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BUILDING A BETTER EXPERIENCE

The processes, people and technologies that go into *fostering* **CUSTOMER-CENTRIC IT**

BY STACY COLLETT

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cover story | **CUSTOMER EXPERIENCE**

BUILDING A BETTER EXPERIENCE

The processes, people and technologies that go into
fostering customer-centric IT **10**

BY STACY COLLETT
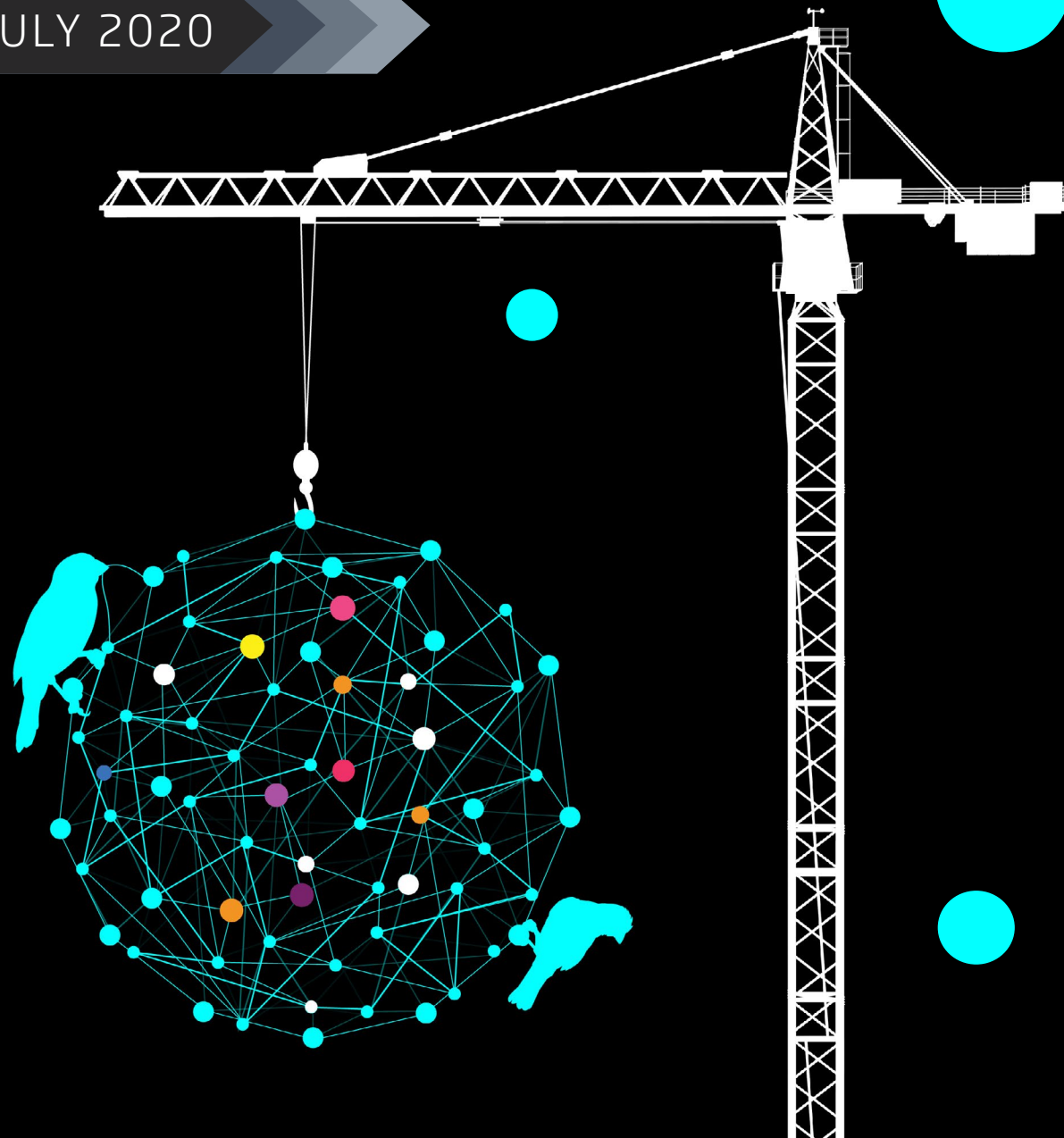
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Reaping revenue from data

Monetizing high-value data is a matter of vision, leadership and follow-through.

BY MARTHA ROUNDS

"We have been paid many times over," says Julie Ragland, SVP and CIO of Navistar International, a manufacturer of commercial and military trucks, proprietary diesel engines, and school and commercial buses.

She's referring to Navistar's digital product OnCommand Connection (OCC), which enables its customers to manage their entire fleets through a single portal—regardless of the manufacturer of the trucks and buses. The portal provides customers a stream of real-time vehicle data to help drivers be more productive and keep fleets safer. For Navistar, OCC provides a critical wealth of telematic business intelligence data about the performance of its trucks and those of its rivals; all this data resides on Navistar's proprietary data analytics platform.

Navistar is a leader in its industry, in part because of its visionary approach to data.

Recent IDC research shows that 41 percent of CIOs believe their companies are well along the path to creating competitive advantage through data excellence. Even before the COVID-19-induced downturn, these companies were pulling away from their competitors: Fully 25 percent of companies are still hamstrung by siloed data.

Finding extraordinary value

"We don't necessarily have to monetize a service in order to find

"We have to recognize that the value can be difficult to sell outside of our organization, and it's even sometimes difficult to sell inside of our organization."

– **JULIE RAGLAND**, SVP AND CIO, NAVISTAR

extraordinary value [in our data]," Ragland says.

For example, Navistar has an explicit goal for its customers to have the best repair velocity in the industry. This requires having parts available when a truck pulls in for repair. "We realized that by knowing where trucks were—all trucks, not just our trucks—and what fault codes were active on each truck at a given time, we could know how to fix each truck, including what parts are required," she explains.

"So, we have developed a dynamic part-stocking model for all of our centers. It is 100 percent driven by the location and fault codes of trucks at any given moment, which drives the part-stocking plan at all our distribu-

tion centers. This creates a huge flow-through benefit in terms of having the right part on the right shelf at the right time. With this information, we have been able to decrease our emergency orders by around 70 percent."

The company also uses pattern recognition to help solve driver issues. "We look for patterns around certain driver behaviors, like hard braking and fuel consumption, that could help coach drivers in their behaviors or show that certain training might be needed," Raglan says. "A new product called International 360 allows customers to take an OCC signal and turn it into a shop appointment. This enables a driver to get a repair action initiated online and track it to prob-

lem resolution, including when the truck is ready for pickup to get back on the road."

A customer-first focus

Ragland cautions that finding real value in data is sometimes elusive: "We have to recognize that the value can be difficult to sell outside of our organization, and it's even sometimes difficult to sell inside of our organization. Sometimes people don't all realize the problems, so when a brilliant solution is put in front of them, they didn't know the problem existed in the first place."

For success in unlocking and multiplying data value, CIOs must emphasize the critical importance of data to the customer. Data's monetary value can be secondary. Also, they need to address difficult ques-

tions, including: What are the right use cases, subjects, domains and parts of the organization to start with? How do we deal with change, employee concerns and motivation? What architecture, technology and platform should we use?

Navistar leaders were initially worried that the company might not reach its revenue targets with its OnCommand data, Ragland notes. "But that repository of data has the ability to "add so much [more] value to our business operations than what the actual revenue is, the revenue opportunity becomes incremental to that." ♦

Martha Rounds is research director for IDC's IT Executive Programs. IDC adjunct analyst Robert Multhaup contributed to this article.

EXECUTIVE VIEWPOINT

Leveraging Data to Transform the Customer Experience

Poornima Ramaswamy
Executive Vice President,
Strategic Clients
Qlik

Poornima leads Qlik's Strategic Client Advisory Team, a multi-disciplinary team that designs and executes data-driven transformation strategies for large enterprise customers. Prior to joining Qlik, she ran Cognizant's North American AI & Analytics practice and led the Cognizant Chief Data & AI Officer Advisory Council, a community of analytics executives focused on AI and analytics as a strategic imperative.

Qlik Q®
LEAD WITH DATA™

Q. Why is a data-driven customer experience strategy so important?
A. The term *customer experience* has become mission critical in recent years, mainly because of the explosion in digital interactions in almost every aspect of our daily lives. Middle-and back-office processes must empower employees with insights to anticipate and service customer needs through the most optimal channels. Pulling all that data together into a 360-degree customer view is what takes an organization from static, generic, siloed interactions to connected, convenient, consistent, customer-facing experiences that increase loyalty and wallet share.

Q. How are your customers improving customer experience with data?
A. We work with organizations across virtually every industry to improve customer experience. For example, retail industry leader Benjamin Moore used our platform to expand their understanding of customer purchasing patterns and demand. That gave their sales team better pricing data to drive quotes, made fulfillment and manufacturing more efficient, and drove more effective marketing campaigns. Becoming more customer-centric lets them spot market trends in days instead of months so they can provide contractors, designers and consumers with the exact paint colors they want much faster.

We've also helped Jefferson Health focus its digital transformation on providing more personalized service to people with sickle cell anemia. The organization identified members with this inherited disease and combined their health history with real-time contextual data, like local flu outbreaks, to develop personalized care plans with proactive advice about staying healthy and out of the hospital.

Q. What are some best practices businesses can follow?
A. Every company should keep these five critical things in mind:

▶ **CREATE A CROSS-FUNCTIONAL MODEL.** Bring business and IT together around the common goal of improving the customer journey.

▶ **EXPERIMENT WITH CONTEXTUALIZED DATA.** Enrich internal data with external data to drive personalization.

▶ **DEVELOP A CULTURE OF DATA LITERACY.** Ensure everyone in your organization understands that data is important and deserves to be used properly—and habitually.

▶ **TELL STORIES WITH YOUR DATA.** Analysis matters to the extent it helps people determine the right answers. Someone who needs data to make decisions must also be able to consume it intuitively exactly when they need it. For example, if your call center reps can see all relevant information about a customer in a single interface as soon as they take a call, they'll reach the best response quickly and naturally.

▶ **DRIVE COLLABORATION ACROSS STAKEHOLDERS.** Improving customer experience involves continuous change, so it must be a top-down mandate.

To learn more about accelerating business value through data, visit **www.Qlik.com/ExecutiveInsights**.

6 business concepts IT leaders should master

CIOs who talk tech must also master critical business lingo when speaking to their C-suite peers. Here are some essential terms to learn.

BY CLINT BOULTON

Communicating the value of technology is critical for any CIO seeking to curry favor for their digital business initiatives. So it follows that engaging fellow leaders and the board of directors in buzzword bingo will sound the death knell for even the best laid tech plans.

Instead, when it comes to communicating the business value of technology, IT leaders must speak and think like their business peers, says

Art Langer, academic director of Columbia University's executive master of science in technology management program.

"You need to think like the people around you think," says Langer, who helps IT leaders learn how to communicate to board members. "Nobody is interested in talking about technology."

Rather, CIOs must be conversant in business concepts that help them deliver, iterate on and measure efforts for augmenting operations and the customer experience (CX). Here CIO.com leans on the wisdom of consultants and analysts to define key business lingo—the lingua franca of corporate finance and MBA programs—that CIOs should become familiar with.

The key to operating in lean startup mode is pairing technology with a business model in parallel.

1 Digital business KPIs

As companies create new business models anchored in digital technologies, it behooves IT organizations to track digital business KPIs, which come in two types,

according to research published by Gartner analysts James Anderson and Paul Proctor in April 2019.

The first set assesses the progress in digitalizing the current business model, spanning sales, marketing operations, supply chain, products and services and customer service. A second set of KPIs assesses the progress and opportunity of net-new revenue sources created by pursuing new digital business models and are clearly differentiated from nondigital sources.

It's one thing to create KPIs but another to discuss them. CIOs must be able to explain to their C-suite peers and boards what these digital KPIs measure and why they matter to the business.

2 Customer journey map

Once mainly the domain of marketing, the customer journey map is something CIOs can no longer ignore, as more companies leverage technology to create new customer experiences.

Customer journey maps blend qualitative and quantitative data to understand customers' desired journeys and to identify gaps between their expectations throughout this journey and the experience delivered by the brand, according to Jane-Anne Mennella, a Gartner analyst. The main goal of journey mapping is to determine the challenges and opportunities a brand faces in improving its CX, as well as satisfaction, loyalty and advocacy.

3 Lean startup

It's one thing to run scrums and deliver software in agile. CIOs should also learn how to operate in lean startup mode, which involves iterative testing, learning and improving on their product, says Scott Snyder, a partner at Heidrick & Struggles who advises clients on digital innovation. Failure is expected as companies move fast, break things and iterate.

Lean startup mode is really about operating a "business model alongside a product or solution," and "moving from experiments to insights really fast," says Snyder, who is also a senior fellow in the management department at the Wharton School of the University

of Pennsylvania and studies how emerging technologies facilitate new business models and ventures. The key to operating in lean startup mode is pairing technology with a business model in parallel.

4 Reverse income statement

Whereas the income statement starts with estimates of revenues and works down the income statement to derive profits, the reverse income statement starts with required profits, according to Rita Gunther McGrath and Ian MacMillan in their article "Discovery-Driven Planning" from the July–August 1995 issue of *Harvard Business Review*. "We then work our way up the profit and loss to determine how much revenue it will take to deliver the level of profits we require and how much cost can be allowed," write McGrath and MacMillan, adding that the reverse income statement is a key tenet of discovery-driven

planning, or "planning for a new venture that involves envisioning the unknown."

Snyder says that a tech chief would initiate expectations around a tech solution similarly, estimating ROI in terms of customer adoption. "You're basically building a business model with imperfect information," Snyder says. What would an attractive business case look like? What is a surface assumption that needs to be true to make the business case work or for this new app to be successful and add a bump to revenue?"

5 Real options

Borrowed from finance, real options cover the right to undertake certain business initiatives, such as deferring, abandoning, expanding, staging or contracting a capital investment project. As applied to tech, real options include running a pilot with a startup and other forms of experimentation.

"If I invest a small amount in a

"**Nobody** is interested in **talking** about **technology**."

—**ART LANGER**, ACADEMIC DIRECTOR, COLUMBIA UNIVERSITY'S EXECUTIVE MASTER OF SCIENCE IN TECHNOLOGY MANAGEMENT PROGRAM

startup pilot, I can learn faster and cheaper than cutting a big check to develop a project internally," Snyder says.

6 Data balance sheet

Potentially an ultimate bridge builder between tech and business leaders, the data balance sheet provides an overview of data the organization holds; how it is used, including the information flows related to the organization's operations; and the risk management procedures related to data.

Ideally, a well-appointed data balance sheet will help you and your organization harvest data and turn it into business value, while taking care to acknowledge the potential liabilities in using certain types of data, Snyder says.

Between cloud computing and the availability of other digital services that automate functions for your organization, the "challenge is not as much on the tech as it is on the human side," says Snyder, referring to sweeping change that is often the toughest part of implementing a new digital business model.

According to research published in December 2018 by Gartner analysts Suzanne Adnams and Elise Olding, regardless of what language IT leaders elect to use, they "must be able to put the vision into their own words so it is meaningful and relevant." ◆

Clint Boulton is a senior writer at CIO.com.

BUILDING A BETTER EXPERIENCE

THE PROCESSES, PEOPLE AND TECHNOLOGIES THAT GO INTO *fostering* CUSTOMER-CENTRIC IT

DELIVERING AN EXCEPTIONAL CUSTOMER EXPERIENCE has never been more important than it is today. For many businesses, meeting the customer's digital needs means survival, but organizations are also planning for the longer term competitive advantages to be gained down the road.

Investments in customer-focused projects will remain largely intact, despite business uncertainty caused by the global pandemic, because it paves the way for future competitiveness, says Amity Millhiser, chief clients officer at PwC.

In a PwC survey conducted the week of April 6, CFOs ranked a ⟩⟩⟩
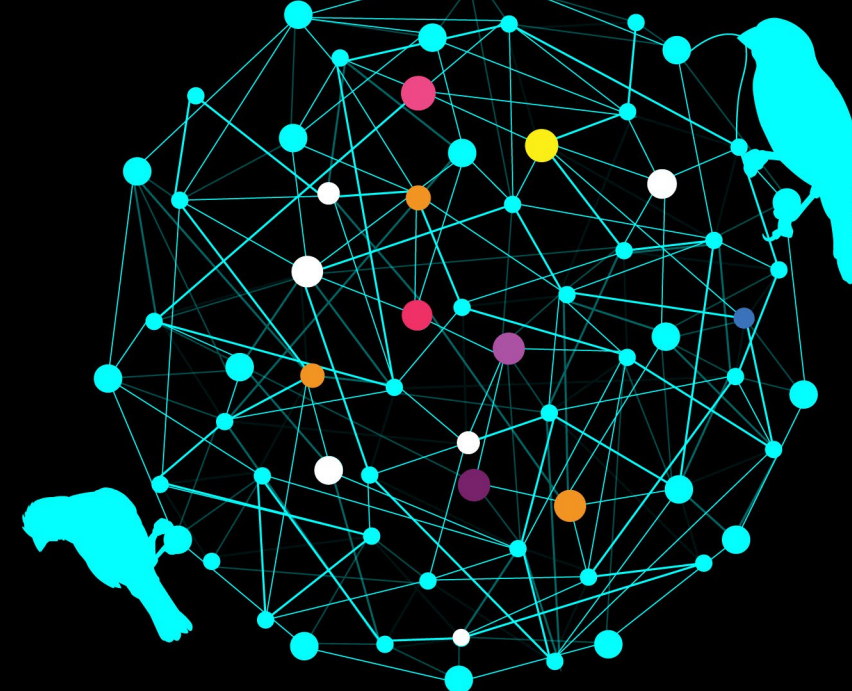
BY STACY COLLETT

⟫⟫⟫ **list of potential budget cuts. Customer experience investments and digital transformation ranked much lower on the list of potential cuts than IT, general capital expenditures and even workforce.**

CIOs, long accustomed to employing technology to streamline business processes, are well positioned to bring that same approach to addressing customers' needs. These IT leaders offer their experiences and tips for curating the processes, people and technologies needed for a frictionless customer experience.

Building customer-centric IT on top of legacy tech

AT BROOKS BROTHERS, trying to build new customer-facing technologies around legacy systems is like dressing up a pig, says Todd Treonze, senior VP and CIO of the clothing retailer. "The biggest challenges for us are in finding unique ways to make us look and perform great even though we're running a 12-year-old order management system or a 10-year-old POS system," Treonze says. "It's about finding ways to build around those barriers and building a better experience while keeping those traditional anchors in place."

For starters, 65 percent of the retailer's revenue comes from stores. "Every customer is armed with all kinds of data when they go into that store, so the only thing we can do to change the game is arm our associates with that same type of data," he says. The retailer partnered with Mad Mobile and its Concierge app that runs on top of legacy systems. It connects Brooks Brothers' POS, website and CRM/loyalty platforms and allows in-store associates to engage with customers using an iPad to bring up their sizes and preferences. "In the old days, all the associates had little black books with customer details. Now, it's digitized," Treonze says.

Outside the store, an associate can personally contact a customer via text or email to remind them that their loyalty rewards are about to expire or that a shirt they like is back in stock. The sales rep then sends the customer a link where they can buy online or hold the item at the store for pickup.

"We've seen amazing converting rates on the links," Treonze says. When a store associate texts the customer with links back to the website, about one-third of the time the customer will click and buy online.

TREONZE'S ADVICE: In a traditionally high-touch environment like retail, CIOs must humanize the digital experience. "You don't need AI when you've got someone who knows the customer and has a personal relationship. It's 100 percent personal touch, all triggered by a person–there's a name behind it, not an email blast."

–**TODD TREONZE**, SVP & CIO, BROOKS BROTHERS

Dedicated teams for each customer-focused product

WHEN THINKING ABOUT physical storage space, one typically doesn't draw a direct line to the customer experience, let alone technology innovation. Yet at Extra Space Storage, innovation is creating competitive advantage.

"We want the customer to be able to transact with us in the store, from their mobile phone, mobile app or desktop computer, and regardless of whether a store is open or not," says Bron McCall, senior vice president and CTO. "And from an in-store experience, it's about gaining access to the property and your storage unit with your mobile phone."

The Salt Lake City-based company is in the home stretch of a five-year digital transformation that first replaced all of its core systems with cloud-based platforms and apps that are now capable of fulfilling McCall's customer-centric vision for mobile apps, the company's website, customer communications, property management systems and access control.

To make it happen, McCall built product development teams for each of the five customer-facing products.

"We needed to have full-time people focused on the roadmaps and the experiences. The product team, led by a dedicated product manager, is responsible for prioritizing and curating that new customer experience," McCall says. "Obviously, the business is heavily involved," as well as dedicated engineers who are assigned to each product team, he adds.

The products are in various phases of development. The mobile app is in beta testing, and access control has been rolled out in a half-dozen stores.

> **McCALL'S ADVICE:** Make sure someone on the business side of the organization is also responsible for the customer experience. "When you get to the point where you need to start changing business processes, it needs to be coming from the business," McCall says. "I may be telling them what they need to do, but the message needs to come from the business."
>
> —**BRON McCALL**, (LEFT) SVP & CTO, EXTRA SPACE STORAGE

> "We want to be able to **compare** and **validate** that the ads they buy from us are actually being delivered in the **targeted zones** they ask for."
>
> – KURT RAO, SVP & CTO, TEGNA

Tech that provides transparency for customers

AT MEDIA COMPANY Tegna, customers of its Premion digital advertising business are asking for more transparency and assurance around the targeting of their advertising, especially as OTT (over-the-top) subscription services such as Netflix, Hulu and Amazon Prime continue to complicate viewership data with access from mobile and other devices.

"We want to be able to compare and validate that the ads they buy from us are actually being delivered in the targeted zones they ask for," says Kurt Rao, senior vice president and CTO. For instance, when the customer wants an ad to reach 18- to 25-year-olds who earn $100,000 or more annually and have children in the household, Tegna relies on third-party sources for most of the data and then validates that data through partners.

"We have built proprietary technology capabilities internally [called Audience Assurance] that matches what customers ordered versus what was delivered and are able match this up against using industry-standard data sources." One source provides real-time device detection in all connected environments, including the web, mobile networks and native apps. Another source can map all connected devices to a home address, and a third provides geolocation and online fraud protection tools.

RAO'S ADVICE: "Have a partnership with your internal customers and stakeholders, but equally be able to hear and manage to the voice of the external customer," he says. "A lot of that has to be self-initiated, but make sure you're listening, understanding and asking what your end customers are looking for."

–**KURT RAO**, SVP & CTO, TEGNA

Data interoperability unlocks patient access

IT HAS ALWAYS been difficult to introduce changes to the customer experience in health care, thanks in part to a lack of data interoperability, says Lisa Davis, senior VP and CIO at Blue Shield of California. "Blue Shield can come to a hospital system with a great idea, but getting people to buy into a standardized method for sharing information [is difficult] because these hospital systems are doing business with multiple different entities."

That's about to change. In March 2020, the U.S. Department of Health and Human Services finalized federal interoperability standards that could unleash even more innovation by giving patients access to all of their health records from different providers in a common format and available from their mobile devices. "It will help a great deal in how we ultimately share information between our hospital systems, our providers and our payers," Davis says.

Interoperability hasn't stopped Blue Shield of California from making headway with its own customer-facing solutions. The insurance provider is piloting an app that enables doctors to capture patient notes using an Apple Watch, which would then download the information into the patient's electronic health record. "The purpose of that is to improve the experience of the customer and provider, so they have more time with patients and reduce the amount of overhead" involved with charts and billing, Davis says.

Blue Shield of California is also rolling out real-time claims and billing, "where you leave the doctor's office like you're leaving the grocery store," Davis says. "You know exactly what you paid for, get a bill and pay the bill, versus 'I'm not sure exactly what I just paid for, what the deductible was, or what I'm ultimately going to be charged for the services I received.'"

DAVIS'S ADVICE: It requires a culture shift. "IT is the business, and the business is IT. I know that my peers at the executive leadership level believe that. Now that narrative needs to trickle through the organization. There is no separation of lines anymore," Davis says.

—**LISA DAVIS**, (LEFT) SVP & CIO, BLUE SHIELD OF CALIFORNIA

'Flex fast' to handle changing needs

AT APPLIANCE RETAILER Conn's HomePlus, customer service doesn't stop at selling appliances from its stores and digital channels. The retailer also provides financing to 80 percent of the customers who buy products from the company's 133 retail stores in 14 states.

Like a lot of retailers, Conn's wrestles with growing customer expectations for immediacy brought on by giants like Amazon, as well as some legacy technology that can impede innovation. "How do you provide an experience that customers will equate with satisfaction when comparing it to [retailers] who don't even operate in our space?" says CIO Todd Renaud.

The answer came by adopting a cloud and SaaS mindset, he says, and partnering with vendors that could provide a frictionless customer experience. "There's also the security piece," he says. "Because we are a lender of consumer finance, we also have to maintain security and privacy from a finance side."

Last year, Conn's fully enabled its website for end-to-end customer service, including not just product selection, but loan application and approval, product fulfilment, delivery, bill payment and service call scheduling. Year over year, the retailer went from $150,000 a month in online sales to over $1 million monthly. "It just shows there was pent-up demand and there's a customer base that likes to shop online," Renaud says.

All of this came in the nick of time for the retailer, which is now offering online sales and curbside pickup during temporary store closures due to COVID-19. If the shutdown continues, he's considering telesales where salespeople in stores can virtually walk through stores with customers using video conferencing on iPads. ◆

RENAUD'S ADVICE: "All of us are having to flex very fast based on the way the market changes and business changes," Renaud says. "You need systems more and more that are able to do that."

–**TODD RENAUD**, CIO, CONN'S HOMEPLUS

Stacy Collett is a regular contributor to CIO.com.

Telltale signs of IT dysfunction– and how to fix it

Transformational success can be derailed by a dysfunctional IT culture, the roots of which often can be traced to silos, org structures and little desire or incentive to collaborate.

BY STACY COLLETT

The role of IT is evolving, and digital transformation has brought with it a new set of responsibilities and assumptions that can lead to IT dysfunction. An explosion of new initiatives, the need to produce more quickly, constant interaction with the business, a shift from traditional data centers to third-party cloud providers—with so much coming at IT these days, it's little wonder that organi-

zational tensions and challenges are rising.

Despite the focus on technology, some industry analysts say the root of today's dysfunction can be traced to lingering silos in the business, organizational structures that measure performance vertically instead of horizontally, and an unwillingness to collaborate, which is fundamental to a corporate-wide, shared digital strategy.

CIOs and industry analysts weigh in on these and other telltale signs of IT dysfunction and offer advice on how to fix these issues before they derail transformative initiatives.

Projects don't move fast enough

In this scenario, IT organizations want to move quickly, but they're hopping from one project to the next—and those projects are often not the ones on the company's digital strategy priority list, nor those that have the best ROI or

will strengthen the organization. Direction comes from the department with the loudest voice.

"You've got this pressure for speed; we can't achieve fast unless we're all going fast in the same direction. They all have a different sense of prioritization," says Troy DuMoulin, vice president of research and development at Pink Elephant, a global IT change management training and consulting firm. Agile teams are iterating quickly with business units, closing the gap between IT and the business with short feedback loops and iterations. But when it's time to scale across the enterprise, that small-group collaboration isn't enough.

DevOps was created to help solve this problem by bringing all parts of the process together with its focus on collaboration, culture and teaming. "But many organizations that are actually using DevOps don't focus on culture and organizational issues they have

picked up on, but rather take a laser focus on the automation elements of continuous integration, testing and deployment," DuMoulin says. This concept of a cross-functional team is just "a Band-Aid to vertical silo thinking," he adds.

business partners may have expectations that if you [create applications] fast, that you also got it right on the first attempt," Strusievici says. In reality, a successful app requires many iterations before it can go live.

> ## "You've got this pressure for speed; **we can't achieve fast** unless we're all going fast in the same direction."
> —**TROY DUMOULIN**, VP OF RESEARCH AND DEVELOPMENT, PINK ELEPHANT

Business managers have a low opinion of IT

After years of leading Colliers International through its digital transformation and dealing with the pressure to create new business solutions quickly, CIO Mihai Strusievici faced some unfair criticism. Business leaders had grown frustrated with what they considered to be half-cooked ideas. "Our

It's just one example of how business managers might develop a low opinion of IT, which if left unresolved, can result in IT's disengagement from business operations.

In a low-confidence scenario, "the other managers in the organization have no interest in partnering with IT when they feel the IT department has little to offer them," says Ted Ross, CIO for the

> "A dysfunctional team doesn't have a **sense of vision or priorities** to guide them, [which] leads to ineffective and disjointed decision-making. **It ends up in execution failure at the core**." —**NIMESH MEHTA**, CIO, NATIONAL LIFE GROUP

City of Los Angeles Information Technology Agency (ITA). Not only does it lead to an influx of shadow IT, but it also creates a lack of visibility that causes security issues.

"The results of this dysfunction are dramatic," Ross says. "IT departments are seen as providing low value to the company at a time when technology is the largest differentiator for most organizations. Now, business managers can easily access a set of configurable, online solutions without really engaging the IT department. Without a concerted engagement effort by the IT department, they can become seen as obsolete in favor of third-party solutions."

The business divides and conquers IT

If business leaders have a low opinion of the IT organization, then they feel like they can manipulate it. A classic sign of dysfunction appears when business managers hear no from one IT team member but continue to pursue things with other team members until they get a yes.

"It's the old adage of divide and conquer," says Nimesh Mehta, CIO at financial services company National Life Group. "A dysfunctional team doesn't have a sense of vision or priorities to guide them, [which] leads to ineffective and disjointed decision-making. It ends up in execution failure at the core."

Low morale, high stress

These obviously big issues usually start with subtle cues—missed deadlines, sloppy execution, subpar projects. "But these relatively minor problems can quickly manifest into more significant challenges from which it can be much harder to recover," such as continued turnover or a major IT outage, says Steve Haindl, executive vice president of technology and innovation at Holman Enterprises.

This low morale could be attributed to the many roles that IT must assume, but it can also come from performance structures that aren't aligned with their many responsibilities, says Pink Elephant's DuMoulin.

IT staff usually assume three roles: They perform the functional tasks of IT and the project tasks assigned to them, and they participate in cross-functional teams with other areas of the organization. Their performance, however, is based primarily, "and sometimes solely, on only the functional tasks, where they only spend a third of their time," he says.

Meanwhile, middle managers struggle to meet their own performance goals as they keep lending out IT staff to other teams. "They're distributing their capacity, but we don't change how we're measuring them and yet still hold them accountable to their own P&L

and the projects that they have [to complete]," says DuMoulin. "Job descriptions, functions and roles are not aligned with this sense of collaboration. Performance management structures contradict these goals."

How to fix it

Fixing IT dysfunction starts by making sure that everyone—not only the IT department but the entire organization—is aligned with the business' objectives. It all begins with leadership, Haindl says. "There needs to be a clear vision, a clear understanding of your company's key strategic priorities."

In the IT department, alignment continues by setting a clear, concise vision and performance strategy for the team. "If your vision has an elevator speech for the Empire State Building, then you will have a dysfunctional team that is navigating in the fog," Mehta says. "Have a teachable point of view that is concise and simple."

With those fundamental princi-

ples in place, you can begin to hone in on your IT department and determine how your IT resources will support and execute those objectives, Haindl says. To take it a step further, look to foster an office environment that nurtures seamless collaboration, Haindl adds: "An IT department that embraces trust, transparency and open com-

munication will be well positioned to overcome virtually any challenge and deliver truly meaningful results for your business."

CIOs play a unique role in translating the value of an IT department to their business counterparts, Ross says. To fix the dysfunction of IT department disengagement from the business, CIOs must engage their business counterparts and learn

their operations and key objectives, and help start the dialogue on how technology can advance their goals. Second, CIOs must work to build a culture of engagement within their IT department. There must be clear connections between IT projects and business outcomes. The IT staff must see their role as serving their customers and not simply maintain-
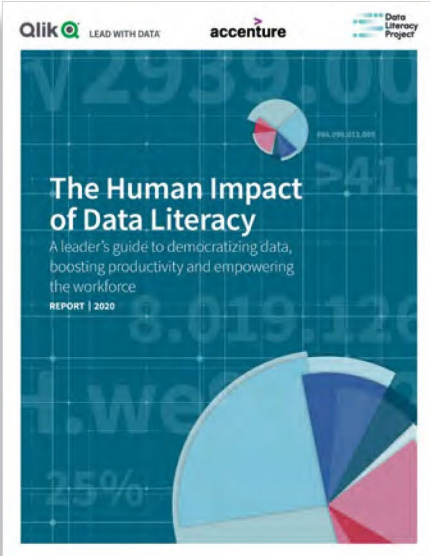
ing apps and infrastructure.

Third, IT staff must be developed with the non-technical skills expected in the modern IT department, Ross says. This includes public speaking, interpersonal communications and customer service. "While many IT staff chose this field because of their interest in tech, they will need to expand their toolkit to include effective customer

interactions," Ross says.

And when it comes to lowering stress and infighting over shared resources, "we have to realign our management and organizational structures to more horizontal perspectives," DuMoulin says.

Quoting Conway's Law, DuMoulin still believes that "structure dictates architecture," as first noted

by computer programmer Melvin Conway in the 1960s.

"We are the environment we create" he says. The key to solving IT dysfunction starts with shifting to horizontal structures that take into account—and reward—the shifting role of IT. ♦

Stacy Collett is a regular contributor to CIO.com.

In the IT department, **alignment** continues by setting a clear, concise vision and **performance strategy** for the team.

The Human Impact of Data Literacy

Upskilling the data capabilities of the entire workforce has the power to exponentially increase the business value of data. In this report co-authored by Qlik® and Accenture, you'll discover the remarkable impact of data literacy, including its $500M potential for enterprises. You'll also learn three barriers preventing businesses from becoming data driven and five steps for building a data-informed workforce.

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The Data Literacy Index

For the first time, Qlik® and the Data Literacy Project have established a statistical correlation between data literacy and company performance. In the process, they uncovered a $500M enterprise opportunity. In this report, you'll learn where data literacy impacts corporate performance, how different geographies and industries rank, and why enterprises are falling short. You'll also get a measurement to use as a benchmark for your organization.

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The Top 4 ROI Areas for Data-Driven Transformation

The opportunities for data-driven transformation are vast, and no organization can focus on all of them at once. That's why it's so important to understand the key areas where data makes the most impact. Through experience gained by helping over 50,000 customers, Qlik identified four key value categories that enable leaders to focus their efforts and maximize ROI, including top use cases within each category.

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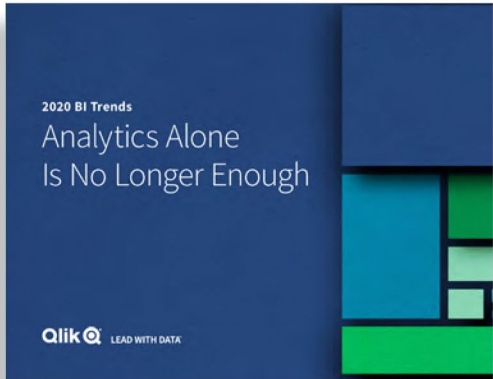
Analytics Alone Is No Longer Enough

Despite countless ways to collect information and connect people, the world has become more fragmented than ever. When it comes to data, that fragmentation is holding businesses back. In the coming years, leading enterprises will do more than analyze their data; they'll synthesize it. This 2020 trends e-book reveals which coming trends will facilitate both synthesis and analysis, including data literacy, ethical computing and metadata catalogs.

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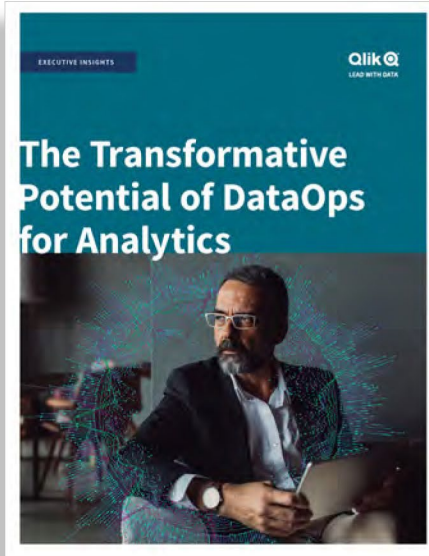
The Transformative Potential of DataOps for Analytics

Any executive tackling digital transformation understands the challenges of making data available to the organization. In this executive brief, Qlik® CEO Mike Capone provides an introduction to the emerging discipline of DataOps for Analytics, sharing the many benefits your organization can expect to see, including integration, automation, governance, data literacy and data democratization.

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