

VERSION NEXT

NOW

TEKSYSTEMS DATA ISSUE | JUNE 2020

ACCELERATION POWERED BY DATA

Pivoting Business Models to Succeed in Disruption



Actionable Insight Requires Refinement

Finding clarity in disruption through data

It's often said that data is the new oil. Long overlooked and considered only a supplemental tool for corporate decision-making, organizations now recognize that data drives innovation and success. With coalesced, real-time data from every source, companies can see what customers want, what even the smallest links in their supply chains are doing, how market factors are shaping short- and long-term demand for products and services, and how they can best prepare internally to respond to those and many other conditions. Data is indeed the oil to drive every component of business.

In this issue of Version Next, Now, we look at why and how organizations need to find clarity, through data, on not just a daily basis, but on an hour-by-hour basis. Insights from customers and supply chain partners, the many macro and micro forces that drive global and local commerce, and the seemingly infinite number of internal processes and decisions (everything from hiring to performance to employee

wellness) will help companies respond to change with intelligence and confidence. A data-driven culture determines the success of new products and services and puts organizations in the right place to decide what should come after that, and after that, and after that. The retailer Giant Eagle is just one example, as seen in this issue, of a company that recognizes data knows best. It uses data to quickly respond to customer expectations.

Any organization can try to move with the times. Only an organization that's committed to properly analyzing and acting on data insights can move with the times and not regret it.

Albert McKeon



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Q1

THE CHANGE AGENT

Disruption forces organizations to rethink how they operate and how to continue delivering value to customers. Action based on instinct is high-risk. Data is at the root of sound decision-making, and it offers the most promise to achieve cost savings, increase revenue opportunities, reduce risk and improve customer experiences.

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MARKETING PERSPECTIVE

We examine how Snowflake can help organizations inform business through near real-time insights.

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THE CHANGE AGENT

TEKsystems Data Analytics and Insights leaders Jennifer Kling and Ram Palaniappan provide their perspective on data as an enabler for businesses to make strategic, better informed decisions and shift business models quickly.

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THE CHANGE AGENT

When a crisis strikes, organizations must act with speed and agility. Accurate, real-time data can deliver the insights that enable leaders to act with confidence.

01

Navigating Disruption

During disruption, organizations are forced to pivot and quickly respond. While you can plan for potential events, it isn't until a change occurs that the organization is tested. Resiliency is rooted in data. When organizations develop a response plan, they need transparency and an understanding of how to leverage and optimize data. Make your data a competitive advantage—especially when disruption requires quick action.

A data strategy is crucial to truly [maximize the value of enterprise data](#). As a general rule, any data strategy should be evaluated every three to five years to ensure it continues to align with the long-term goals of the overall business. But with unanticipated disruption—whether internal to the organization or resulting from external factors such as a storm or economic downturn—immediate action is required. To weather the storm, disruption demands organizations act swiftly and with agility. They can only do that with accurate, real-time data. It needs to be collected, evaluated and optimized—on a moment's notice.



Plan, Activate, Evaluate

COVID-19 has tested the world in ways not seen since World War II. The virus has cost many human lives and sickened thousands of others, and it has nearly halted the global economy. It has pushed people to their limits, with stay-at-home orders and social distancing guidelines in an effort to flatten the curve. It has incumbered businesses in ways no one could have predicted. To survive the pandemic, organizations needed to leverage data more effectively, get scrappy and evolve. Every industry was impacted—some more than others, but no one was immune. Companies quickly shifted to a remote workforce, technology projects were delayed or expedited, and many had to reduce headcount. Companies able to stay open in some form were required to rethink how they deliver their goods and services. The supply chain was squeezed, and organizations at all ends of it had to adapt. Unprecedented change forced immediate adjustments for survival. Instead of having weeks or months to plan and make decisions, organizations had to act in a matter of days or even hours.

The pandemic is an extreme example of market disruption. But disruption takes many forms and it seems impossible to prepare for every scenario. In the face of any uncertainty, the value of data is paramount. It is the difference between gut feeling and evidence-based, informed decision-making. Leveraging data, organizations can make real-time decisions with confidence; it enables and influences their ability to be agile, work smarter. And agility is critical in order to respond to disruption. Organizations need to plan a business model, act on collecting data relentlessly and reconfigure the business model if data suggests the plan isn't working.

*Data analytics is a **foundational pillar to DX success** and one of the top-most adopted technology areas*

(State of Digital Transformation 2020 report, TEKsystems).



SECTION 01

More often than not, disruption isn't immediately apparent. Change happens incrementally, almost imperceptibly. That's why businesses need to be in the proper position to take advantage of data insights. Across industries, data is driving the future, enabling [digital transformation, empowering automation](#) and informing businesses' evolution. All are working with similar goals in mind: **reduce costs, increase revenue, mitigate risk and improve the customer experience.** Data analytics acts as a leading indicator with the power and potential to guide industries through their evolving business strategy as they aim for these goals.

- » Take [healthcare](#). Patients have encountered virtual healthcare, personalized, in-home health assistance and telehealth delivery. Not only do these innovations enhance the customer experience, but they also create efficiencies for healthcare providers.
- » In [manufacturing](#), there's a push toward self-sustaining, localized operations, automated quality, predictive maintenance, intelligent supply/inventory management and transportation management. These efforts drive efficiency and ensure goods are delivered in the right volume, at the right time and place.

- » Data has enabled [financial services](#) organizations to implement autonomous fraud prevention and loan approvals, which reduce risk, save money and improve the customer experience.
- » In [retail](#), features such as smart checkout, virtual personal assistants, augmented reality applications that let consumers "see" how products work and look, and recommendation engines help predict buying preferences to enhance the customer experience.

Data has powered and informed these future-facing solutions and helps organizations save money, increase revenue opportunities, reduce risk, improve the customer experience.



35%

Spending on customer experience expected to continue to **grow 35% in the next three years**

(CMO Survey, 2020)

MARKET PERSPECTIVE

Snowflake's cloud-built data platform enables organizations to be data-driven by delivering instant elasticity and secure data sharing across multiple clouds. Snowflake discussed the importance of near real-time analytics and how to leverage more data, faster, in a recent [white paper](#), and we explore some of those insights here.

02

Informing Business Through Data-Driven Insights



Why is third-party data critical for personalization?



- » **Snowflake:** Your customer data has one major limitation: It only shows you the ways in which people interact with your own company. Even if you are storing and analyzing brand data from dozens of customer touchpoints, that information can't provide a complete view into who your customers are and what drives their behavior. You can achieve a 360-degree view when you bolster your customer data with third-party data sources, but putting that into practice with a legacy data warehouse can be difficult.⁹



What are some of the barriers associated with the use of third-party data?



- » **Snowflake:** A robust ecosystem of companies has emerged to sell demographic data, purchasing data, life-event data, and other data types to help build your customer profiles. This information can increase the ROI of your personalization initiatives. However, getting external data into your environment and converting it into a usable format is challenging for technical teams, since ingesting data from even a single source can require considerable engineering resources over the course of weeks or even months.⁹



How does Snowflake deliver scalable data enrichment?



- » **Snowflake:** Built on top of Snowflake's secure data-sharing technology, Snowflake Data Marketplace allows companies to publish a variety of data sets, which then become immediately available for use or purchase by other Snowflake users. Users gain instant access to always up-to-date data from a robust and growing pipeline of providers, including Weather Source, Wunderman, LiveRamp, and FactSet. This external data is kept up to date within the Snowflake platform, enabling you to quickly and easily enrich your own customer data to derive more detailed, unique insights. By integrating your data with third-party data from the Snowflake Data Marketplace, you can extract insights in a fraction of the time it would otherwise take to engage with external data sources. As a result, you can take campaigns to market faster, conduct real-time testing and optimization, and obtain a 360-degree view of customers to accelerate your personalization initiatives.⁹

Snowflake equips organizations with a single, integrated platform that offers the only data warehouse built for any cloud; instant, secure and governed access to their entire network of data; and a core architecture to enable many other types of data workloads, including a single platform for developing modern data applications. Click [here](#) to read the complete white paper.

OUR PERSPECTIVE

TEKsystems Data Analytics and Insights leaders Jennifer Kling and Ram Palaniappan provide their perspective on data as an enabler for businesses to make strategic, better-informed decisions and shift business models quickly.



Shift Smartly with Data

Change is constant. How organizations respond and adapt to it is the variable. Although it was previously viewed as a supporting asset, data has evolved into a mission-critical component to success and the catalyst for change. Data fuels digital transformation strategies across the enterprise.

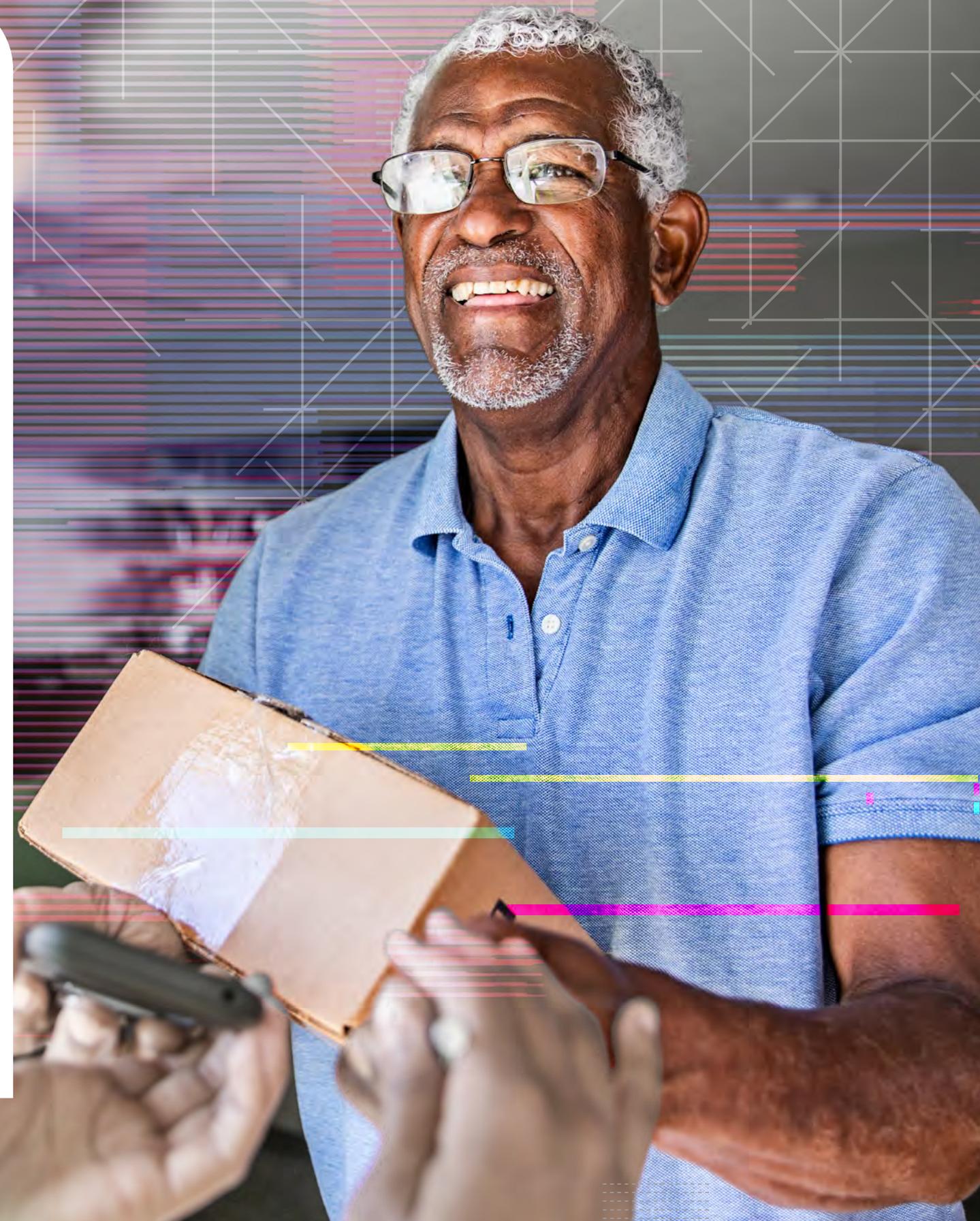
Whether responding to disruption or continuing business as usual, data is the competitive advantage if—and only if—leveraged appropriately. Think of it as a journey, not a single solution for a snapshot in time. “COVID-19 has exposed problems that organizations likely already knew were there,” says Jennifer Kling, TEKsystems Director of Enterprise Applications, Data Analytics and Insights. “The right data is going to provide insights—both predictive and prescriptive—that will help them plan and prepare for what’s next. This can be a competitive advantage.” You must have a vision for where your organization intends to go in the next three to five years, and then continuously adjust by way of the insights and opportunities your modern data strategy generates. Data lets organizations shift smartly.

For example, data illustrates how an organization is tracking toward their [digital transformation](#) goals. That insight can then be acted on to pivot and adjust accordingly. “Organizations know data is critical, but what many don’t realize is what type of data is needed for their organization,” explains TEKsystems

Senior Practice Director of Data Analytics and Insights Ram Palaniappan. “They’re always inward looking, but I think a huge opportunity is looking outward.” Pairing internal analytics with external syndicated data, competitor data and social data is a more holistic approach to data strategy that can be extremely insightful and influence decisions.

*By 2023, DX spending will grow to **over 50% of all ICT investment from 36% today**, with the largest growth in data intelligence and analytics as companies create information-based competitive advantages.*

(IDC FutureScape 2020: State of DX, IDC)



TEKsystems' Tips

Spend is constantly being scrutinized. A well-devised data strategy can enable cost savings, increase revenue, mitigate risk and improve user experiences. To maximize the value of your data strategy and enterprise data:



Create clarity Clearly define data platforms and get consensus on how data is defined and managed across the enterprise.



Identify opportunities to innovate and transform Many companies have been forced to change business models, evolve the way they interact with customers and enhance existing services (e.g., curbside pickup). Use data to do things differently, while engaging customers in meaningful ways. Make the data capture worth the investment.



Monitor the supply chain Visibility across all layers of the supply chain is critical to forecasting needs and understanding where there are gaps (e.g., from warehouses, raw materials suppliers, assemblers, wholesalers, individual retailers/distributors).



Nurture talent Finding a good cultural fit can be the hardest part. Upskill existing talent when possible. Think about how automation and machine learning tools can simplify your technology so a broader population of employees can derive value and insights from your analytics.



Cultivate a data-driven culture Create a cultural mindset that sees and believes in the value of data, trusts and relies on it to pivot and make sound business decisions, with greater confidence.



Real-World Application: Giant Eagle

The Pittsburgh-based supermarket and convenience company, Giant Eagle, is one of the largest private corporations in the country, serving 4.6 million customers each year. With more than 400 stores across Pennsylvania, Ohio, West Virginia, Maryland and Indiana, and up to 60,000 unique items in any location, the retailer looks for ways to innovate its complex supply chain. All while maximizing efficiencies to reduce costs, increase revenue, mitigate risk and improve the customer experience.

Digital transformation technologies have enabled Giant Eagle to remain nimble and continue serving customer needs in a time of disruption. In fact, in response to the pandemic they introduced a “totally contactless” shopping experience at one of their stores. This free service has not only tripled the number of e-commerce customers they had before, but also boosted employment opportunities in a time of hardship.

Data analytics plays a critical role in informing any process adjustments. For example, as a grocer, product shelf life is shorter than that of nonfood retailers, and the importance of managing inventory can't be underestimated. They implemented technologies such as transportation management and warehouse management systems to

enhance visibility and create logistical efficiencies. Monitoring fluctuations in inventory and anticipating demands ensures the supermarket doesn't have too much or too little of each product at any given time. “Our data integrity and being closely connected to the suppliers and distribution centers ensures a spot-on forecast,” says Joseph Hurley, senior vice president of supply chain at Giant Eagle. “We know what's going to happen and the amount we'll need.”

Even before the pandemic the company recognized customers were coming to expect different ways to interact with brands and for technology to meet them where they are. They became the first major supermarket retailer in the area to launch a mobile shopping app, Giant Eagle Mobile Shopper, with features including digital coupons and fuel rewards. “The notion of the ‘traditional’ customer shopping experience no longer exists,” says Giant Eagle spokesperson, Dan Donovan.

Data has enabled Giant Eagle to quickly innovate and adapt to the current landscape, and to meet customers' basic needs, regardless of what's going on in the world.

All information shared herein was accessed from public sources as indicated.



TEKsystems Data Portfolio

We believe business success is grounded in data-driven decision-making.

300+ customers, including 20% of the Fortune 100 Delivering expertise in modern cloud analytics, data modernization service, AI and machine learning, master data management, data governance and quality, real-time analytics and IoT.

Proprietary tools to accelerate timelines and delivery results

Millions of lines of code of TEKsystems IP leveraged covering 55+ accelerators across AI, conversational platform, data engineering, data visualization and cloud analytics.

In good company

Transformational technologies demand equally transformative partnerships. TEKsystems is proud to deliver data insight solutions across the full spectrum of leading platforms to drive data as organizations' competitive advantage.

The views and opinions expressed in this publication are those of the authors and do not necessarily reflect the views of TEKsystems, Inc. or its related entities.

Meet Our Contributors



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Jennifer Kling is a high-energy team player with in-depth experience across multiple industries and experience supporting technical and functional business requirements across a multitude of corporate functions. With 26 years of IT experience, including more than 17 years of SAP experience and 40 global enterprise implementations, Jennifer has proven results in all phases of the software development life cycle. She has expertise in optimizing organizations, increasing ROI and reducing total cost of ownership.



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Senior leader, innovator and technologist Ram Palaniappan brings broad experience in managing data at scale, AI and machine learning, and cloud solutions. Ram has worked with Oracle and Deloitte and is a featured thought leader in the space, including contributing to articles in major IT publications, such as Information Week, and serving as a featured speaker at multiple forums and conferences.



About TEKsystems®

We're partners in transformation. We help clients activate ideas and solutions to take advantage of a new world of opportunity. We are a team of 80,000 strong, working with over 6,000 clients, including 80% of the Fortune 500 across North America, Europe and Asia. As an industry leader in Full-Stack Technology Services, Talent Services and real-world application, we work with progressive leaders to drive change. That's the power of true partnership. TEKsystems is an Allegis Group company.

[TEKsystems.com](https://www.teksystems.com)



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Albert McKeon is the contributing editor for Version Next, Now, TEKsystems' quarterly publication. He has written an estimated 5,000 articles and has received leading journalism industry recognition, including the New England Press Association's Journalist of the Year honor. He writes for magazines and news services and creates content for organizations.



Listen Now

Don't miss Jennifer Kling and Ram Palaniappan, who appeared on The [Agile World](#) podcast. In a three-part series, host, author and business expert, Greg Kihlström, sits down with Jennifer and Ram and discusses how organizations can use data to pivot business models in times of disruption.



Be in the Know

See what's coming up next for [Version Next, Now](#) and check out our previous issues.

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Sources

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