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Analytics helps global business services fuel resilience and return

As companies navigate the COVID-19 reset, global business services organizations can deploy advanced analytics to equip leaders with the information needed for better, faster decision making.

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Companies everywhere were suddenly thrust into rapid-fire decision-making mode when the COVID-19 pandemic struck. They needed to ensure workers' safety and maintain business continuity—to mobilize teams for remote working, sustain operations (to the extent possible), manage customers and channel partners, and steady disrupted supply chains—all while adjusting to seismic shifts in customer demand.

But to make the right decisions, companies needed the right data, and they needed it in a timely fashion. How many actually had it?

In any rapidly unfolding situation, particularly in the uncharted territory of a pandemic, it would be an understatement to say that decision-making is challenging. Traditional KPIs, as lagging indicators, are inadequate. Last quarter's sales numbers won't help much in forecasting demand when a sales channel suddenly goes dark, or customer needs make 180-degree turns, or other tried-and-true assumptions become moot overnight. Companies need reliable micro- and macroeconomic indicators to discern emerging trends, new behaviors, and new correlations. The insights derived from these indicators can give companies the ability to be proactive, which can mean the difference between securing competitive advantage and enduring prolonged performance woes. In starker terms, it can also mean the difference between a sustainable business and a slide into irrelevance.

These insights are actually at companies' fingertips. Global business services (GBS), the central organization for general and administrative functions including finance, HR, IT, procurement, and legal, has often played an important role as data "first responder" when reliable data were needed fast. As the central data repository of financial, HR, procurement, and other crucial processes that touch every aspect of a company's operations, GBS can be a gold mine of information.

With the right analytic capabilities in place, GBS organizations are well-positioned to help the enterprise quickly harvest actionable insights from the wealth of enterprise data they handle—data that are processed and updated regularly, often in real time. Carefully designed advanced-analytics algorithms, applied to GBS data in analyzing a specific business issue, can dramatically reduce subjectivity and bias in supporting clearer-eyed decision-making. Moreover, GBS functions' ongoing analytic works gives their people the skills and mind-sets needed to draw insights from the data.

As companies navigate the COVID-19 recovery, an advanced-analytics program can help GBS serve as information broker, equipping leaders with the information they need to make proactive decisions quickly. GBS is designed to reap economies of scale, so playing this data role represents a natural evolution. Such an arrangement also allows GBS to work more efficiently, freeing it from the manual reporting it must sometimes perform so it can serve the enterprise more strategically.

From retrospective analysis to forward-looking insights

The pandemic—and institutional responses to it—triggered all sorts of operational challenges for businesses: supply-chain disruption, collapses (or spikes) in demand, worker shortages, stoppages of indeterminate length, and cash-flow interruptions. These challenges were compounded by the gamut of policies that varied by region.

In times of disruption, a GBS-led advanced-analytics capability can help companies answer multiple questions in determine the right strategic levers to pull:

- What if, in assessing the order-to-cash cycle time, companies could at any moment know their numbers on sales orders, renewals, and customer revenue—replacing the indicators they often rely on today, such as bills per full-time employee (FTE)?

- What if, instead of cash apps per FTE, companies could access customer short-pay and payment-data trends—that is, they could see the direction and speed of these trends at any point in time?

— In assessing the procure-to-pay cycle, companies normally must wait for payments to be made before they can track on-time payments. What if they could compare the value of extending payment terms to that of offering early-payment discounts—or better yet, evaluate the effects of those changes dynamically?

— What if, instead of waiting for monthly KPIs on inventory aging, or on maintenance, repair and operations, companies were able to forecast these KPIs with greater accuracy?

The impact on spending, cash-management, and resource-allocation decisions could be dramatic, which in a time of crisis or volatility could have significant business repercussions.

What's holding companies back?

Certainly, companies today understand the value of data and analytics. But they face many common obstacles in adopting an analytics program. Often companies are missing a key asset: our analysis finds that fewer than 20 percent have all of the necessary building blocks. Some have the data, but not the right platform for analysis; others have the platform but lack the right data, or can't access it in a useful way. Others lack the workforce with necessary digital and analytics skills.

Reaping the value of a GBS-based advanced analytics program can be difficult for a number of reasons:

— *Siloed data, siloed teams.* Much of the data resides in the business unit, geographic region, or a particular service-management system. Take sales data: usually owned and managed by the sales function, it's often out of reach of the GBS function and not always consistent in quality. At many organizations, finance teams and sales teams interact only minimally, creating few opportunities to collaborate in reviewing data, making improvements, or exchanging insights.

— *Lack of data standards.* With no specific definitions of data types, it can be difficult to compare process data. For instance, general-ledger codes might not be consistently or sufficiently detailed across the company's chart of accounts. It's not unusual for sales teams in the same company to follow different standards. Analyzing data trends thus requires substantial manual effort.

— *The sheer volume of data.* The growing digitization of business and customer processes, along with the proliferation of devices—including mobile devices and industrial Internet of Things sensors embedded in manufacturing and service-delivery equipment—has caused an exponential increase in the quantity of data businesses are producing. Managing all this data and ensuring its quality calls for an increasingly sophisticated, enterprise-wide capability.

— *Few, if any, standards on using external data.* Most enterprises lack protocols for obtaining and using data from external sources, whether to extract, validate, or transform it (for example, cleaning the raw data for a particular use), or even to load data into their own data stores. That's because usage depends on specific agreements, which can only be made on a case-by-case basis. This lack of standards can create long lead times and delay use—another impediment to decision making.

— *No formal career path in data science or data engineering.* By not seeing data science and engineering expertise as being vital to the organization, companies handicap their data effort in two ways: they're less likely to attract such talent, and risk losing in-house talent due to limited options for career progression.

— *Lack of faith in the model.* Before entrusting a new technology or process to a critical business process, internal stakeholders must be convinced that it works: that it's sufficiently robust and that its risks are limited. Then the company must develop a well-thought-through, reliable methodology that allows teams to define and test algorithms. Once the new approach passes muster, it takes a change-management program to incentivize

adoption. The lack of a strong data culture in a GBS organization, along with functional-area managers who are used to relying on gut instinct, can increase resistance.

Rapid analytics in the real world

Several GBS teams and third-party GBS service providers are already putting advanced analytics to work in generating bottom-line impact.

Cash-flow forecasting cuts time and the cost of capital. One multinational facing new demands on its capital recognized that it needed a more accurate and timely perspective on accounts payable, so that it could find more flexibility in managing its working capital. Over the course of about two months, the company designed and piloted a model to predict end-of-the-month outstanding accounts payable, not only at the enterprise level but also by location and type of expense. By developing the pilot for two business units with different business dynamics, the company was able to build a prediction model that offered a 90-day advance view with an error rate of approximately 3 percent. The model also gave finance managers a clear view of the company's payment patterns, revealing opportunities to extend days payable outstanding with minimal consequences. Ultimately, the approach improved forecasting accuracy, cut the company's cost of capital, and reduced controllers' workloads, allowing them more time to focus on strategic matters.

A supply chain–planning COE. A leading consumer packaged-goods company is using its supply-chain planning group in GBS to plan product allotment and direct-store delivery for its regional plants. Because the group is co-located with the company's procurement and sales-order management groups, it can help resolve supply disruptions or problems with customer product receipt. With its network view of local inbound and outbound supply and logistics constraints (such as a transportation lockdown), the GBS organization can now optimize product supply in a rapidly changing local environment.

A third-party IT entity helps government leaders while identifying its own service-demand trends. A large IT services provider deployed greenfield COVID-19 response centers with analytics capabilities for its government clients. Each center collects data from across local communities in real time, converting them into visualizations that help guide planning and decision making on COVID-19 response efforts. The data is helping local authorities calibrate policy decisions and manage the transportation of essential supplies to areas of greatest need.

Technologies such as natural language processing (NLP) and machine learning are helping the IT services provider track and respond to its own customer needs in real time. Specifically, these technologies are helping the provider perform topic modeling in real time, drawing from thousands of publications from international health agencies and news outlets, and automating the extraction of quantifiable trends along with actionable information relevant to a manager's role and responsibilities. The company has also developed forecasting that tracks and predicts (directionally) when regions critical to the service provider and its customers will reach peak infection, and conversely, when a turnaround occurs and recovery rates begin to rise. The technologies have also helped the company create a multi-dimensional simulation model as a proxy for the pandemic so it can develop service-demand scenarios.

Eight weeks to value

As illustrated by the foregoing examples, organizations can mount a rapid advanced analytics approach in as little as eight weeks (Exhibit 1). The work model brings together teams from across functions: IT personnel, data engineers, data scientists, business subject-matter experts, and so forth. The first two weeks focus on prioritizing use cases—a process involving a fair amount of deliberation (including determining criteria) and one that can take a few rounds of iteration (Exhibit 1). The next, step is

Exhibit 1

Advanced analytics supports a wide range of GBS use cases.

Area	Business process/Sample use case
Cash flow/working capital	Order to cash • Credit monitoring and customer cash-flow forecasting • Risk-based collections strategies Procure to pay • Price harmonization, real-time input-cost monitoring (eg, compliance with purchasing policies, real-time recommendations for category managers) • Payment terms: segmentation and optimization Inventory • Inventory segmentation and forecasting of critical stock levels • Distribution forecasting and integration with transportation and delivery channels
Order to cash	• Monitoring order trends in customer accounts for continuous forecasting and for indicators of demand or mix changes • Forecasting order bottlenecks and proactive resolutions (eg, providing a temporary credit-limit adjustment)
Source to pay	Supplier risk monitoring: • Tracking lead times for critical commodities or parts • Liquidity forecasting for smaller suppliers and providers
GBS operations	Forecasting employee capacity and availability; Critical-skills planning relative to demand forecasts
Customers	Forecasting delivery dates based on continuously updated inbound logistics and operations

to assemble analytics teams with the right subject-matter and data skills. Then it's time to collect the data and define the analytical approach (Exhibit 2).

Early on, it's important to establish a governance model to fuel rapid decision making and progress. Adopting an investor's mindset helps teams find ways to overcome resource or talent bottlenecks.

Over the next five weeks, the company can build a minimum viable product (MVP) for three or four priority use cases. In parallel, it assesses current analytics capabilities to see what is needed to scale up analytics efforts throughout the organization. Finally, in the last week, the company rolls out the MVPs, synthesizes findings, creates a high-level roadmap for further use

Exhibit 2

Advanced analytics supports a wide range of GBS use cases.

Six core questions will help determine use-case feasibility

1. Is enough data available to develop a model? What sources can it come from, and is it readily extractable?
2. Is the data of good quality?
3. Are there any external dependencies that might affect implementation, such as the inability to change a business process?
4. What about legal considerations—for example, a third party that might restrict data access; or a compliance-related concern (such as data privacy)?
5. Can the implementation be done quickly—say, within 2 or 3 months?
6. Can the company quantify the benefits, in terms of revenues, cost savings, or other efficiencies, that an implementation would provide?

cases, and fleshes out its capability-building plans.

Demonstrating proof of concept is not enough, however. At this point, it's critical to train users of the data, who may need persuasion to abandon their manual analysis, put their trust in algorithms, and adapt to a new way of working. Success can therefore be measured in large part by the speed with which cases can be scaled up—which in turn depends on garnering widespread user support.

Once a rapid implementation has demonstrated the value of a full-fledged, GBS advanced-analytics program, in relatively short order the company create a center of excellence (COE) to oversee a program. A COE would have dedicated resources and formal investment and organization committees for serving functions and business units.

At this point, GBS could proceed with capability building in earnest. That means acquiring new talent and training existing staff in new data and analytics roles, as well as the use of analytics tools. GBS will likely also refine its operating model, improving its data infrastructure and establishing the right tools and processes. Over time, data-driven decision-making can become the norm in GBS in its interactions with stakeholders and customers. Through the data insights it generates, the GBS organization could shift its orientation to outcome-based process optimization.

The COVID-19 pandemic has tested companies' planning and resilience as never before. The next three to six months represent a critical rebuilding time for businesses. Having a clear view of demand, supply, and other critical operational and customer trends can give them a major jump-start.

Beyond its role as the keeper of the transactional record, GBS holds the key to strategic insights that are particularly elusive in a time of crisis and rapid change. Putting this to use requires GBS to shed its passive, process-oriented mindset.

Rapid analytics with GBS calls for a fresh approach that brings together cross-functional teams from IT, the business side, and the data engineering and science areas to work together in agile fashion.

Instead of continuing to play security guard at the data gold mine, GBS can stake its claim as master and broker of the organization's most precious asset: its rich store of data. But as automation and analytics advance, the window of opportunity may be closing. Now is the time to recognize the value GBS can create—and unleash its power in helping guide the enterprise to recovery, resilience, and competitive advantage.

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