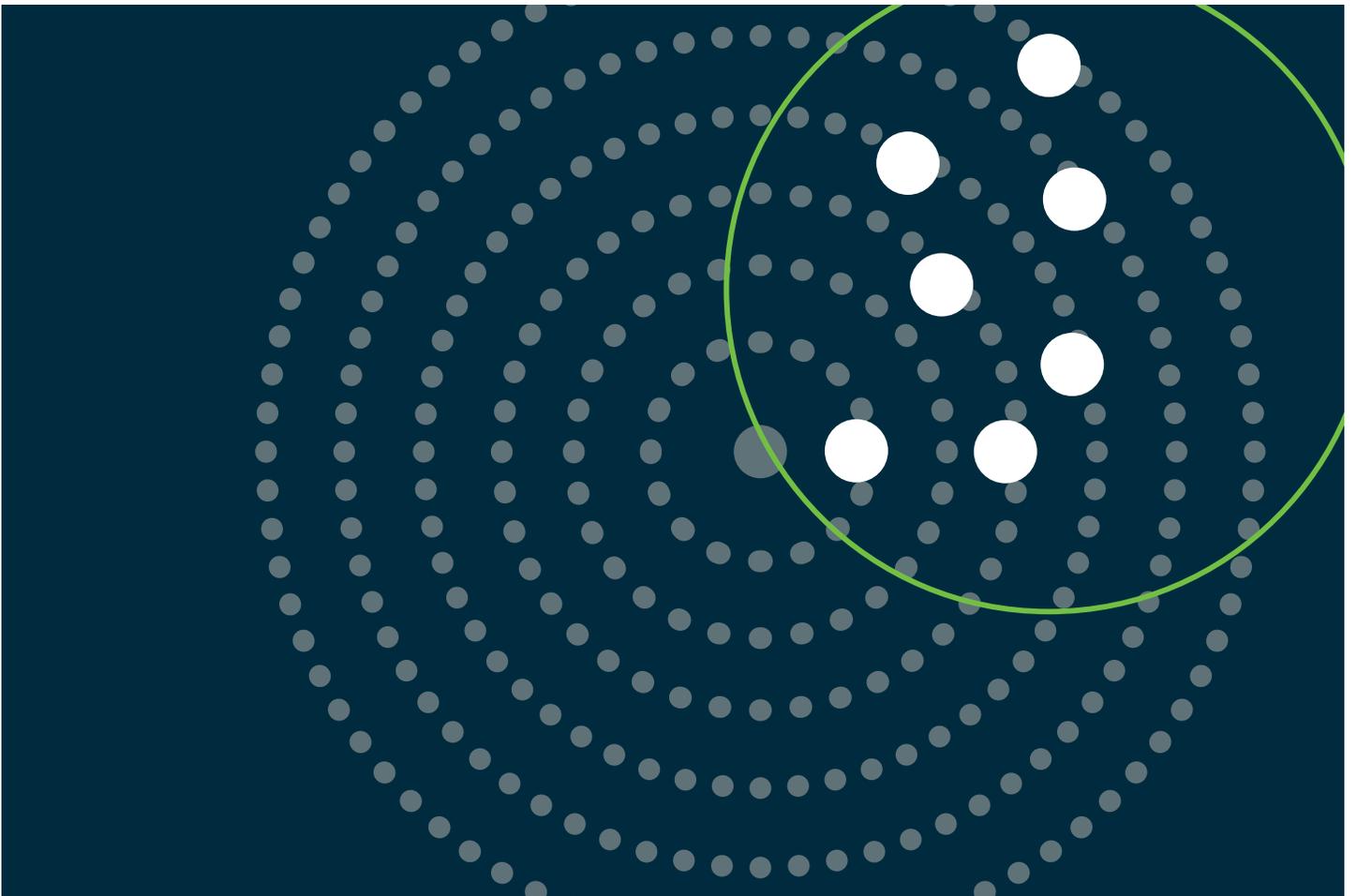
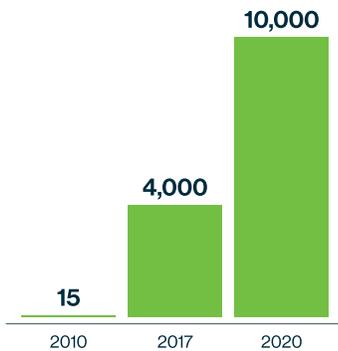


Data Intelligence

It's the future, and it's now



Large enterprises with a Chief Data Officer



Introduction

In 2010, the number of large enterprises with a Chief Data Officer (CDO) was 15. By 2017, it was up to 4,000. In 2020, it'll be over 10,000.

Those numbers are remarkable, but does the sheer quantity of CDOs reflect the impact that data is having across organizations? Do we have so much data that it requires a C-level executive to manage it, protect it and ensure compliance? Or is it that we need someone with a deep understanding of technologies that facilitate transformation?

Yes, data volumes are staggering, but that's not the real change. What's more important than even yottabytes is that data is at the center of our thinking, that data is the core of all digital transformation. Data allows organizations to optimize processes, increase efficiency and accelerate innovation. According to Gartner, data will be used to reinvent, digitize or eliminate 80% of business processes and products from just a decade ago.

“Data will digitize or eliminate 80% of business processes from the last decade.”

– Gartner

And this will all happen by next year.

We get the scale: data is everywhere, being generated and absorbed by all connected devices, in multiple formats, from billions of users. But is it more of a burden than an opportunity? When compliance challenges become the primary concern, fear of a breach overrides business interests, customer needs go unmet and potential insights remain untapped; so is data a constraint rather than an asset?

Let's hope not. Data affects every job in every company in every industry and it's essential to connect the right people to the right data, so Data Citizens increase efficiency and drive innovation in their organizations. With the proliferation of data, the evolving consumer and regulatory landscapes, and emerging technologies, there's never been a better time to achieve digital transformation. There's also never been a time when achieving that goal has been more important.

This is the journey we must take. We've accepted data management, but it's time to go beyond that. Now, let's embrace Data Intelligence.

Cross-industry, cross-platform, cross-function

So what does this mean? Well, we can already see signs of it in some forward-thinking industries and enterprises.

\$25b

Amount spent by four largest US banks on Data Intelligence

Consider financial services, a sector that must always walk the line between regulation and innovation. The industry faces many mandates governing data usage, yet the four biggest American banks now spend at least \$25 billion a year “perfecting better customer applications and learning to mine data more cleverly.” To cite just one example, the global conglomerate Morgan Stanley recently unveiled a ‘Data Center of Excellence’ to help address the volume of data and extract business value.

The healthcare industry may be even more regulated and here, too, data is critical—from building increased interoperability between medical records to generating better intelligence for operational decision-making. And as far as the industry's already gone, it's set to go much further. A range of devices in the Internet of Things (IoT) category will reinvent patient care through expedited data generation.

And let's not forget retail, an industry that continues to be disrupted by data generation, collation and analysis. Consumers now expect ultra-personalized recommendations, secure and seamless online payments, consistent customer experiences across channels and lightning-fast shipping. Call it the Amazon effect: operational transformation guided by optimization and powered with data. And again, we're in the early days—retailers are only beginning to harness Artificial Intelligence (AI) and Machine Learning (ML) to better manage inventory planning, track shopping habits, personalize brand engagement and optimize logistics. The changes we see now will be dwarfed by those still to come.

In all these cases, the idea of Data Intelligence affects more than just a few disciplines and executive levels—it's systemic and sweeping, reconstructing every function across the enterprise. This can be seen in companies committed to innovation and already experiencing the benefits.

Take Adobe, a familiar brand for creative individuals and disciplines. The company has dedicated itself to strengthening its data culture across every level of the organization, enabling employees to seamlessly access the essential information they need without having to learn new software. Today Adobe has reached that very ambitious goal, crystallized in a dashboard that drives the entire operation. It's a testament to the company's faith in the data—and to its belief that the data can be used to achieve true digital transformation.

That's the ideal of Data Intelligence playing out in a real-world setting.

Adobe: Data Intelligence by design

Adobe has come to define innovation and leadership in digital media and marketing with brands such as Photoshop, Marketo and Magento embedded throughout the industry. And in that spirit of forward motion, the company wanted to promote a data culture and enable 18,000 employees to seamlessly access the information they need without learning new software. For that, they called on Collibra.

Over the past four years, Adobe has used the Collibra Platform and other products on a series of initiatives that began with an effort to develop and certify common definitions of terms for all employees. These definitions underpin a cohesive data culture and help make the business more efficient. There have been many projects since. For example, there was the integration of Collibra with Tableau, which Adobe uses for reporting, and the transfer of metric definitions from Collibra to a MySQL database, which is subsequently brought into Tableau as a separate data source.

The benefits are undeniable: the team has seen an uptick in the number of people who want to dive deeper into the definition and dataset information within the Collibra Platform after seeing the mouseover. Today, Adobe has 50 to 100 unique Collibra users per day via this channel; as of summer 2018, 22% of Adobe's employee population had come into Collibra to get information.

This is Data Intelligence in action. It's not a specific destination or goal—it's a philosophy that enables individuals to securely access data they trust and use it to drive digital transformation.

Adobe uses Collibra
to achieve
Data Intelligence

100

people accessing Collibra daily

22%

of employees have used Collibra

Checks and balances: the flip side of data management

To be sure, there are hurdles to overcome. The value of data comes with vulnerability: an asset that can drive business growth becomes a huge risk if compromised or even misused. Despite massive resources devoted to security, there are constant headlines to illustrate the ways in which a data breach can devastate the brand and the bottom line.

Some companies even believe that data should be considered an asset on the balance sheet. It meets many of the criteria: the volume and value make it a corporate priority, yet external factors are equally important.

75%

of all enterprise applications
will use AI by 2021.

Thanks to a plethora of emerging regulations, data privacy, protection and transparency are non-negotiable. The European Union's General Data Protection Regulation (GDPR) only went into effect a year ago, and we're already hearing about more than 200,000 cases. EU regulators can dish out fines of up to 4% of annual global turnover or €20 million, whichever is greater. That's Europe, but the US isn't far behind; the California Consumer Privacy Act (CCPA) becomes law next year, other states are gearing up to develop their own regulations, and there may even be a national standard at some point.

But with all that regulation, there's also innovation. AI and ML alone will offer major advances, and enterprises are investing more than ever in these emerging technologies. It's always unwise making predictions related to technology, but analysts predict that 75% of all enterprise applications will use AI by 2021.

The human factor

So what does it take to surge from data management to Data Intelligence?

We have the technology, and it keeps getting better, but that's only part of the puzzle. It's not about a bigger or faster database. It's not about volume or performance or scale—the cloud will commoditize all of that with a more agile and scalable IT infrastructure. In this environment, the old ways don't work anymore. We have to focus on more human characteristics.

This is a people and process issue. We need to make it easier for people to find the right data, build on it and collaborate. And for that to happen, we must help people trust the data.

Let's get past the fixation on structured data; take on the task of managing any type of data, insights, and algorithms; and put trust at the center. This requires us to not only manage these elements but also capture the context in which they're used. Making the context explicit makes it easier to trust the data and ensure that it's interpreted appropriately.

This becomes the knowledge graph, which in turn connects data elements to business terms to data quality scores to systems to business processes to policies to data sets to reports to algorithms and so on. Everything is connected—and it delivers full visibility over the entire data landscape. This becomes the foundation for digital transformation.

Democracy in action

Stepping back, we see an even more dramatic shift: this is data democratization, and we're all Data Citizens.

Data is no longer the purview of database admins or data architects. It belongs to every knowledge worker. Everyone produces and consumes data, and that leaves room for so much collaboration. It can be formal, such as through structured and automated workflow, or ad-hoc, such as crowdsourced. It needs to reflect the sometimes random ways humans connect and communicate, which means the siloed nature of data management must be jettisoned.

This is how technology creates trust and serves people and processes. This is how we change the dynamic. This is how we reach the state of Data Intelligence.

Data Intelligence is about understanding the positive effect data can have on the business, and offering the ability to create that impact. Data Intelligence allows any Data Citizen to uncover and extract the strategic value hidden in data. Data Intelligence gives everyone the power to use data to solve problems, implement ideas and transform the business.

The future is now, and the future is Data Intelligence.