

Data Leverage for CIOs: The Key to Intelligent Disruption

How to accelerate data-driven digital transformation

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Introduction

Times like This Demand Intelligent Disruption

Times like This Demand Intelligent Disruption

For CIOs, digital transformation is a careerdefining proposition.

No matter your industry, the settled strategies, business models, and processes are all being disrupted—by competitors who have succeeded with their own digital transformation initiatives, or by new legacy-free entrants to the market.

As a CIO, CDO, or senior IT strategist, you need to guide your organization through your own digital transformation: through intelligent disruption. Not a knee-jerk reaction to change, but a strategic, guided transformation. That means getting serious about the not-sosecret weapon that drives the success of every digital transformation program: the intelligent use of data.

Today, every CIO—even most CEOs—will tell you how important data is to everything they do. But what's still alarmingly true is that most big organizations don't actually behave as if this is true.

- Data is still locked up in silos.
- Data governance is still a limited, project-based initiative.
- Project leaders start worrying about data far too late.
- Expensive analysts spend too much time wrangling data instead of leveraging it.

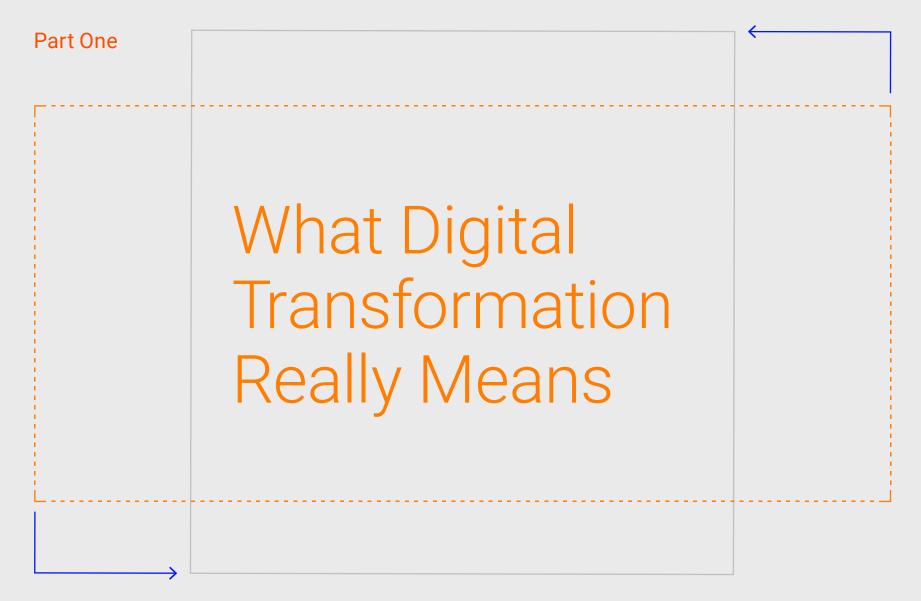
This short eBook is about changing that. About making sure that your digital transformations are *data-driven*. And about maximizing your "data leverage" to make that happen.

In our work with transformative companies, we've seen hundreds of major initiatives and one thing is clear: The businesses that take data seriously from the start are the ones that succeed (and the ones that don't, will struggle). Every time. Let's make sure you are one of the successful ones. "Do I worry about disruptors? Absolutely. Do I wake up in the middle of the night sometimes wondering what I've missed? Absolutely. It's about the disruptor that's coming up that we don't see. It's about keeping up with something that is just over the horizon."

Eddy Wagoner

Global CIO, Corporate Solutions Division JLL





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What Digital Transformation Really Means

Every organization will define digital transformation differently. You may not even be using those words to describe the big changes you're driving.

On the ground, you're probably talking about your specific program or initiative. You're using intelligent data to transform your business model so you can respond to disruption or be a disruptor. You may strive to:

- Power advanced analytics. To give data scientists, analysts, and business decision makers fast, self-service access to the insights they need.
- Put the customer at the center of everything. To create engaging experiences across channels, fed by the insights you derive from trusted, governed, relevant, and authoritative data.

- Streamline compliance and security. Intelligent security flows follow the data, so you're not bogged down by manual processes and unnecessary policies that constrain your creativity.
- Modernize your infrastructure.
 By leveraging cloud-based platforms and services while supporting applications that you're keeping on-premises.
- Tap into the Internet of Things and AI.
 Using sensor data and machine learning to not only anticipate service needs before they turn into customer problems, but to also make intelligent recommendations via predictive analytics.

In other words, you're dealing with one or more of the major trends that are driving the need for data-driven transformation today:

- Differentiated customer engagement
- The journey to the cloud
- Driving value from big data analytics and data lakes
- The rise of AI and machine learning
- The new intelligent security

Make Yours Data-Driven

"The most important thing in any type of digital transformation or journey is to understand the overarching strategic goals of the organization. Without that foundation, I think everything else is going to be a struggle. You're going to be bringing technology and solutions to bear without understanding the problem fully."

Andrew McIntyre

VP of Technology Chicago Cubs Whatever kind of transformation you're going through, make sure you start with the data. Organizations are finding success with datadriven change initiatives.

The Chicago Cubs use intelligent data to power three primary initiatives. First, enhancing customer engagement throughout fans' lifelong relationships with the team (customer relationship management). Second, informing both internal business decisions and fan interactions that drive experience, not just revenue (enterprise data management). And third, on the infrastructure side, data drives the provision of wireless across the entire campus for the business and fans, delivering a customer service but also analyzing its usage for ongoing improvement.

JLL, the commercial real estate services company, uses intelligent data to gather, master, and analyze huge volumes of data from multiple sources, to make smarter decisions about building design and about which sites will make the best investments in future. Digital transformations are all different, but one fact holds true: Successful transformation depends on the intelligent management of data. That means the whole organization needs to fundamentally transform the way it thinks about data.

CIOs already know this. The challenge is to help the whole enterprise see that it's time to stop treating data as just an operational tool and to recognize that it's a strategic asset with huge potential to create opportunities, rise to challenges, and accelerate intelligent disruption. In other words, it's time to maximize your data leverage.

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Data Leverage: Unleashing the Power of Data

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Data Leverage: Unleashing the Power of Data

A lever is something that amplifies an input force to generate a greater output force. In other words, it gives you the power to do big things. That's exactly how data leverage works, too.

You already have the data—that's an existing asset. When you increase your data leverage, you multiply the power of trusted, accessible, and timely data to impact the business.

For instance, addressing the seven dimensions of data leverage (which we'll discuss shortly) across all kinds of customer data, as well as infrastructure usage data, allowed the Chicago Cubs to significantly improve customer engagement across their entire operation. Just as data touches every aspect of your business—every department, process, and discipline—data leverage unleashes the power of data to make an impact everywhere, not just in one project, and not just once but again and again.

The Seven Dimensions of Data Leverage

The degree of data leverage varies widely in any business. A highly siloed business bound by legacy technologies will have low data leverage. Its ability to turn data into transformative insights is severely limited.

But a business that treats its data as a strategic asset will work hard to improve its data leverage across seven critical dimensions. The more your data exhibits the following characteristics, the greater your data leverage.

1. Trusted

You can't make decisions based on data you don't trust. Trusted data is high-quality data that has been cleaned, mastered, integrated, and governed to create a single version of the truth about the things that matter most to your business (customers, products, stores, etc.).

Master Data Management (MDM), data quality, and data enrichment tools are now being applied to centralized enterprise data lakes as well as project-specific use cases—all to make data more trusted. So you can discover new insights from data that could transform the way you engage with customers.

2. Secure

Unless you're sure your data is secure—at rest and in motion—you can't unleash its power across the business. You'll be forced to keep it locked up or risk data breaches, regulatory fines, and customer privacy problems. Secure data is ready for use because it's protected.

New approaches to data security are wrapping security around the data itself, so the protection goes wherever the data goes—within your on-premises applications or in the cloud. Automated security intelligence tools can discover sensitive data that's exposed so you can take action. And whether you're cloud-first or working with a hybrid infrastructure, enhanced confidence in your security means you can approach the cloud your way, at your pace.

3. Governed

Data governance has risen to the top of the enterprise agenda as leaders recognize the critical importance of common business definitions and the need for transparency around data relationships and lineage. Governance isn't just about compliance. It's about leverage across the business.

A new generation of end-to-end data governance—built on top of an intelligent data platform (see below)—is extending the benefits of governance to all data stewards and users. And governed data gives you greater transparency around data relationship and lineage across the organization, increasing your ability to drive customer engagement.

4. Accessible

Data can no longer be the exclusive preserve of data scientists and analysts. As data users multiply in every department, it's vital to develop a self-service model so that more users, business decision makers as well as technical users, can access the data to discover insights.

Self-service data management makes it easy to create new data integrations between systems, then streamline the process of making the new mappings available to the whole enterprise. So users can access trusted data via the cloud quickly, to test and refine theories and insights on the fly.

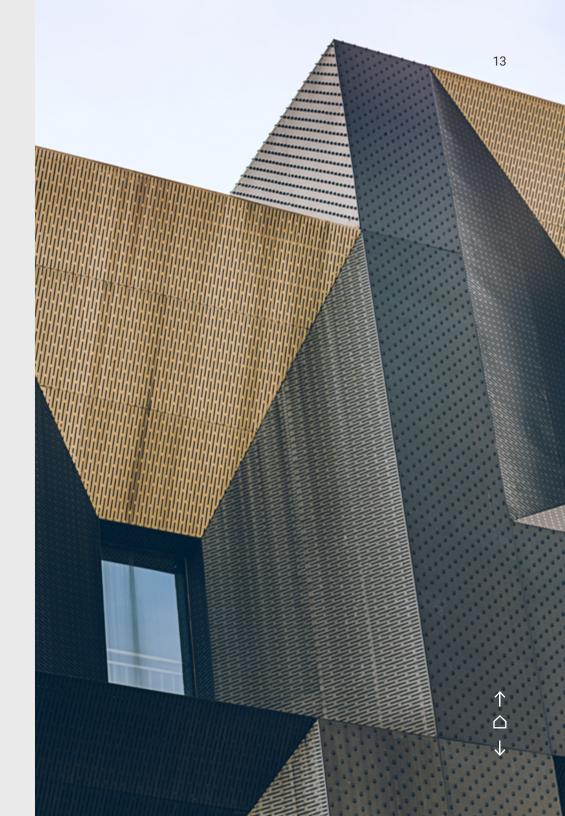
5. Timely

More and more use cases depend on fresh, real-time, streaming data. If your data infrastructure demands extensive extraction, loading, and transformation processes, your data won't be ready when needed. Timely data multiplies your data leverage.

Today's data integration solutions embrace streaming and real-time data—including from IoT and cloud apps—as well as data held in data stores. That means it's always up-to-date (without weeks of cleansing and prep), so you can experiment and pivot when you need to, with confidence and agility. "One of the things that we're starting to look at is: How do we use data to drive that productivity, drive that employee experience to a higher level, which has an impact beyond just the real estate. It actually has an impact into the productivity of the corporation."

Eddy Wagoner

Global CIO, Corporate Solutions Division JLL



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6. Relevant

Relevance is in the eye of the data consumer. If your data is locked up in overstructured data warehouses, your users' ability to gain the necessary insights or guidance to perform their jobs will be limited. You won't be able to give them the data they need because you're stuck with the data you have.

New data management approaches—like modern data lakes—let business users spin up new use cases driven by what's most relevant right now.

7. Actionable

The end game is to make all enterprise data actionable by the people, processes, systems, and algorithms that depend on it. Automating and systematizing data management makes that possible.

Data silos make your data dramatically less actionable. Integrating all of your data management technologies in a microservices architecture maximizes data leverage, extracting value from your data.

Part Three

The Intelligent Data Platform

The Intelligent Data Platform

Traditional, *ad hoc* data management tools were good enough for a simpler world when data was less ubiquitous and less central to success.

That world is gone.

Today's world is driven by market disruptions, so the data landscape is completely different:

 As data becomes more business-critical it's also skyrocketing in volume, variety, and complexity.

- Instead of a few highly trained users, enterprises must support thousands of nontechnical data users and stewards.
- Instead of living in structured, on-premises warehouses, data now lives everywhere: in the cloud, on prem, in big data Hadoop clusters, and in systems you don't even control (like social channels).

More data. More sources. More uses. More users.

Clearly, today's enterprise needs a new approach: the intelligent data platform.



An intelligent data platform is a modular, integrated ecosystem of data management tools—based on a microservices architecture —designed to streamline and automate all processes to increase data leverage across the business.

Some key concepts in that definition:

Modular

So you can start with a single solution or tool and add more as you extend your reach.

Integrated

So you aren't forced to become a data systems integrator: Your quality, security, integration, mastering, and governance tools all work together, across cloud and on premises.

Streamline

To accelerate all datadriven projects and initiatives and every process that depends on data.

Automate

Leveraging today's machine learning and Al tools to discover, tag, catalog, and index data with no human intervention.

Increase data

leverage Turning more of your data into greater and greater value.

Across the business

Not just in one application, department, or location.

ent, on.

Three "Eureka!" Moments

Most CIOs experience three "Eureka!" moments at some point during their digital transformation programs:

1. "My digital transformation initiatives all depend on actionable data."

Data that's ready to be put to use at all scales and by all relevant users: people, applications, machine learning systems, and more.

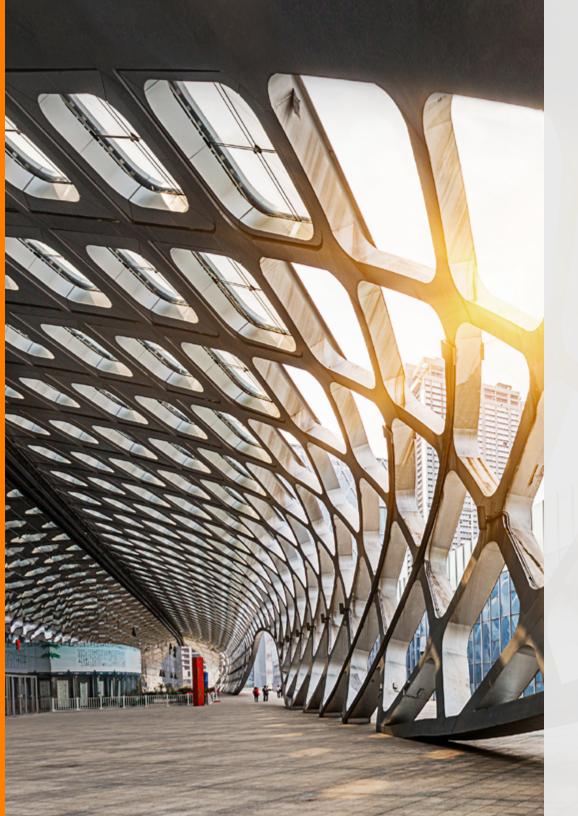
2."I need a centralized, governed approach to data management."

Because, without it, our data stays locked in silos and is never ready for action.

3."IT can't do it alone."

It takes more than a village to transform a business. Working closely with internal stakeholders the process guardians, the data stewards, and users—is critical.





"You've got to bring people along. One of the biggest challenges is helping people understand that it's a journey and to break the process down into component parts."

Eddy Wagoner Global CIO, Corporate Solutions Division JLL

Part Four

The Road to Data Leverage

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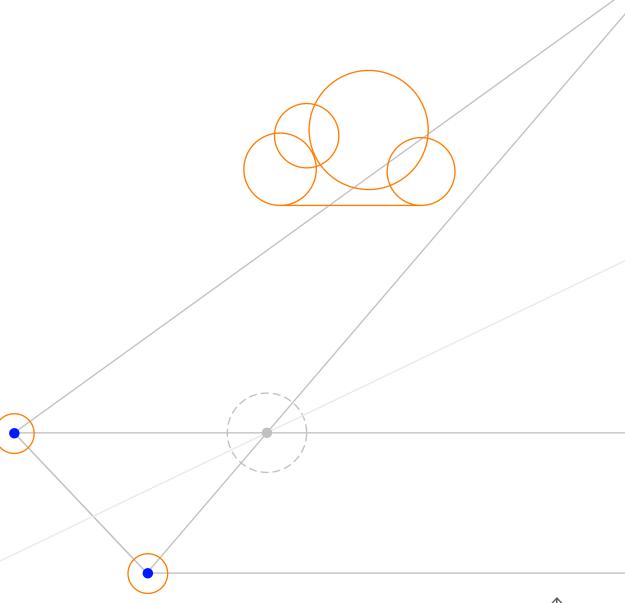
The Road to Data Leverage

Our first-hand experience using data for digital transformation has helped us help ambitious CIOs multiply their organizations' data leverage.

Our data-driven digital transformation journeynicknamed Roadtrip—is aimed at transforming Informatica® from a primarily licensed, on-premises software business to a primarily subscription- and cloud-based business.

To do that, we are changing every part of the entire enterprise—from sales and marketing to finance, accounting, customer services, engineering, and product management.

That means we are practicing what we preach: applying our own intelligent data platform to discover, define, apply policies to, monitor and measure our data, across the business.



The Rise of the Chief Data Officer

As enterprises look to increase their data leverage, more organizations are realizing that existing organizational structures must be reconsidered.

As data comes into its own as a department, and data management as a discipline, a dedicated leader must act as guardian of the organization's data and the strategic mind behind its governance and optimization: the Chief Data Officer.

CDOs in the spotlight

Forrester Consulting evaluated¹ the need for organizations to formalize the CDO role, and discovered the following:

 The rising importance of data signals the need for a data-focused executive, the CDO. According to Forrester, 45 percent of companies have already appointed a CDO.

- To be successful, CDOs need to master many skills: business, technology, data and the people skills to communicate across departments.
- Companies without CDOs are challenged.
 Organizations without a CDO struggle to orchestrate their business intelligence strategy more than companies that have appointed a CDO.
- Companies with CDOs experience business and IT benefits. They're data-driven, more able to scale, and can identify new cross-sell opportunities.
- The CDO role will evolve to be more strategic: Beyond just focusing on tactical issues, CDOs are improving analytics capabilities to monetize data in new ways.

Check out the eBook we created for this new data guardian: <u>Five Imperatives for the</u> <u>Chief Data Officer</u>.

Data governance, too, is going through its own transformation: In the past, it was often seen as a bureaucratic innovation-killer.

Today data governance is the foundation for a wide variety of data-driven digital transformation imperatives—and the focus now is on helping organizations use their data to power intelligent disruption not just once, but again and again. "The CDO will become the business decision maker for companies. It's much more critical to understand what the data is, what the data does, and what the data can do, than it is about the systems that support it."

Tony Malone CIO Highways England





Achieving Data Leverage: Five Techniques for Pivotal CIOs

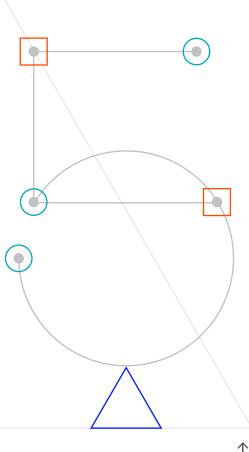
The CIOs leading intelligent disruption today are those who recognize that data leverage maximizing the impact of trusted, accessible, and timely data—gives them a much greater chance of making their data-driven digital transformation a success.

Here are five techniques for the modern data organization:

- 1. Centralize data management. Stop considering data management a projectlevel issue. It's an enterprise opportunity.
- 2. Take a platform approach. Capitalize on modular, integrated, and reusable tech, skills, integrations, and knowledge.

- **3. Think hybrid.** Understand that your data is in the cloud. It's also on premises. It's everywhere.
- **4. Optimize for agility and governance.** Fuel business and IT agility with effective data governance.
- 5. Enable business self-service. Make sure data is accessible to everyone.

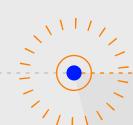
They're simple principles, but they're the foundation of the most successful data-driven digital transformations.



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Conclusion

It's Time to Truly Value Your Data



It's Time to Truly Value Your Data

Read the following phrases and see if any of them sound familiar:

- "To be honest, we're not sure where all of our data is."
- "We let project teams decide how they want to handle their data."
- "Data lives in a thousand places around here."
- "Everyone handles data differently. We don't want to dictate policies."

They're very possibly the kind of thing you might overhear in the office. Now reread them, but replace the word "data" with "money."

Suddenly they're the kind of comment that could cost someone their job.

And that's the point: Data is money.

It's time to treat it that way.



Getting There from Here

Whatever kind of intelligent disruption you're leading—whether it's to do with product innovation, analytics, or customer experience and engagement—it starts with one specific transformation: changing the way you think about your data, so you can unleash its power.

Informatica specializes in enabling the world's most progressive companies to deliver datadriven digital transformation outcomes.

It's all we do.

The Informatica[®] Intelligent Data Platform[™] lets you start your data-driven digital transformation journey anywhere and modularly expand your data management capabilities as new requirements arise. Our end-to-end data governance solution sits on top of that platform to help you govern your data like never before.

Our professional services team is here to get you started. We have expert practitioners who will provide you with the guidance you need on your journey—from helping define your data strategy, to identifying the right people and processes you need to make it happen, to implementing the technical capabilities of the Informatica platform.

Let's talk.

Read more at informatica.com/CIO.

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About Informatica

Digital transformation changes expectations: better service, faster delivery, with less cost. Businesses must transform to stay relevant and data holds the answers.

As the world's leader in Enterprise Cloud Data Management, we're prepared to help you intelligently lead—in any sector, category or niche. Informatica provides you with the foresight to become more agile, realize new growth opportunities or create new inventions. With 100 percent focus on everything data, we offer the versatility needed to succeed.

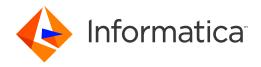
We invite you to explore all that Informatica has to offer—and unleash the power of data to drive your next intelligent disruption.

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