demands of business units, with the goal of making those units more financially aware and more accountable.

"We needed to change the type of reporting to highlight the financial awareness issues and to make the individual business units accountable for their results, rather than the finance service just sending reports," says Najam Israr, head of delivery enhancement at TfL's finance service center. "We also needed

Cultural change is usually the most critical element in making an organization more data driven.

to give them sufficient detail. For example, cost centers can view their own reports, such as to check if they are overpaying specific suppliers, and which ones in particular. In fact, we are now saying to each business unit that they can produce their own KPIs — that they are now responsible for analyzing and managing these."

Now that TfL has begun to lay the foundations for better data, and for more agile and devolved reporting, managers from across the different business units have begun taking a keen interest, and asking what else might be possible, Israr emphasizes. "They are already requesting enhancements — more detail, and different ways of displaying it. [Because we are] a public-sector body which moves very slowly, it's been transformational to see what effect this new approach to data is having," he adds. "It is helping us tremendously in mitigating financial risk."

2. Create a data-driven culture. Becoming a data-driven organization depends on getting the buy-in of everyone in the business, who will adapt to new ways of thinking and working based on what the data is telling them. Generating consistent enthusiasm across the wider organization can be difficult — especially when it depends on rallying other leaders with competing agendas.

Indeed, cultural change is usually the most critical element in making an organization more data driven. Yet it is also the area that receives the least investment, and it is the toughest to get right. Changing an employee's thinking away from "gut feel" toward evidence-based decision making is not something that can be achieved with token change management or training. It needs to be

embedded in the way people think and work every day. This includes fostering a culture and expectation of data ownership, and of using data to guide any process and quality improvement.

Finding and hiring the talent that can drive data-led innovation should be a further priority. Digital-era startups tend to have a wealth of this talent, which in turn cements the right kind of culture. Traditional businesses may need to develop their existing talent, bringing people up to speed with the latest data trends and insight-led innovation in their industry (along with interesting developments in adjacent markets that could provide inspiration).

At Geotab, a Canadian telematics company that supplies GPS systems for tracking and managing fleets of vehicles, championing the mission-critical role of data began with CEO Neil Cawse, a software engineer who founded the company 17 years ago. He says, "You don't know what you don't know, but the data can tell you that. Much of the growth in our company is due to our focus on being data driven."

Rather than have a centralized data science unit, the company has embedded data scientists within each business department, "to help the sales organization run better, or finance, or customer service," Cawse says. These departments then feed data back into a central facility, which aggregates it. "There are lots of islands of information, which we push into one central location for comparisons and analysis," he explains.

3. Bring data-generated insights to life. For data to translate into positive business results, it must first be synthesized into insights that inform decision making. To maximize its impact, data should not be restricted to managers. Rather, the goal should be to get good data out to the point of need, and into the hands of those at the front line. And to truly embed data into mainstream thinking and behavior, organizations need to look at how they can build data insights into business processes by default.

Every decision Geotab makes is based on data. The company monitors production status and performance, its products' security status, feeds about bill settlement (who's not paying), and more. Once insights have been distilled from that information, they are fed back out to big TV screens mounted around the company, giving live reports to the teams that need them. Better still, teams can

Technology choices will have a significant bearing on organizations' ability to exploit data strategically and operationally.

write their own queries and run them live via the on-screen dashboards, so they can get immediate access to the insights they need.

If a buzz of incoming customer activity suggests a broader problem, teams can quickly take steps to address it, because graphical dashboards display both "the wood and the trees" — the overview and the specifics. At one point in August, for example, live customer support metrics showed a sudden spate of problems in Texas. It didn't take long for support teams to realize that the supplier's SIM cards were warping in the state's high temperatures, and that this was because they had been made from the wrong kind of plastic. Geotab took up the issue with the manufacturer immediately and restored high levels of customer service.

4. Implement the requisite technology and infrastructure. Technology choices will have a significant bearing on organizations' ability to exploit data strategically and operationally — enabling them to both unleash data from legacy silos and integrate it with other data sources to create something useful and meaningful.

Success depends on being able to map any planned technological innovations to the strategic priorities and specific needs of the organization and its individual business functions, rather than simply creating data-processing capabilities for their own sake. It's also important to build in scope for the technology advances that will come later. Balancing local solutions with cloud-based facilities can be a practical way forward, to help deliver relevant insights to where they are needed, especially if consumers of the data are geographically dispersed.

Another consideration will be making data easily usable by technologies such

as artificial intelligence (AI), machine learning, and augmented reality. Such tools could play a critical role in generating more nuanced insights and integrating data into operations in new ways. AI and machine learning tools, for instance, might mesh with the Internet of Things to monitor new high-volume data feeds, or with social listening tools that aim to gauge evolving market trends and changing customer preferences.

Sanitas, a specialist in healthcare and well-being services in Spain and part of the Bupa group of healthcare companies, is so convinced of the importance of data in driving better decisions across the business that it has rebuilt its information strategy around a platform that can give anyone in the organization access to any data in one click. Explains Sanitas's analytics lead, Leandro Tubia Ebel, "We are developing a DOC [Data-One-Click] project that aims to democratize not only the data, but also the knowledge and the insights around it, giving users tools that allow faster access to different data as well as making data easier to analyze — avoiding tedious search processes and streamlining decision making. In the development of these projects, legacy tools and new technologies coexist, which is allowing a greater transformation in which we can remove inefficient processes."

From this starting point, the company can start to look at the type of data each business unit or team might need, and where this might come from. To make it easier for business users to interpret data, meanwhile, Sanitas has been working on common data dictionaries — so an IT system's code for a customer account, for instance, is turned into something that business teams would recognize.

In due course, Sanitas expects data analytics and targeted insights to be instrumental in detecting fraud related to medical claims and identifying anomalies in medical invoicing, among other applications. The priority for now, though, is to achieve a comprehensive governance model for the platform and any data, so that when insights are fed to business teams, the teams can rely on their quality and integrity.

From planning to progress

Becoming more data driven should not be a protracted exercise. What's important is to begin, with the knowledge that each organization's journey will be

shaped by its current business priorities and the specific data hurdles it needs to overcome.

Ultimately, data-driven organizations aren't simply those that sit on heaps of data and state-of-the-art analytics capabilities. Rather, they are those companies that have been redesigned to harness the data and generate insights that make a quantifiable difference to customers, revenues, and profits. And this should be true not just for today, but for the long term — however markets, businesses, opportunities, and challenges evolve. +

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