

CIO | EXCHANGE

Data in Action: A blueprint for transformation

CIO Exchange Brief

This CIO Exchange Brief is part of a series that summarizes key points discussed in Oracle's CIO Exchange events. In these virtual events, hosted by Oracle CIO Jae Evans, global IT executives discuss the latest topics with acclaimed thought leaders.

DJ Patil, former U.S. Chief Data Scientist, joined us for a recent event to cover how technology leaders use data and analytics to transform businesses and industries.

This brief highlights the key takeaways from the event:

- 1.** Today's data landscape is multi-disciplinary
- 2.** Generate value from data by putting it into action
- 3.** Create a blueprint to transform with data
- 4.** A CTO perspective: data transforms the sport of sailing



1 Today's data landscape is multi-disciplinary

When it comes to the future of data use, Patil points to the fact that data is multi-disciplinary. This means that the biggest advancement of opportunities ahead of us will succeed due to a combination of research, computer science, industry, and—perhaps the most important—talent. Data scientists who can work with data in novel ways to tell stories will have a transformational effect across industries, leading change in the way data is used by addressing data ownership, access, and availability.

The way we think about data is often separate from technology, viewed through the lens of how it affects education, policy, perception, and psychology. Former Chief Data Scientist for the US government, DJ Patil, has experienced this first-hand.

At the beginning of the pandemic, Patil put together a team of data scientists to help rebuild models that would provide the government with data to inform COVID-19 related policy decisions. But two major issues quickly became clear: the data wasn't coming in fast enough, and it wasn't helping answer key questions.

This challenge faced by Patil and his team isn't unique. Many organizations are overwhelmed when it comes to data. Whether you lack real-time access to information, or are stymied by advanced technologies, Patil recommends that you start by keeping it simple.

1 Today's data landscape is multi-disciplinary

Getting started with data:

✓ Create a data dictionary

That defines, names, and provides information about the data in a database. This can easily provide users with basic information that encourages them to start looking at the data.

✓ Ask a question

Rather than guess at answers, look for new ways to capture data, such as qualitative surveys, that complement existing data capture methods and provide faster, directional insights.

✓ Make it "bite sized"

By gathering insights from small pieces of data that can help you start asking more complex questions.



2

Generate value from data by putting it into action

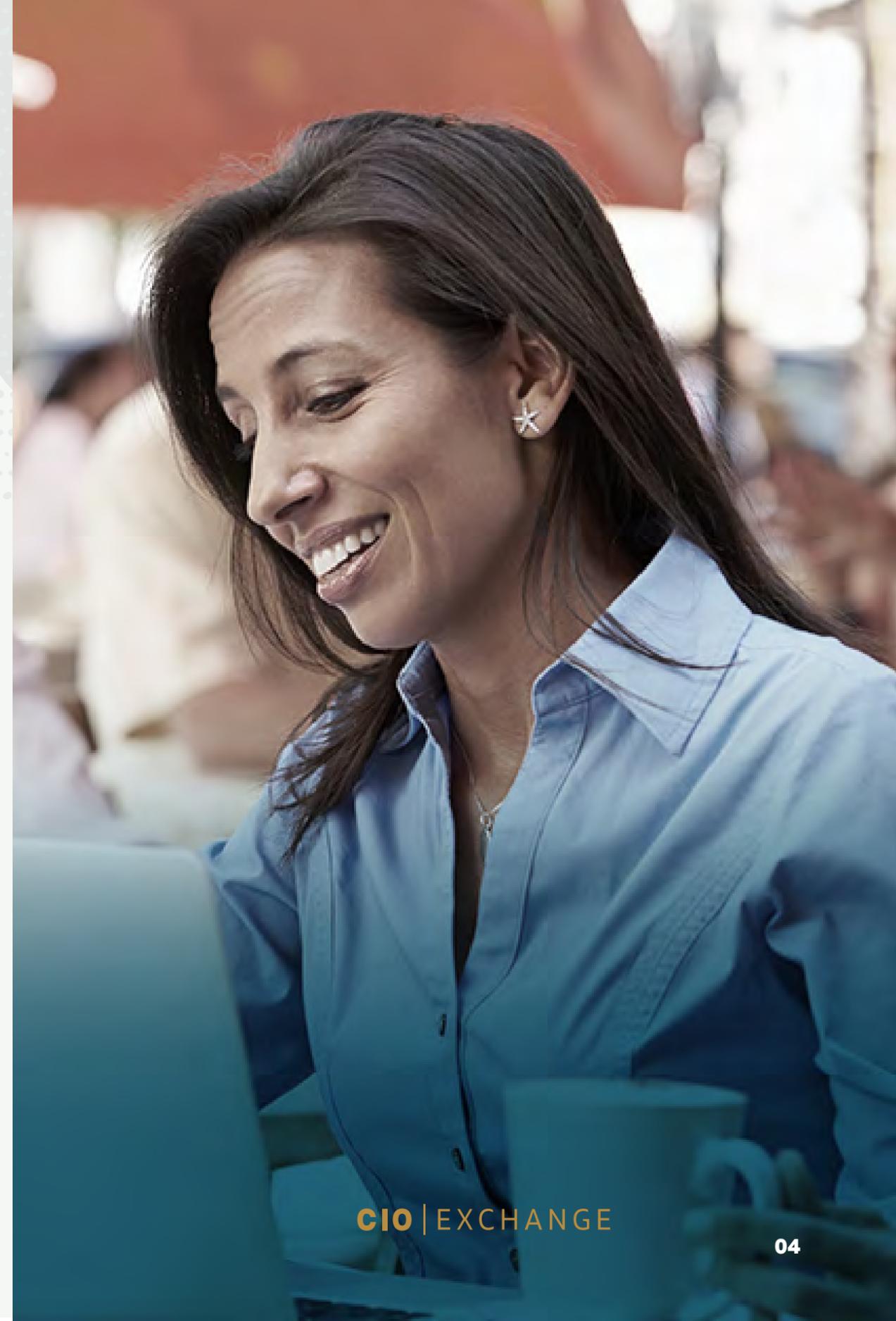
Data analytics is beneficial to any organization because it creates personalized, frictionless customer relationships that are essential to building loyalty and driving growth.

When combined with business acumen, the latest data science and data engineering capabilities can help organizations uncover opportunities for new growth. But how do you get there? Elaine Priest, Head of Data Transformation at NatWest, believes that it all starts with putting data into action.

NatWest, like many organizations, has data pipelines and applications that have grown organically over time. This can lead to complex architectures and business processes. Technology can address these complexities. Migrating to the cloud can help reduce and simplify your data architecture footprint, improving your ability to compute and store large amounts of data cheaply and effectively.

“[We] had to rely on data to make decisions, which forced senior executives to look at data in a different way.”

– Elaine Priest, Head of Data Transformation, NatWest



2 Generate value from data by putting it into action

Tips for putting data into action:

- ✓ **Make data part of your overarching corporate strategy.**
Having the right data, the right quality, and at the right time is fundamental to creating new value.
- ✓ **Build a better data culture.**
Data training isn't just for data users. By providing training across your organization, every person can better understand their role and relationship with data and how it impacts the business.
- ✓ **Be strategic and intentional.**
When you're thinking about how to use data, ask yourself, "What is our purpose and how does data analytics help us achieve that?"

- ✓ **Listen to what your customers are saying, and what they aren't.**
Customers won't always be able to imagine the solutions to their problems. Data and analytics should be intuitive to use, both from an external customer perspective and an internal perspective.
- ✓ **Build stakeholder confidence in data.**
Be curious and embrace risk so that you can deliver on the transformational agenda. This can help foster executive sponsorship and stakeholder buy-in.





3 Create a blueprint to transform with data

For CIOs evaluating their organization's blueprint for data and analytics, there are two key words to look for: outcomes and augmentation.

Despite numerous advances in technology and tooling, the impact of data analytics today is still limited to the population of data professionals, which includes data analysts, data scientists, data engineers, and most business users. Oracle's Greg Pavlik, Senior Vice President of AI, Machine Learning and Data Services, and T.K. Anand, Senior Vice President of Analytics discuss how augmented analytics—powered by AI, machine learning, and natural language—can help tackle discrete problems to provide more transparency into the needs of the business.

Most organizations are on the path to becoming data driven but aren't yet actually driven by their data. Outcomes and augmentation support the concept of making AI ubiquitous, easy to use, and transformational to the business. When data professionals can produce curated data science models that are tailored to their organization's needs, businesses can benefit from capabilities such as data podcasts in the mobile app and automatic insights, powered by machine learning.

4 CTO perspective: Data transforms the sport of sailing

Warren Jones, the CTO of SailGP, explains how data transformed the company's annual sailing championship. While planning for geographical challenges and venues, thinking about how to capture data turned into an essential part of the process.

Key Points

- ✓ With 30,000 sensors, there was an abundance of data to be captured, requiring about 44 billion data requests to the Oracle Autonomous Database.
- ✓ SailGP identified approximately 500 data points required to make an event successful, ranging from visualizations of people watching at home to the activity at the racecourse.
- ✓ With Oracle Cloud Infrastructure (OCI), SailGP was able to openly share data across the organization, forecast situations, and create augmented reality to map out the courses for athletes.

This significant amount of data needed to be monitored, and key metrics needed to be identified to improve performance and strategy within the FFT. Analytics helped safeguard against potential problems for athletes and the boats. OCI Anomaly Detection package found anomalies and helped predict problems ahead of time.

“Prioritize what you want to accomplish and don't rush it. The data will inform your roadmap.”

– Warren Jones, Chief Technology Officer, SailGP



Key Takeaways

Business leaders have been able to connect with their customers to reach a higher level of performance using data. By reevaluating data strategies, organizations can support priority initiatives by conducting complex analyses and turning them into thoughtful choices.

Get more from your data now by understanding:

- How to apply productive use of data while adapting to market changes
- How to improve processes and performance
- How to drive a data-driven culture to increase operational efficiency



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