THE STATE OF DATA GOVERNANCE

There's a high level of interest in formal data governance practices at many organizations but a troubling lack of follow-through at many levels. Here's what enterprises must do to make sure their data governance agendas succeed.

Executive Summary

A variety of factors are driving enterprise interest in data governance. However, a lack of executive support, budget and understanding of the right implementation approaches could slow down efforts to translate that interest into action at many organizations.

In November 2017, erwin partnered with UBM to survey business technology professionals at large organizations about their attitudes on data governance. Among the survey respondents were CIOs, CTOs, data center managers and directors, IT staff, and consultants from nearly 20 industries.

The survey revealed considerable awareness of the importance of data governance within many organizations. Both business and IT groups appear to understand the importance of properly governing the data assets of their organizations and are taking joint ownership of the domain. And while compliance remains a primary driver, it is no longer the only reason why organizations want to implement data governance.

At the same time, a familiar set of issues clouds the outlook for data governance, at least in the short term. While the business and IT agree that governance is an important issue, nearly four in 10 of the organizations surveyed do not have a separate budget for data governance. Forty-six percent do not have a formal strategy for it, executive support continues to lag, and IT continues to pick up a major portion of the tab for governance initiatives at many organizations.

Methodology

erwin, Inc. commissioned UBM to conduct an online survey in the fall of 2017 exploring the current state of data governance.

The respondent base (N=118) is made up of IT professionals at North American companies. All respondents report that data governance is important to their companies, and all respondents have knowledge of the total amount of data under management at their organizations. Nearly two-thirds (63%) of respondents hold IT management titles such as CIO, director or manager of IT, data steward, data governance or risk compliance. All respondents are from organizations of 1,000 or more employees. Survey respondents represent more than 16 vertical sectors including financial services, government, healthcare, IT and telecommunications.

The margin of error for the total respondent base (N=118) is +/- 8.9 percentage points. UBM was responsible for all programming and data analysis. These procedures were carried out in strict accordance with standard market research practices.

Figure 1

How important is data governance to your organization?

Not very important: Some groups can benefit but there's little need for an enterprise-wide effort.
2%

Important: My organization recognizes the value of data, but we don't have a formal governance strategy.
46%

52%
Critically important: Data is core to our business, and we have a formal strategy in place for governance.

Data: UBM survey of 118 business technology professionals at organizations with 1,000 or more employees, November 2017

I. The Importance of Data Governance

The Data Governance Institute defines governance as a "system of decision rights and accountabilities for information-related processes, executed according to agreed-upon models which describe who can take what actions with what information, and when, under what circumstances, using what methods."[1]

Data governance touches virtually every aspect of your organization's information management practices, from how you collect, create, retain, use and archive data to the hardware, software and databases used to handle that data. An organization with a well-implemented data governance practice will have clearly defined owners — or stewards — of enterprise data, formal processes for managing it through the life cycle, and a governing body for enforcing and ensuring compliance with those processes. In essence, the governance initiative should capture the enterprise's philosophy on information collection, use and management.

Implementing a formal data governance practice has several business benefits. For data-driven organizations, governance is critical for enabling better data management, quality and consistency. Governance enables automated data analytics and better decision-making, thereby allowing organizations to get more value from their information assets.

Importantly, data governance enables greater transparency, auditability and accountability over an organization's information assets. Governance can help you identify sensitive data across systems and ensure that you have applied necessary privacy and security controls around them.

The Drivers for Data Governance

Compliance is one reason why many organizations implement data governance. When asked to identify the top three drivers of data governance initiatives at their organizations, somewhat predictably, 60% of our survey
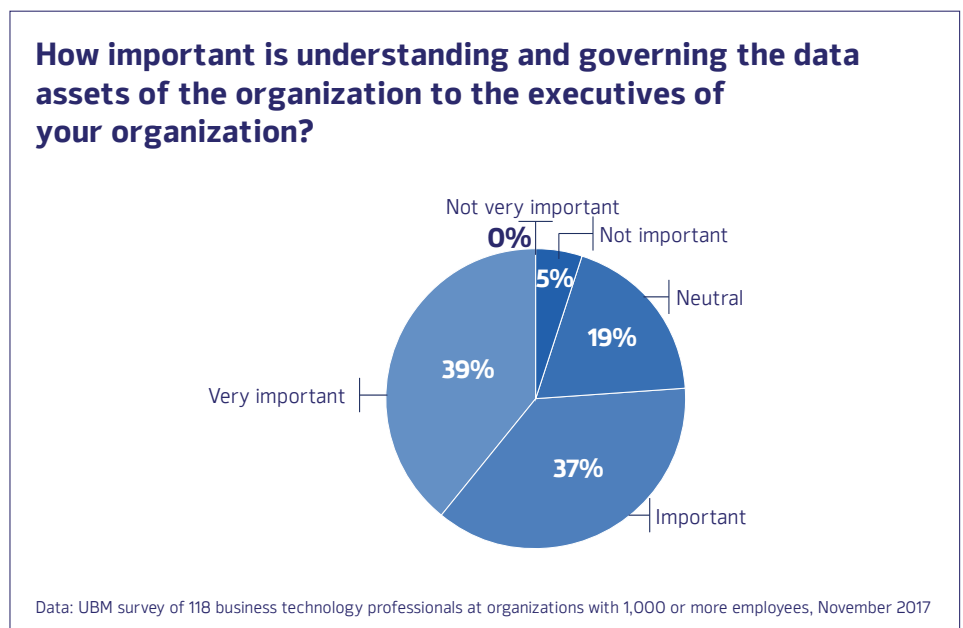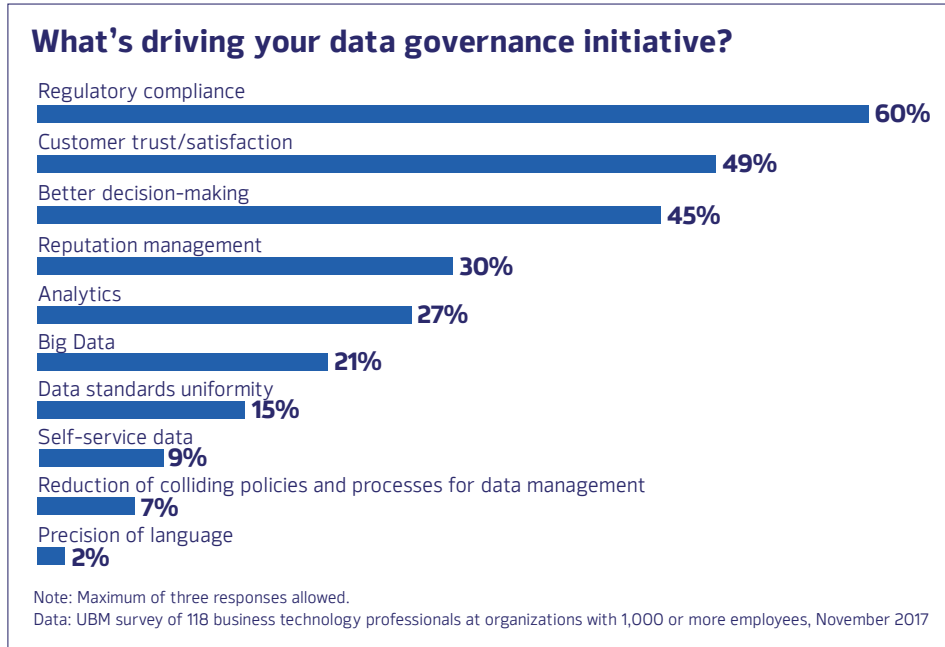
Figure 2

How important is understanding and governing the data assets of the organization to the executives of your organization?

Not very important
0%

Not important

5%

Neutral

19%

Very important
39%

37%

Important

Data: UBM survey of 118 business technology professionals at organizations with 1,000 or more employees, November 2017

Figure 3

What's driving your data governance initiative?

Driver	%
Regulatory compliance	60%
Customer trust/satisfaction	49%
Better decision-making	45%
Reputation management	30%
Analytics	27%
Big Data	21%
Data standards uniformity	15%
Self-service data	9%
Reduction of colliding policies and processes for data management	7%
Precision of language	2%

Note: Maximum of three responses allowed.
Data: UBM survey of 118 business technology professionals at organizations with 1,000 or more employees, November 2017

respondents say their biggest driver is the need to comply with regulatory mandates. **(See Figure 3.)**

This response certainly is not unexpected. Enterprises in different sectors have had to contend with regulations such as HIPAA, SOX and PCI-DSS for several years. Additionally, the European Union's General Data Protection Regulation (GDPR) goes into effect in May 2018, requiring all organizations handling personal data belonging to EU residents to implement specific privacy and security controls or face stringent penalties.

However, compliance is not the only driver. Our survey shows organizations are implementing data governance to address several other business needs. Forty-nine percent see data governance as a way to improve customer satisfaction, and 45% see it as supporting better decision-making. Reputation management and analytics are two other relatively big drivers, with 30% and 27%, respectively, listing them among the top three reasons for data governance at their organizations.

Big Data is another big driver. Twenty-two percent of the responding organizations in our survey claim to have more than 10 petabytes of data under management, and another

20% have between 2 PB and 10 PB of data. In total, more than four in 10 of the organizations in our survey manage more than 1 PB of data. Not too surprisingly given these data volumes, one-fifth of our survey takers say Big Data is one of the top reasons for implementing a data governance program.

This is consistent with our view that governance is more than just about compliance and audits. Though regulations such as SOX, HIPAA and GDPR certainly are good reasons to implement a formal data governance strategy, there are several other vital reasons why you should have a formal plan for managing and governing your information assets.

II. Ownership of Data Governance Initiatives

Data governance initiatives often fail because organizations tend to treat them as siloed IT programs rather than multi-stakeholder imperatives. Even when business groups recognize the value of a data governance program and the potential benefits to be derived from it, the IT group traditionally has owned the effort and paid for it. But that could be changing, because our survey shows strong recognition of the enterprise-wide importance of data governance at many organizations and the need for multi-stakeholder participation.

Ninety-eight percent say their organizations view data governance as either important or critically important from a business perspective. **(See Figure 1.)** These organizations view data as core to their business and have a formal strategy in place for governance, or they at least recognize the value of data even if they don't quite yet have a governance strategy.

Significantly, given the very IT-led nature of these initiatives, business executives seem to realize the value

of data governance as well. Seventy-six percent of the respondents say that understanding and governing enterprise data assets has become important or very important for their executives. **(See Figure 2.)** For 64%, data assets are somewhat or much more valuable to the organization than physical assets — a stance that is understandable considering the enormous financial consequences of data breaches and compliance failures these days.

Mixed Outlook

So how is the broader recognition of the importance of data governance changing things from an implementation and operational standpoint? Our results present a somewhat mixed outlook.

Our survey suggests a strong sense of joint ownership of the data governance discipline between IT and the business. A majority of respondents believe that both are responsible for managing data, the challenge of meeting regulatory obligations, and implementing a formal governance strategy.

At nearly six in 10 organizations (57%), for instance, both IT and the business are responsible for data governance. Just 34% of the organizations have put IT solely in charge of data governance. **(See Figure 4.)** This suggests that many organizations (in principle, at least) see data governance as an enterprise-wide imperative that requires

support from across departments and functions — a notion to which we also subscribe.

Responses to some of the other questions in the survey reveal a similarly high level of awareness of the multistakeholder nature of data governance. When asked who owns the data governance challenge, 55% say IT and the business own it; 63% believe that both IT and the business are engaged in data governance. **(See Figures 5 and 6.)**

As noted earlier, data governance traditionally has been an IT program. Therefore, it is not too surprising that the CIO is the executive most frequently championing it at most organizations. When asked which titles drive the process, 68% point to the CIO. What is more interesting, in our view, is the relatively high proportion of organizations with other C-level executives either championing or sponsoring the mission. At nearly four in 10 — 39% — of the organizations, the data architecture lead is driving data governance activities; at 32%, the CEO is the biggest cheerleader; and at 24%, the COO is a strong advocate.

Clearly, data governance is getting recognition at the highest executive levels. But this is where the good news ends — or at least, here's where the caveats begin.

III. Reality Bites

Encouraging as the broad awareness might appear, our survey reveals some troubling and not entirely unexpected issues regarding data governance. Among the concerning factors are an incomplete understanding of data governance, lack of budget, and lack of executive support.

An Incomplete Understanding

One of the fundamental challenges with data governance is that no one can quite agree on what exactly the term means. There are no formal,

Figure 4

In general, who in your organization is responsible for data?

- IT — 34%
- Both IT and business/corporate — 57%
- Business/corporate — 9%

Data: UBM survey of 118 business technology professionals at organizations with 1,000 or more employees, November 2017

industry-accepted definitions for the term or how to measure success when implementing a governance initiative. Our survey reflects a lot of that uncertainty as well.

When respondents were presented with a set of different definitions for data governance from which to select the ones they agreed with the most, the results were interesting. Sixty-seven percent describe data governance as understanding data flows across the organization, and 62% see data governance as building policies that govern the organization around data. **(See Figure 7.)**

Nearly six in 10 (59%) say data governance is about understanding deployed data, 57% say it is a framework of people and processes with responsibility for data, and 42% say it is about building a glossary of data standards. Twenty-two percent say data governance enables business intelligence self-service.

The responses reflect the wide range of opinions on what data governance is all about and hint at the problems that many organizations have in implementing it. As the Data Governance Institute points out, depending on the
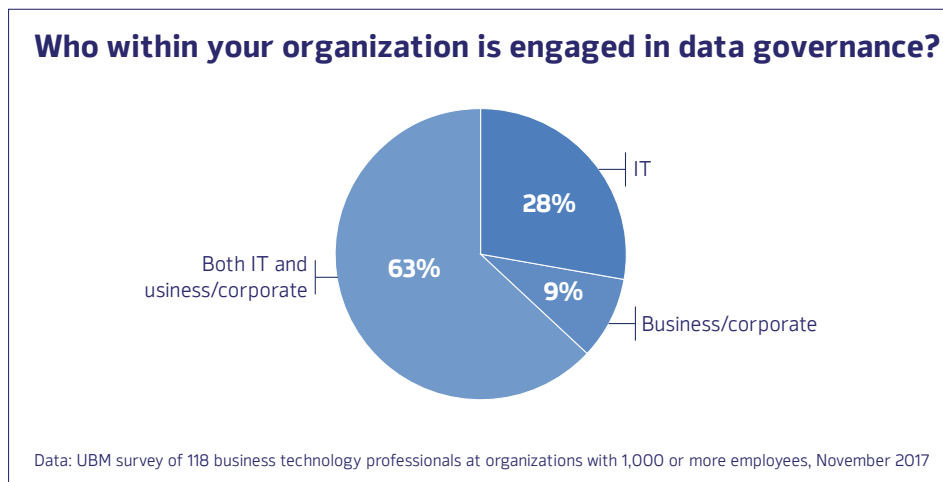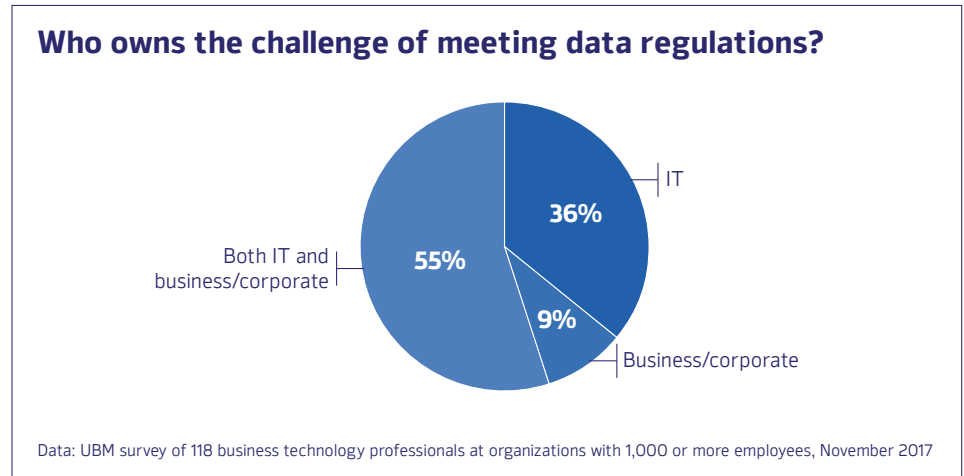
Figure 5

Who owns the challenge of meeting data regulations?

- IT **36%**
- Business/corporate **9%**
- Both IT and business/corporate **55%**

Data: UBM survey of 118 business technology professionals at organizations with 1,000 or more employees, November 2017

context, the term could refer to organizational bodies, policies, standards and guidelines for data, decision rights, accountability and enforcement.[2] In that context, it is perhaps understandable why 42% cite "understanding the right approach" as one of the biggest challenges facing their data governance initiatives. **(See Figure 8.)**

There are other disconnects as well. Nearly seven in 10 of the organizations in the survey have a dedicated IT risk and compliance department, but only one-third have a fully dedicated data governance team. Similarly, though 98% say data governance is either important or critically important to their organizations, a disquieting 46% do not have a formal governance strategy in place.

Costs & Budgets

Project costs and budgets are big challenges as well. When asked to identify the biggest obstacles to their data governance initiatives, 58% of respondents cite project costs as their top issue.

A lot of that concern clearly is tied to budgets for data governance. For all the apparent enthusiasm around data governance, only 37% have a separate budget for it. **(See Figure 10.)** A startling 63% either don't have a budget or don't know if they have one.

Figure 6

Who within your organization is engaged in data governance?

- IT **28%**
- Business/corporate **9%**
- Both IT and business/corporate **63%**

Data: UBM survey of 118 business technology professionals at organizations with 1,000 or more employees, November 2017

Similarly, while business and other stakeholders might view data governance as an enterprise initiative, they appear somewhat reluctant to pay their share of the tab for it. At 40% of the organizations, the IT department continues to foot the bill for data governance expenses. Budget for data governance comes from the audit and compliance function at 20% of the organizations, while the business is footing that bill at just 8% of the companies surveyed. Depending on your perspective, budgets for data governance are shared across all functions only in — or in as many as — 30% of the organizations. The main takeaway here is that while the business gets data governance at a high level, it is less clear on costs and the effort required to implement it.
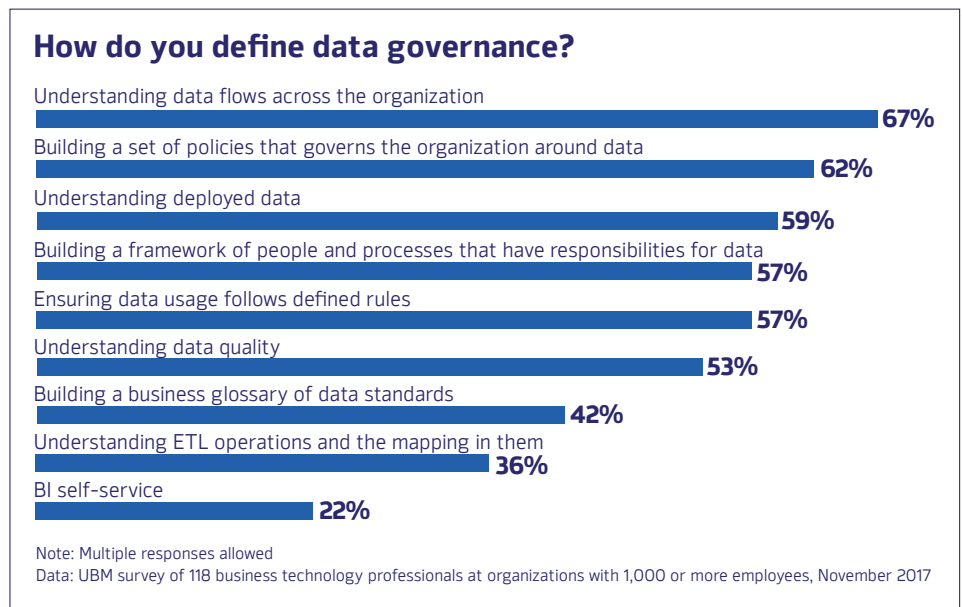
Encouragingly, a plurality of organizations in our survey appear to be willing to spend more on data governance moving forward. Fifteen percent expect budgets to increase by more than 10%, and 17% say their budgets will grow by up to 10% in the next 12 months. The numbers suggest that a substantial proportion of organizations not only see the value in data governance but are willing to increase spending on it. Just over a quarter of respondents, however, say they expect their budget for data governance will remain the same, and 3% say it will decline.

Executive & Organizational Support

The survey shows that executives can do more to support information governance initiatives. Despite the enterprise-wide awareness of the importance of data governance, a troublingly large number of organizations continue to stumble because of a lack of executive support.

When asked to identify all the obstacles to data governance, 42% cite a lack of executive support, and 39%

Figure 7

How do you define data governance?

Definition	Percentage
Understanding data flows across the organization	67%
Building a set of policies that governs the organization around data	62%
Understanding deployed data	59%
Building a framework of people and processes that have responsibilities for data	57%
Ensuring data usage follows defined rules	57%
Understanding data quality	53%
Building a business glossary of data standards	42%
Understanding ETL operations and the mapping in them	36%
BI self-service	22%

Note: Multiple responses allowed
Data: UBM survey of 118 business technology professionals at organizations with 1,000 or more employees, November 2017

point to a broader lack of organizational support. Both these factors ranked higher in terms of biggest obstacles compared to such issues as a lack of effective tools (36%) and difficulty in articulating a business case for data governance (27%).
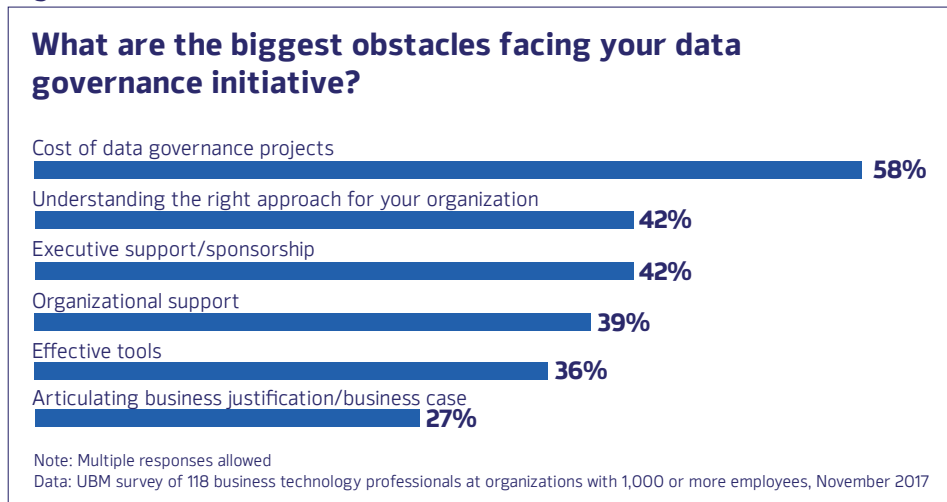
IV. Status Quo

So where exactly are organizations in terms of implementing a formal data governance initiative? Our answers run the gamut and reflect the seeming confusion that exists among organizations about what exactly data governance entails.

Thirty-one percent — less than one-third — have a fully implemented data governance initiative. Data management is a core organizational capability for these organizations, and they have a dedicated staff with formal implementation oversight and processes for continuous improvement. At 42% of the organizations, data governance is a work in progress. **(See Figure 9.)** Most of the enterprises have completed the data discovery phase and are in the midst of developing policies and processes, business rules, data definitions, and classification for data governance.

Though 98% of the organizations surveyed profess a high to very high awareness of the importance of data

Figure 8

What are the biggest obstacles facing your data governance initiative?

Cost of data governance projects
58%

Understanding the right approach for your organization
42%

Executive support/sponsorship
42%

Organizational support
39%

Effective tools
36%

Articulating business justification/business case
27%

Note: Multiple responses allowed
Data: UBM survey of 118 business technology professionals at organizations with 1,000 or more employees, November 2017

governance, more than one in five (21%) are just getting started, meaning they are in the data discovery and inventory phase.

The survey also shows that data governance has not quite become integrated with enterprise architecture (EA) strategies either. In recent years, many organizations have implemented formal and overarching EA methods for figuring out the best and most secure way to use IT for moving their business forward. Forty-six percent, or nearly half the organizations in our survey, have an EA function, but it is only focused on application and technology architecture. Among those that have an EA function, 10% have a data architecture team, but interestingly, the team is not connected to the data governance program.

Once again, whether you take a glass half-empty or half-full perspective, 27% have a fully connected EA and data governance function.

Considering where many organizations are with their data governance initiatives, it should come as little surprise that a bare 6% say they are prepared for GDPR. That number is worth repeating. It means that 94% of the organizations in our survey are not ready for what is arguably one of the most important data privacy and security regulations passed in recent years. **(See Figure 11.)**

The statute gives EU residents a lot more control over their private data, including the ability to ask for it at any time, check for and request corrections, and make it "portable" so the data can be transferred to another entity upon the owner's request. The statute calls for data privacy and security by design, and by default imposes new requirements for breach disclosure. Organizations that run afoul of the statute can face fines of up to 4% of their global revenues.

Considering the impact GDPR will have on so many organizations, the lack of preparation for it is troubling and could come back to haunt those not ready.

V. Conclusion

The data from our survey suggests a high level of interest in formal data governance practices at many organizations but a troubling lack of follow-through at many levels. The survey results present a cautionary tale about what enterprises need to do in 2018 to move their data governance agendas forward.

Based on the results, we offer the following recommendations.

1. Get a Grip on It

Implementing a data governance initiative can be tricky, so it is important to have clear goals and principles for what you want it to achieve. As our results indicate, data governance can be many things to many people. Before starting, decide what your primary objectives are. To enable better decision-making? To help you meet compliance objectives? Or are you looking to reduce data management costs and improve data quality through formal, repeatable processes? Whatever your motivation, you need to identify it first and foremost to get a grip on data governance.

2. Get a Budget

The results show that while the business is beginning to realize the potential value of data governance, it is not entirely clear on how to justify the budget. The reality is that data governance is a business initiative just like any other, and it competes for budget dollars.

There are several ways in which those in IT organizations can help their colleagues within the business get the details required to build a compelling case for data governance. Most governance efforts have been IT-led until now, so IT organizations have a clear idea of what works and what does not. They can help the business understand what it takes from a resource and time perspective to sustain an effective governance practice. They also can help the business prioritize data assets for data governance and quantify the risk, value and potential upsides. Use key performance indicators and metrics where possible to help the business understand that data governance is not a black box.
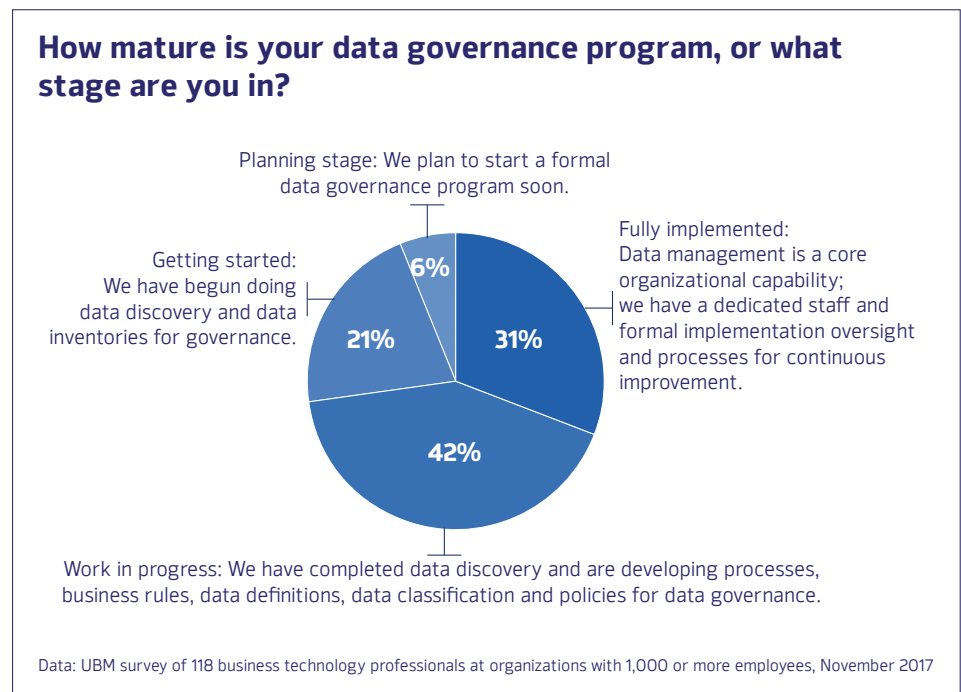
Data governance is everyone's business, so everyone needs to contribute to it.

3. Get Started on GDPR

We cannot stress enough that GDPR is a big deal. When the regulation goes into effect in May, your organization better be ready to meet all its requirements or be prepared for some serious financial pain.

Personal data comes in many forms and extends to the combination of different data elements that individually are not personally identifiable information (PII) but contribute to a PII status when combined. Under GDPR you need to be able to articulate what this data is, where on your

Figure 9

How mature is your data governance program, or what stage are you in?

Planning stage: We plan to start a formal data governance program soon. — 6%

Getting started: We have begun doing data discovery and data inventories for governance. — 21%

Fully implemented: Data management is a core organizational capability; we have a dedicated staff and formal implementation oversight and processes for continuous improvement. — 31%

Work in progress: We have completed data discovery and are developing processes, business rules, data definitions, data classification and policies for data governance. — 42%

Data: UBM survey of 118 business technology professionals at organizations with 1,000 or more employees, November 2017

network it resides, what controls you have for protecting it, and the measures for addressing mistakes in the data. An effective data governance initiative is critical to ensure the data visibility and categorization needed to comply with GDPR. It can help you assess and prioritize risks to your data and enable easier verification of your compliance with GDPR with auditors.

4. Get to Educating and Involving Stakeholders

Our survey shows that data governance training is not a company-wide requirement for many organizations. Only 26% of the organizations surveyed say that governance training is a requirement in 2018. Another 27% plan to implement company-wide training but don't have a timeline for it yet.

IT and the business will need to take responsibility for selling the benefits of data governance across the enterprise and ensure all stakeholders are properly educated about it. IT may have to go it alone, at least initially, educating the business on the risks and rewards of data governance and the expectations and accountabilities in implementing it. The business needs to have a role in the justification

and specification phase for your data governance practice to be sustainable over the long term.

Businesses have not been able to get as much mileage out of their data governance efforts as hoped, chiefly because of how it's been handled. IT has held the reins, serving as data custodian by cataloging data elements to support search and discovery without any real grasp of data meaning, relationships or value to the organization. Efforts aren't always undertaken as part of a holistic, enterprise-wide venture either, so there's little chance of effective data element reuse across the business.

To move data governance to the next level, organizations need to discover, understand, govern and socialize data assets. Appropriately implemented — with business stakeholders driving alignment between data governance and strategic enterprise goals and IT handling the technical mechanics of data management — the door opens to trusting data, planning for change, and putting it to work for peak organizational performance.
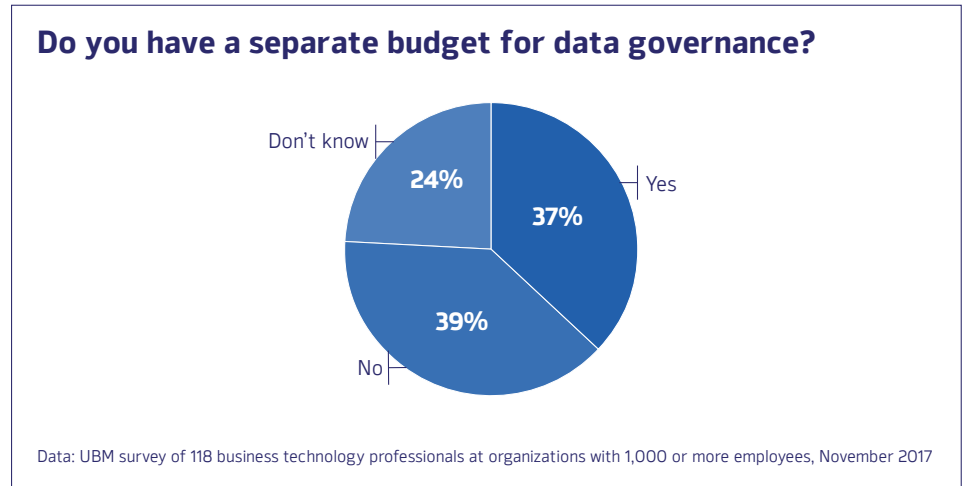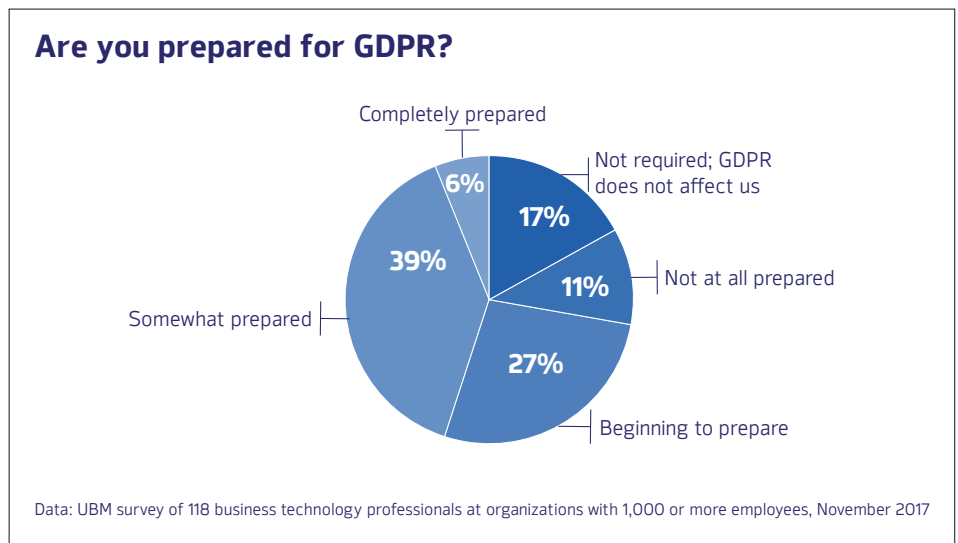
Figure 10

Do you have a separate budget for data governance?

Don't know 24%
Yes 37%
No 39%

Data: UBM survey of 118 business technology professionals at organizations with 1,000 or more employees, November 2017

Figure 11

Are you prepared for GDPR?

Completely prepared 6%
Not required; GDPR does not affect us 17%
Not at all prepared 11%
Beginning to prepare 27%
Somewhat prepared 39%

Data: UBM survey of 118 business technology professionals at organizations with 1,000 or more employees, November 2017

[1] http://www.datagovernance.com/adg_data_governance_definition/
[2] http://www.datagovernance.com/adg_data_governance_definition/

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erwin, Inc. provides the only unified software platform combining data governance, enterprise architecture, business process and data modeling. Delivered as a SaaS solution, these technologies work together to unlock data as a strategic asset so all enterprise stakeholders can discover, understand, govern and socialize data to mitigate risk, improve organizational performance and accelerate growth. For more than 30 years, erwin has been the most trusted name in data modeling and its software foundational to mission-critical data programs in government agencies, leading financial institutions, retailers and healthcare companies around the world. The company is headquartered in Melville, New York. Learn more at **www.erwin.com**.