Trends in Data Governance and Data Stewardship:
A 2018 DATAVERSITY® Report

by Anthony Algmin and Jennifer Zaino

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8. Data Governance and Stewardship Drivers

A. From among the following trends/technologies, which ones drove the implementation of Data Governance in your organization? [Select the Top 5]

B. From among the following Data Management disciplines/business trends, which ones drove the implementation of Data Governance in your organization? [Select the Top 5]

C. Regulatory compliance is often considered to be a driver for implementing Data Governance. Have any of the regulatory mandates below played a significant role in your DG/DS program? [Select all that apply]

9. Conclusion

1. Executive Summary

As data grows, so too should the importance of Data Governance and Data Stewardship. There is, in fact, greater recognition of their significance now than in the past. But there is still far to go for most organizations to reach maturity – for the two terms to become inextricably linked with actually creating data value, not just being supplementary to that value.

A few factors need to be addressed to better make that connection. Some differing or incomplete opinions exist about what these concepts mean, given that few organizations have long experience with these practices – if they have any experience at all. Businesses must get a better handle on the principles and frameworks behind the policies, processes, technology, roles, and management requirements that drive Data Quality, consistency, reliability, and access. With proper Governance and Stewardship of data, an organization can propagate trust in the use of that data among business users. These practices can begin as an initiative by one or more departments or as part of a holistic enterprise-wide Data Strategy.

With that, the enterprise will have a solid foundation that helps business users become more comfortable with Self-Service Analytics, assured that they will get the right data at the right time to make good decisions. A focus on Data Governance and Stewardship pays off in other ways, too. When employees know attention is being paid to data process control and integrity, they'll be confident that the business is prepared for audits, which may be necessary as part of compliance and regulation mandates.

Today, there is wide agreement that data is a critical asset, but that doesn't always translate into taking the necessary actions to make that asset deliver real advantages. Without Data Governance and Stewardship, data can't be effectively utilized in the service of digital transformation or data monetization. But because Data Governance and Stewardship can't always provide clear returns-on-investment – as they are as much about people and processes as technology – Governance and Stewardship efforts often end at the pilot stage or lose support and funding from metrics-minded top-level executives.

Simply put, too many organizations lose patience with Data Governance and Stewardship over time because they don't see sustained results.

This paper is an analysis of a DATAVERSITY® 2018 Survey on Data Governance and Data Stewardship. Primary findings of the survey include the following:

- There is a level of synchronization in the definitions of Data Governance and Data Stewardship provided by respondents. But respondents also saw attributes that prominent data institutions assign to one category as belonging to the other.
- Data Governance and Stewardship are still in their early days with few respondents reporting that their organizations had experience with either one for longer than five years.
- Close to 90% of respondents call their data an asset, but 40% express dissatisfaction with the quality of business data.
- Only about one-quarter of businesses claim they have formal metrics in place to measure their success with Data Governance.
- Is the data-driven business a reality yet? Not for everyone. 43% were either neutral on this point, disagreed, or strongly disagreed that their business was data-driven. This implies that in some organizations, data still isn't always available, accessible, and analyzable for decision-making.
- While there is some progress in understanding the value of Data Governance and Stewardship, one-third of respondents have yet to see that comprehension complemented by action.

We will analyze these results in the remainder of the paper and investigate other key findings that speak to the current and future role of Data Governance and Stewardship in the enterprise.

2. Research and Demographics

A. Research Scope

The survey was given online to volunteers who received an email link or visited a webpage on DATAVERSITY.net. No compensation was given for participation. The results and conclusions contained within this paper are representative of the survey respondents only, a group predisposed to interest in Data Management topics who may not be representative of the general business community.

The results of this research should be useful and directionally accurate, though they may understate just how far we have to go with Data Governance and Data Stewardship. This is due to the fact that the survey respondents are the most likely population to understand and find value in these roles and activities. The broader business community generally is less aware and nowhere near as capable in the areas we discuss here.

The survey asked a number of questions about how businesses view Data Governance and Stewardship and what that means in terms of which efforts they prioritize, how they implement various pieces of the puzzle, how views of these practices have changed over the last few years, and emerging trends in the industry.

The survey included 25 questions:

- General Demographics (4 questions)
- Data Governance and Stewardship Overviews (8 questions, 3 open-ended)
- Drivers (3 questions)
- Functions/Responsibilities (4 questions)
- Evolution (3 questions)
- Training (1 question)
- Software (2 questions)

Most of the questions also contained an extra area for written comments, and those comments will be discussed when relevant throughout this paper.

B. Principal Demographics

The three main demographics questions (outside of contact information) asked about the respondents' job function, industry, and company size.

1. Job Function

In terms of job function, the largest percentage– 46.7% – identified themselves as Information/ Data Governance specialists.

A broader list of roles included [Figure 1]:

▪ Data and/or Information Architecture: 25.4%
▪ Business Intelligence and/or Analytics: 11.7%
▪ Executive Management: 6%
▪ IT Management: 3.6%
▪ Database Administration: 1.3%
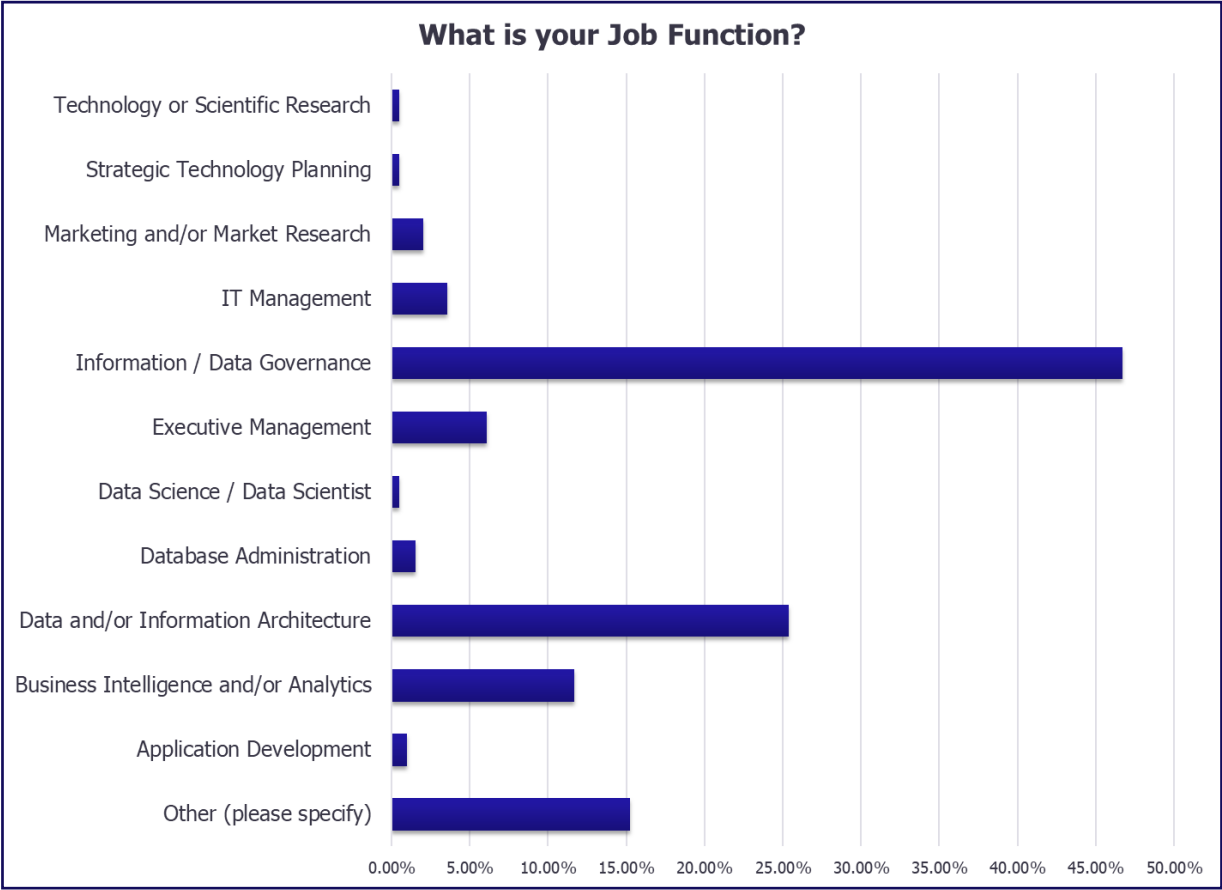▪ Data Science/Data Scientist: 0.5%

Figure 1: Job Function of Respondents

The survey participants were heavily weighted to roles that are neither deeply technical nor purely on the business side. This paper's conclusions should then give us a good sense of the internal perspectives of people who are in the trenches doing the work of Data Governance and Stewardship – but perhaps less of an external view of this group's impact on other areas of their organizations. We'd also expect that survey respondents tend to work for larger organizations that will tend to have more sophisticated data capabilities, including Data Governance and Data Stewardship.

2. Industry Representation

The survey respondents represented over 30 different industries, with the largest percentages including [Figure 2]:

▪ Government: 11.3%

▪ Healthcare: 10.9%

▪ Finance: 10.4%

▪ Consulting: 8.9%

▪ Banking: 7.6%

▪ Insurance: 7.6%

▪ Technology: 7.1%
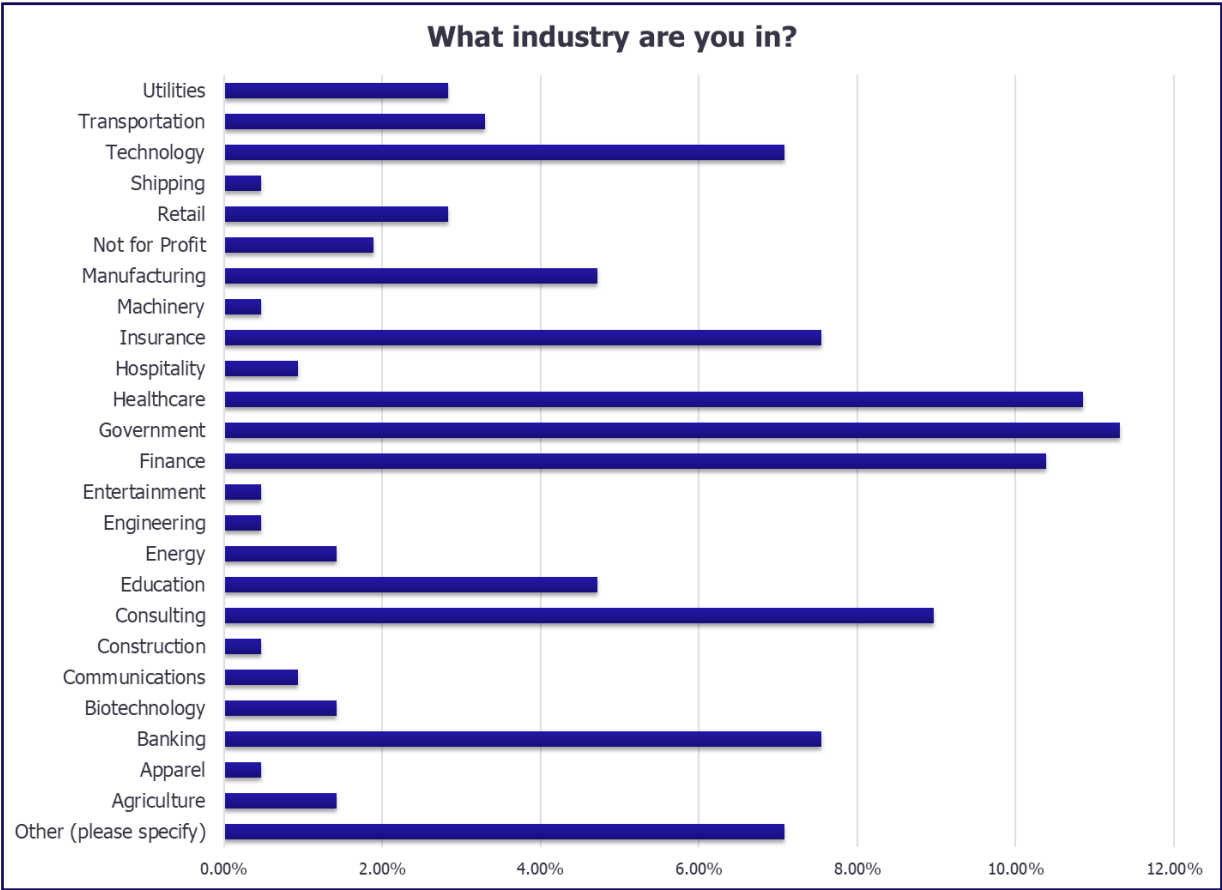
Figure 2: Industry of Respondents

3. Country Representation

The respondents also represented 30 countries, with most participants from the United States, followed by Canada [Figure 3].
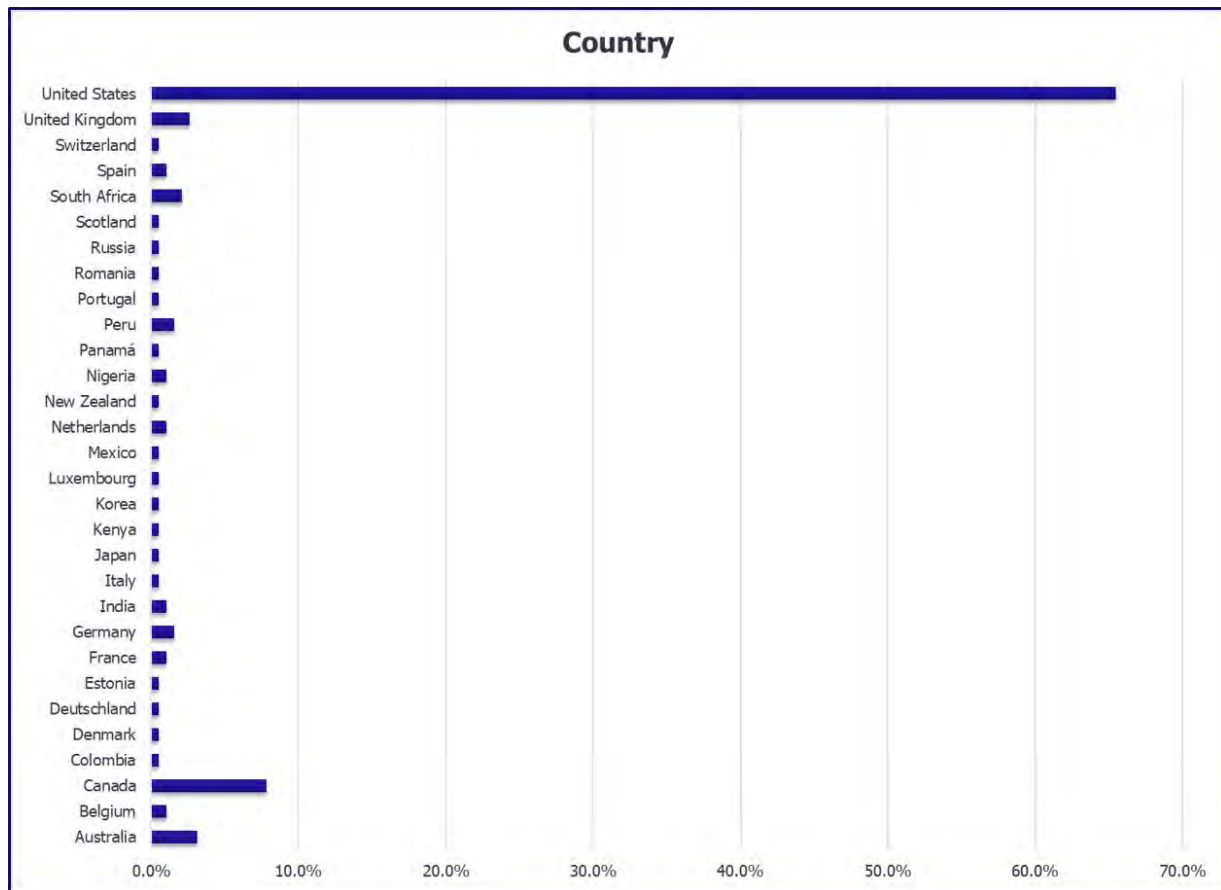
Figure 3: Country of Respondents

4. Company Size

The next demographic question asked about company size, with a marked difference between companies with 101 or more employees and those with 100 or fewer employees [Figure 4]:

- 1,001-5,000: 20.5%
- 101-1,000: 19.5%
- 10,001-50,000: 16.7%
- Over 50,001: 15.8%

Number of employees in your company (please make your best estimate if you do not know for sure)

Category	
Less than 10	~7.5%
11 - 100	~4.5%
101 - 1,000	~19.5%
1,001 - 5,000	~20.5%
5,001 - 10,000	~15.5%
10,001 - 50,000	~16.5%
Over 50,001	~15.5%

Figure 4: Company Size

As these results show, the survey respondents tend to work for larger organizations — between 1,001 and more than 50,000 employees — that generally have more sophisticated data capabilities, including Data Governance and Data Stewardship.

3. What is Data Governance and Data Stewardship?

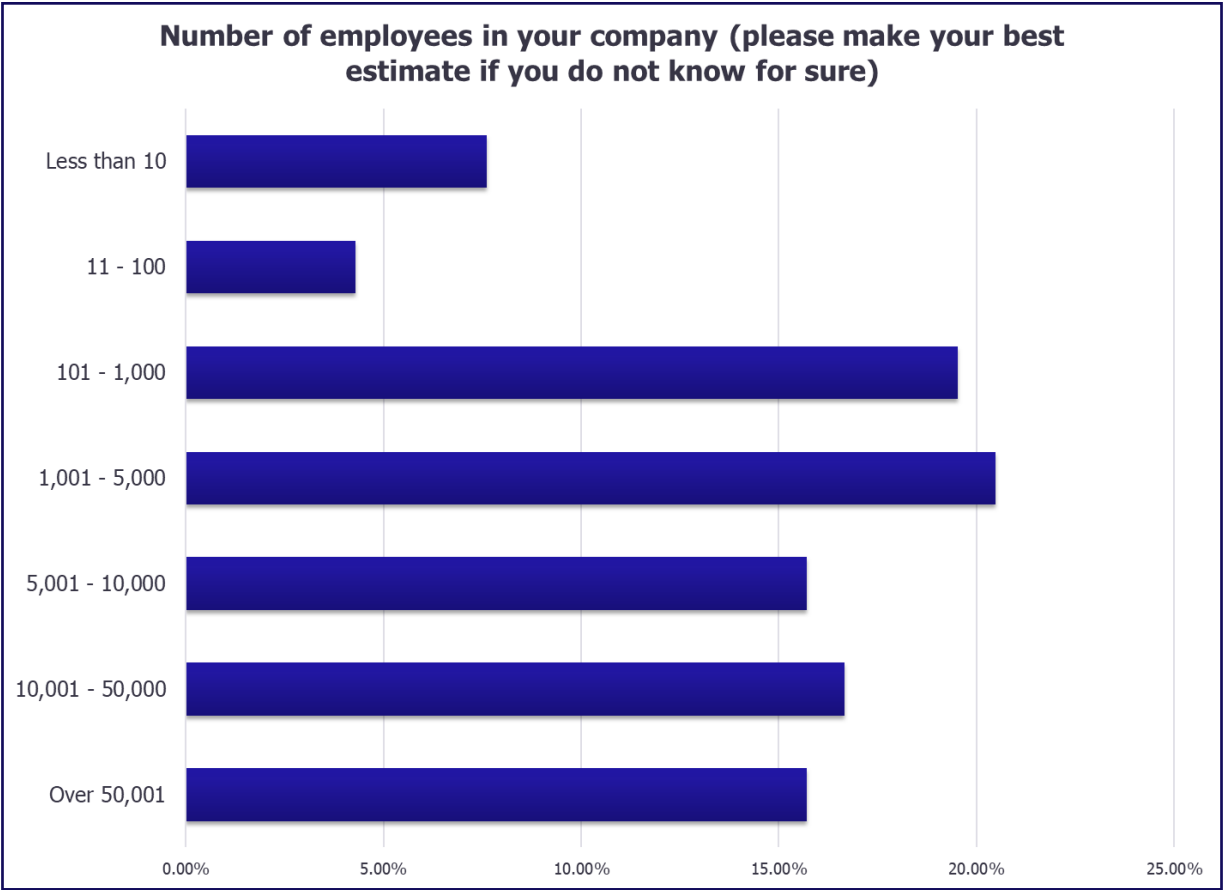Formal definitions of these practices and their requirements do exist and can serve as guidelines for what organizations should consider as they move toward giving Governance and Stewardship a greater role in their businesses.

The DAMA International definition from the *Data Management Book of Knowledge* explains that Data Governance:

- "Provides direction and oversight for Data Management by establishing a system of decision rights over data that accounts for the needs of the enterprise. It is used to establish oversight to enable an organization to be data-driven, by putting in place the strategy and supporting principles, policies and Stewardship practices that enable consistency through data classification and data valuation. It ensures the organization recognizes and acts on opportunities to get value from its data."

The Data Governance Institute positions Data Governance as:

- "Bringing together cross-functional teams, usually from the business side, to make interdependent rules or to resolve issues or to provide services to data stakeholders. Data Governance can be considered the overall process of creating policies that will ensure that the architectures, best practices, and requirements devised by IT and data groups will work."

In relation to Data Stewardship, DAMA describes it as ensuring:

- "Accountability and responsibility for data and processes that ensure effective control and use of data assets. Stewardship can be formalized, or it can be a less formal function driven by people trying to help an organization get value from its data. It can focus on all or some of the following: creating and managing core Metadata, documenting rules and standards, managing Data Quality issues, and executing operational Data Governance activities."

The Data Governance Institute considers Data Stewardship:

- "To be affiliated with those in charge of taking care of data assets that don't belong to them but that represent the concerns of others. They might represent the entire organization's needs, or business units, departments, or even a set of data itself. They may be senior representatives of stakeholder groups who convene as a council to make decisions about the treatment of data assets, or they may operate independently as it relates to applying appropriate data rules and controls."

Taken together, the two organizations interpret Data Governance as the way to shape data policy and practices, and they interpret Data Stewardship as a hands-on function that operates within the framework of Data Governance. Data Stewards are the actors who perform the play, so to speak, while those involved in Data Governance are the directors who oversee and orchestrate its production. The two must exist in concert with each other.
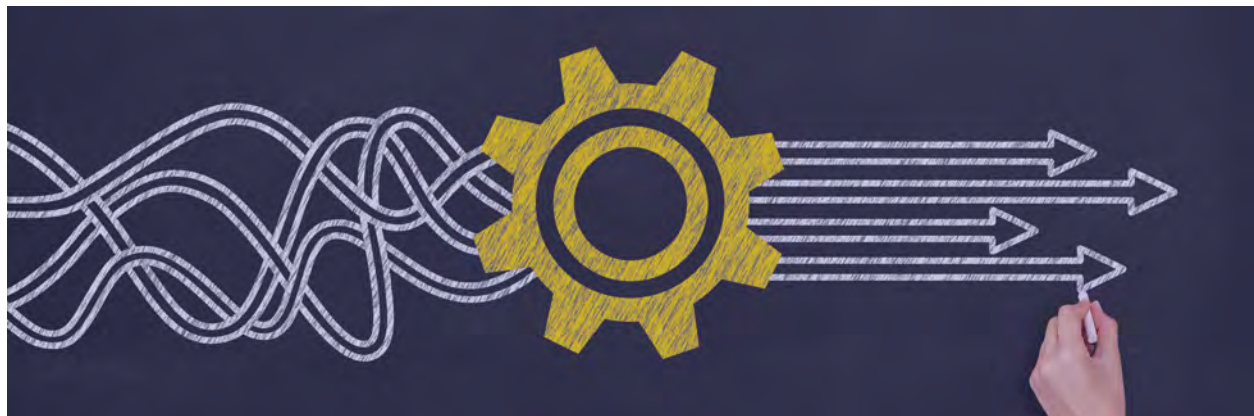
Early in the survey respondents provided their take on two open-ended questions:

- "What is your (or your organization's) definition of Data Governance?"
- "What is your (or your organization's) definition of Data Stewardship?"

We asked these questions to gain an essential high-level view of the topic from multiple perspectives and to see any commonalties and possible discrepancies.

On the question of Data Governance, respondents expressed general agreement with the ideas presented by DAMA and The Data Governance Institute. In fact, some respondents specifically cited that they subscribe to the DAMA definition. Most of them discussed concepts, with an emphasis on the need for Governance to be treated as a formal function. Their definitions included:

- "Data Governance is a formal hierarchy of people and policies and procedures to follow before any changes are made to business glossaries, key data elements, and so on."
- "It is the management and control of data processes to reduce costs, risks, and labor."
- "It is the requirement to have a formal coordination of people, processes and technology to enable the organization to make effective use of and protect data as an asset."
- "Data Governance is an enterprise-wide, collaborative approach that defines and continuously improves the policies, processes, roles and responsibilities for the planning, creation, distribution, use, maintenance, destruction, security and availability of data."
- "Enterprises should treat Data Governance as a formal framework to properly categorize, define and govern all enterprise-approved data elements, thus ensuring that they are just as protected as any other valuable corporate asset."
- "It provides guidance to achieve robust Data Lineage within all corporate information systems."

Respondents offering definitions of Data Stewardship also reflected the views of DAMA and The Data Governance Institute in many instances, perceiving that Data Stewards and Data Stewardship solidify Data Governance frameworks. Among other things, they noted that:

- "Data Stewards are the people responsible for taking the lead on maintaining and communicating the Governance of key data elements."
- "Data Stewardship is the responsibility to define, document and control compliance of Data Management standards."
- "Those ultimately responsible for the definition, management, control, integrity or maintenance of a departmental or enterprise data resource perform the Stewardship function. All Data Stewardship information will be maintained as a form of Metadata and will be made available to the department through on-line accessibility."
- "Data Stewardship is the process of managing the quality and integrity of the organization's data and ensuring that it is structured in a way that creates the maximum value."
- "Data Stewardship is the management and oversight of an organization's data assets to help provide business users with high-quality data that is easily accessible in a consistent manner."
- "Data Stewardship requires that Data Stewards be subject experts for the data they manage."

That said, there were some gaps and overlaps between Data Governance and Stewardship. Many respondents to the definition of Data Governance spoke about data as an asset, about ensuring it has high quality, and about providing rules and policies around it. They discussed the impact that Data Governance has on regulatory compliance. But fewer made a direct connection to the impact that Data Governance has on the business. Viewing data as an asset is a good first step, of course, but more notice should be given to how identifying and implementing measurements, standards, and processes can have a tangible effect on furthering an organization's ability to derive real business value from data assets.

It also should be noted that while setting policies and procedures is universally agreed to be part of Data Governance, in some cases that seems not to extend to specifying top-level accountability for the systems that actually enforce the policies. Without that accountability, one must question how successful Data Governance will be at an organization.

Regarding overlaps, some respondents equated what most consider Data Stewardship functions to be associated with Data Governance. As an example, one respondent's partial definition of Data Governance included "making sure the information provided is correct and informative so that users find the answers they look for."

On the other end, results [Figure 5] also showed that a majority of respondents say that in their companies, Data Stewards are responsible for working with the business to define Data Governance rules, surpassing those who equate Stewardship with implementation and reporting tasks. The survey also revealed that the process that is more in keeping with traditional ideas of Stewardship – ensuring that data is entered according to Data Governance rules – falls mainly to business stakeholders and non-IT Data Management groups [Figure 6].
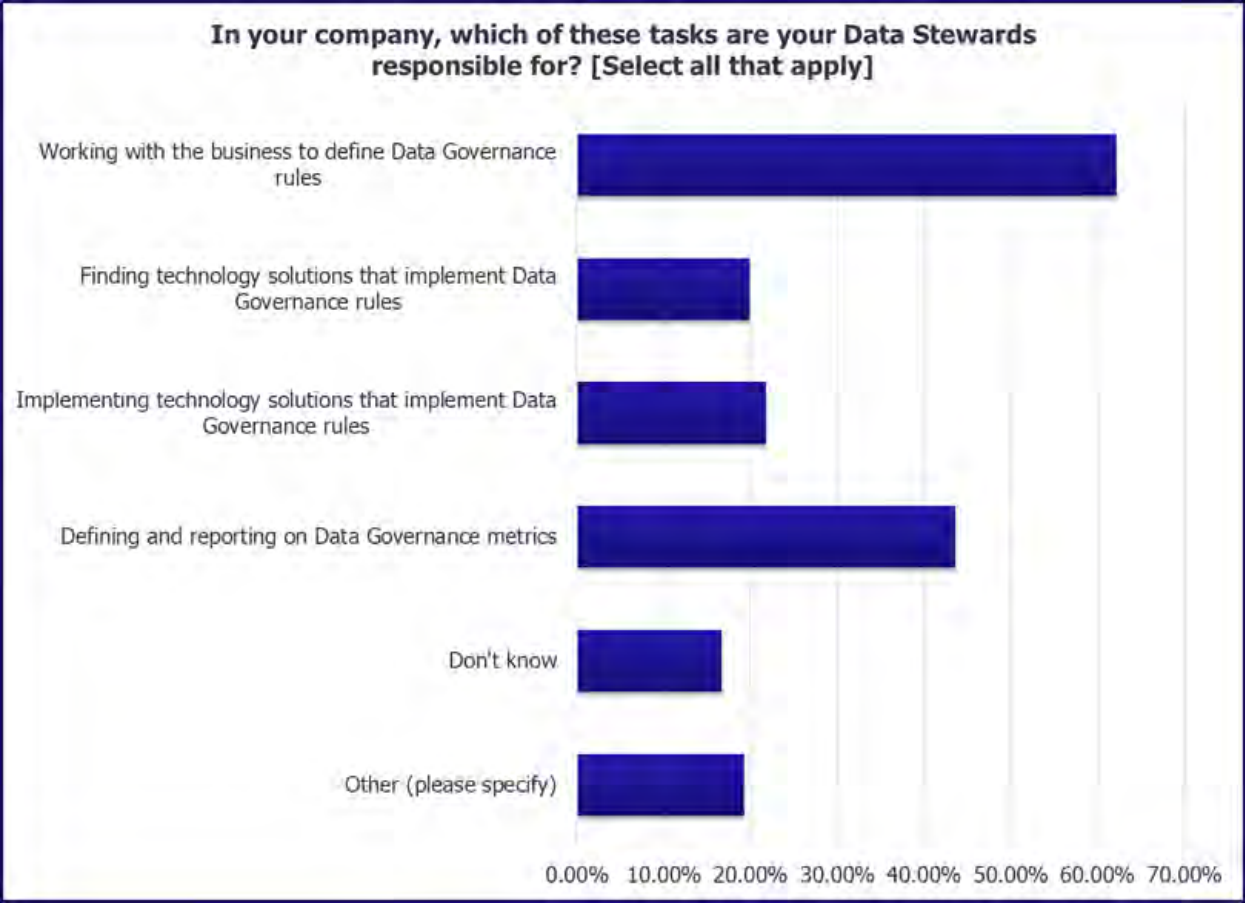

Figure 5: Data Stewards

Which part of your organization is responsible for implementing and maintaining Data Stewardship, i.e. ensuring that data is entered according to your Data Governance (or Data Quality) rules? [Select all that apply]
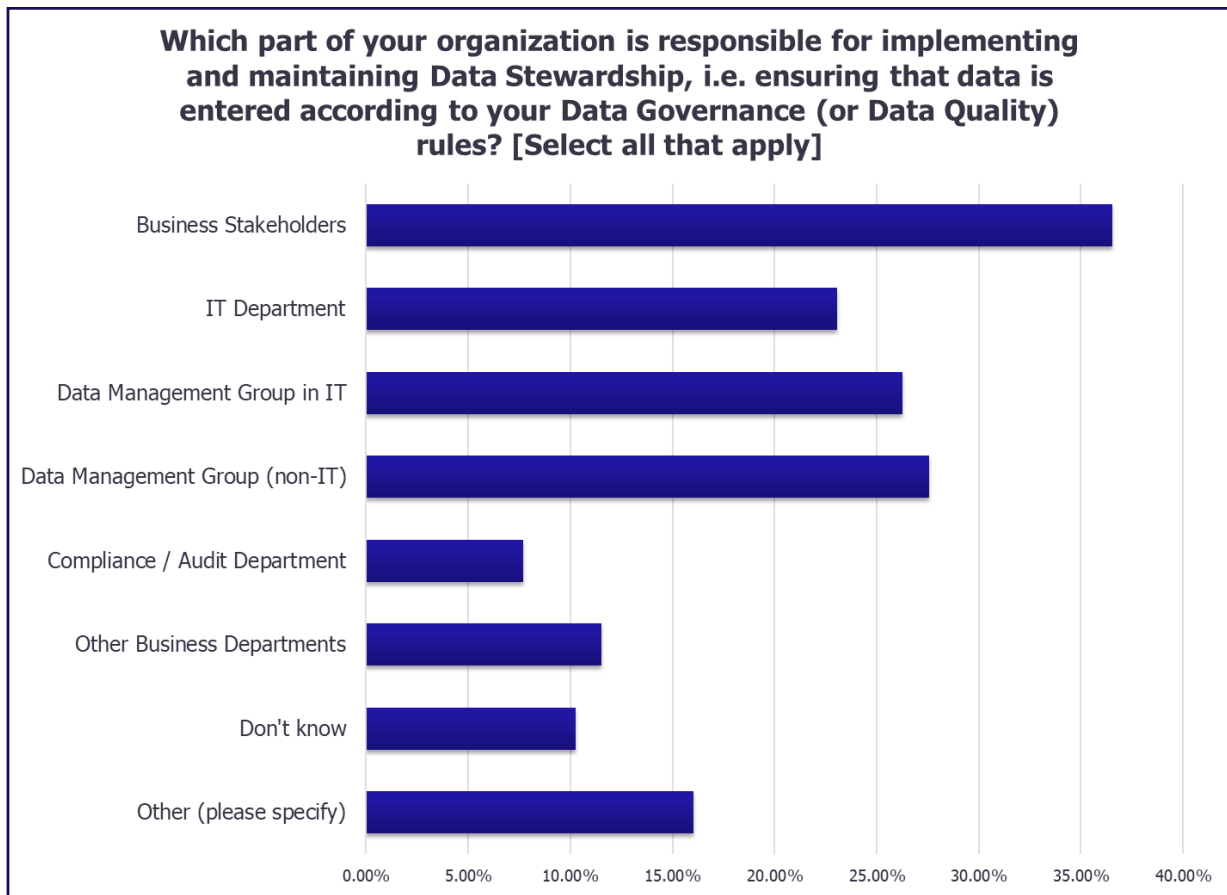

Figure 6: Data Stewardship Responsibilities

So, despite the existence of formal definitions of both concepts, there may be little differentiation in some people's minds between Data Stewardship and Data Governance. Given perceptions that these individual practices actually converge, some people may be more likely to implement Data Governance and Data Stewardship practices together. That isn't necessarily bad, as it may be a more efficient way to initially and holistically get at least some requirements of both practices up and running.

Anthony's Take:

The concepts of Data Governance and Data Stewardship converge together in some people's minds. They are often seen as two parts to a greater whole.

But it comes with risks, too. Over 50% of respondents indicated that their companies have not hired a Chief Data Officer or similar title, such as Chief Analytics Officer or Chief Digital Officer. More than a third expressed that there is no Data Governance committee to oversee activities of the Data Governance program. Without a Data Governance lead or committee to review and reset strategies and policies as part of a continuing oversight process – determining current truth from the existing truth expressed in Metadata Management – the tasks that should be equated with Stewardship may drift. Such companies may reach the point of performing a seemingly random collection of Data Management activities rather than the entirety of activities that support transforming data assets into business value.

4. The Current State of Data Governance and Data Stewardship

Among the range of answers given regarding the definitions of both Governance and Stewardship, respondents frequently reported that their interpretations of both are still under development. This helps confirm that it's still the early days of Data Governance and Stewardship in many organizations. Those immersed in the data community have been talking up these ideas for years, but as a whole, many of the organizations they work for are still trying to get out of the gate.

Another confirmation that Data Governance and Stewardship are in their early days comes from responses about the length of time their organizations have been practicing formal Data Governance. The largest percentage at 40.9% selected one to five years [Figure 7]. With "we are not currently practicing Data Governance, but we have plans to start this year" at 20.4%, and "less than one year" at 16.5%.

The same was true for Data Stewardship, where the ability to search for duplicate records and validate data before entering it into a platform topped the list of currently implemented Data Stewardship capabilities. Only one in ten noted that they had practiced Data Governance for longer than five years, and just a little over 7% claimed the same for Data Stewardship. Among respondents, 16.5% and 11.9% fell into the "less than one year" category for Data Governance and Data Stewardship, respectively [Figures 7 & 8].
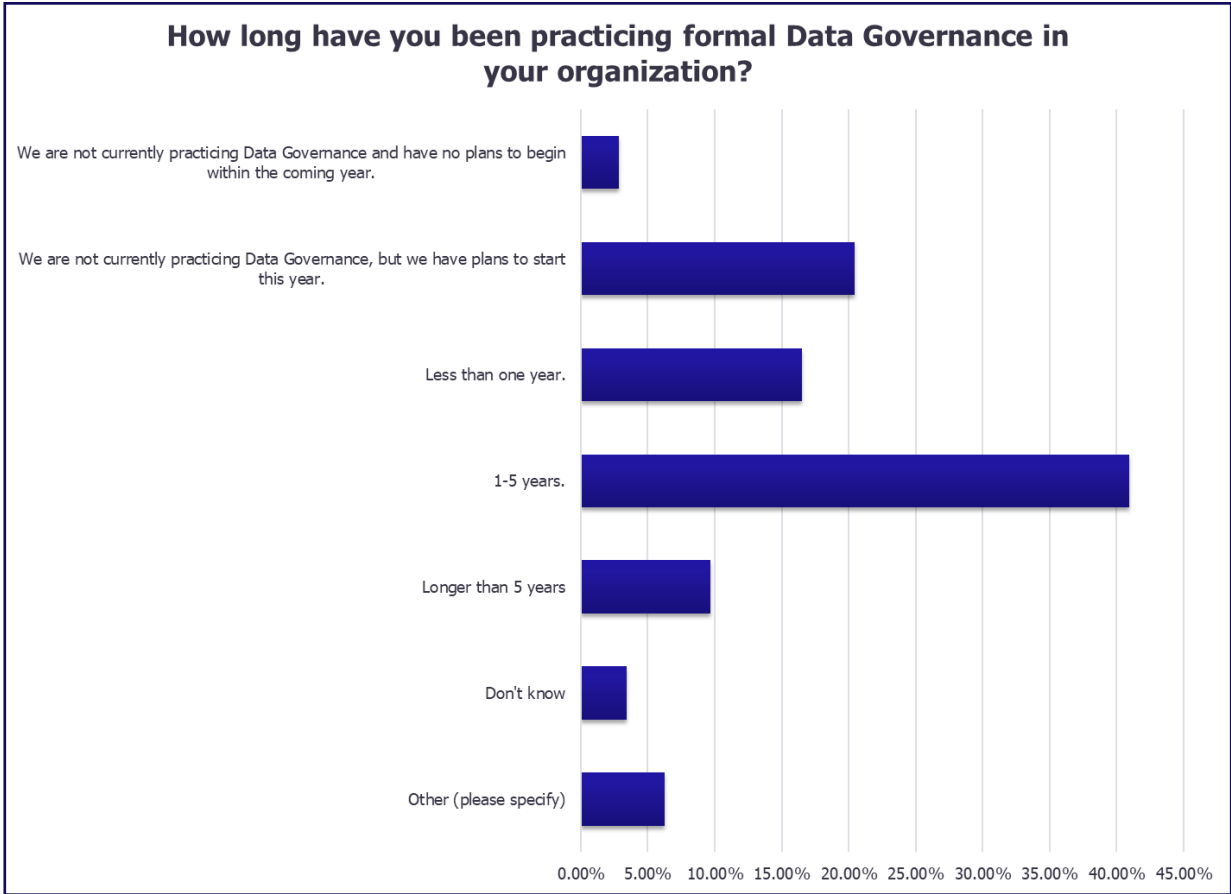
How long have you been practicing formal Data Governance in your organization?

Figure 7: Practicing Data Governance

How long have you been practicing formal Data Stewardship in your organization?

Figure 8: Practicing Data Stewardship
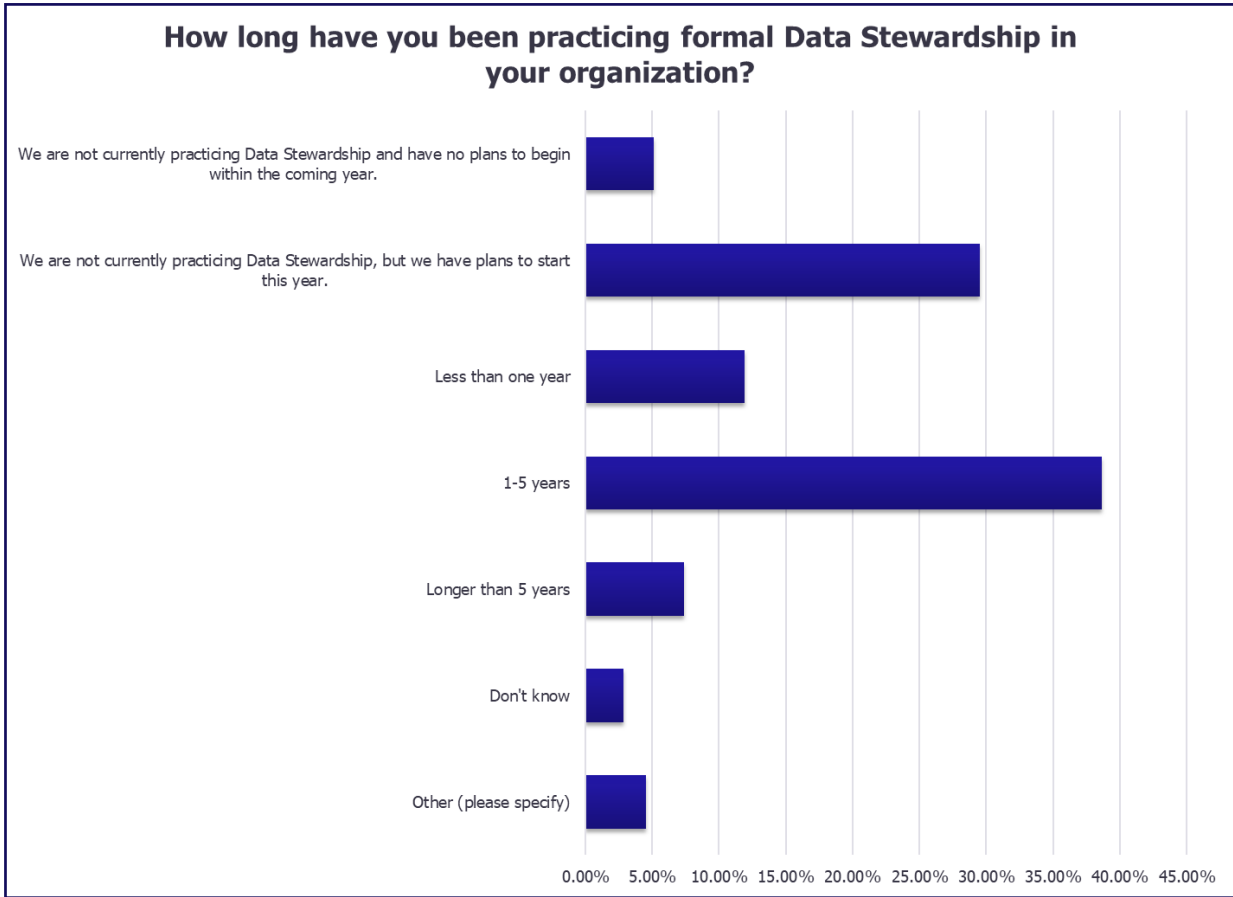
**Which Data Stewardship capabilities are you currently using?
[Select all that apply]**
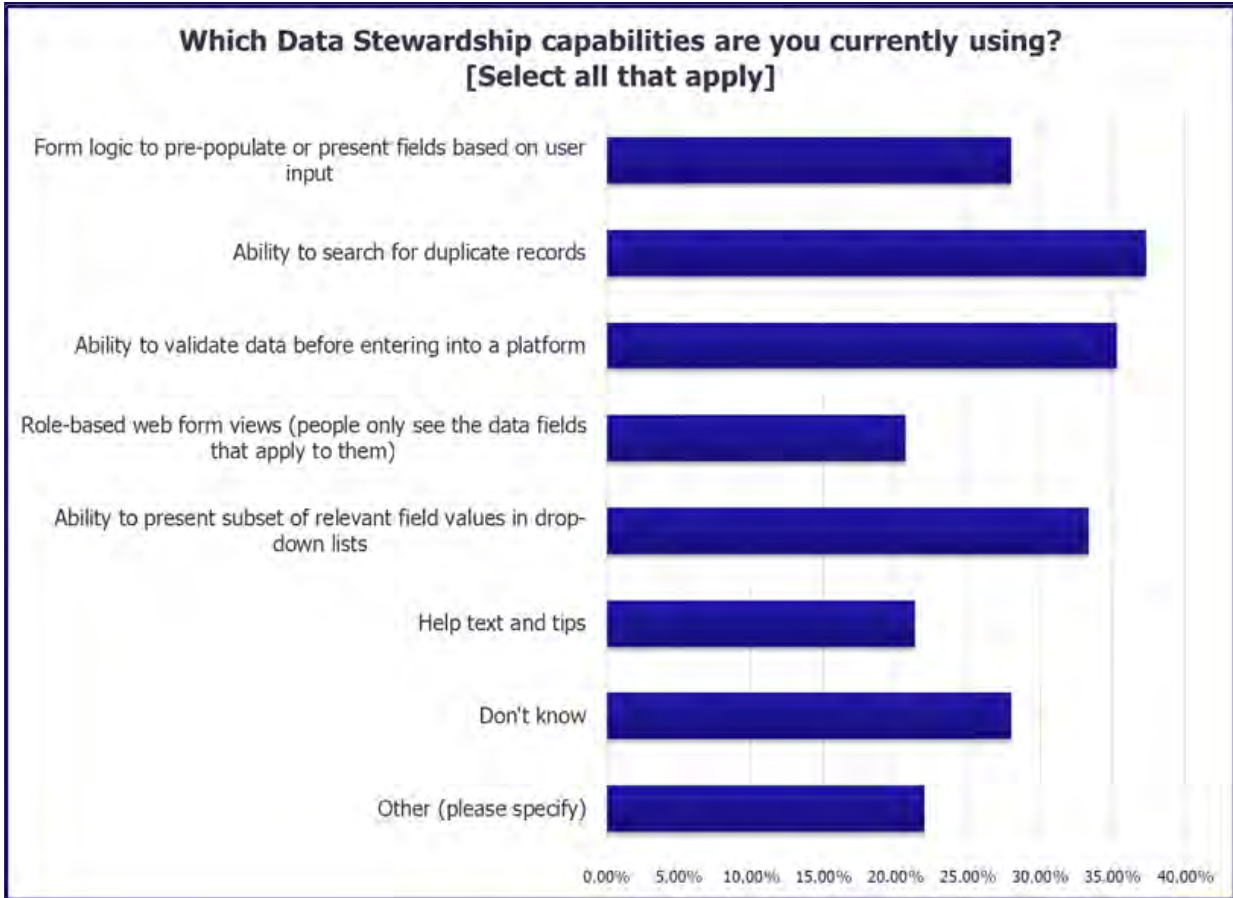
Figure 9: Data Stewardship Capabilities

Those practicing Data Governance and Stewardship longer than five years each fell under the 10% mark. These early adopters were ahead of the curve in understanding the need to:

▪ Adapt approaches to Data Governance and Stewardship to their organizations' culture.
▪ Build business cases that drive home the message of the value of these practices to the organization.
▪ Cultivate executive sponsorship.
▪ Assign stakeholder responsibilities and accountabilities.
▪ Integrate data formats, Metadata, and Data Architecture.
▪ Track progress in some way to help assure the business that these efforts are having an impact on everything from better decision-making to improved regulatory compliance.

A. Training in Governance and Stewardship

However long a business has been working on building up Data Governance and Stewardship practices, there is always the concern that they may not have access to strong training. While most respondents received training on how to do Governance and Stewardship from webinars and blogs sponsored by neutral parties, were coached by experienced professionals, read books, and/or received tutorials and other materials from vendors, 36.2% said that they had no training in Data Governance or Stewardship. They "just started doing" it [Figure 10].

How do you get trained in Data Governance and Data Stewardship? [Select all that apply]

Figure 10: Governance and Stewardship Training

Absent real guidance, it could become difficult for data professionals to keep these initiatives flying, even when it's possible to get them off the ground. Executive sponsorship may waver if the efforts data professionals try to make on monitoring and reporting don't deliver as much assurance or as many returns as they'd hoped. For instance, a data professional may be able to show that work was underway to prep and present more trustworthy data for the business to use, but the length of time it took to make that progress didn't immediately spur business agility. Funds may have dried up, and business users may have gone back to standard – if imperfect – practices, like having IT corral the data they need in reports that might take weeks to complete.

B. Data Governance and Data Stewardship Processes

It was, however, encouraging when a little over one-fifth of users noted that, although Data Governance wasn't currently being practiced, there were plans to start this year. Close to 30% of organizations claimed the same for Data Stewardship. We also discovered that respondents may have a leg up in that they already have processes in place that will help them implement a formalized Data Governance program [Figure 11]:

- 58.6% are identifying and monitoring regulatory compliance and risk management needs.
- 58.6% are identifying business information and data needs.
- 51.3% are building business element definitions and doing glossary implementations.
- 42.8% have processes for data issue resolution and Data Quality.
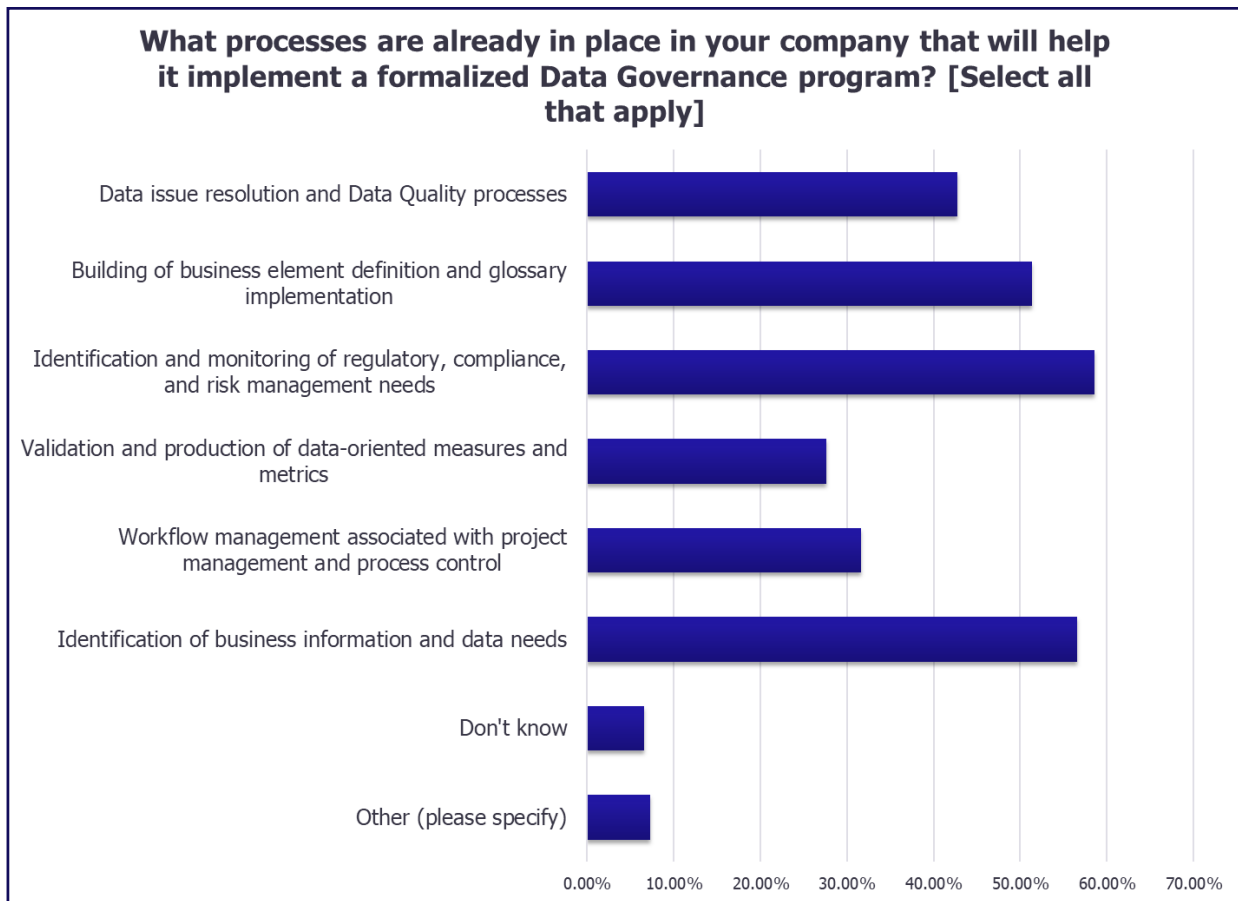

Figure 11: Data Governance Processes

As businesses slowly move in this direction or look to strengthen the processes and systems they already have in place, it's useful to understand how respondents view changes in Data Governance and Stewardship over the last few years. We asked an open-ended question to get a better idea of these changes:

▪ "What has changed the most in Data Governance and Data Stewardship in the past three to five years?"

There were some negative comments. One respondent indicated that not much has changed in the organization because work was proceeding at a glacial pace, and another implied that people in the business aren't as excited as they were when the company began the undertaking a decade ago. That challenged the ability to keep the concepts relevant.

But there is good news for businesses that want to dive into Data Governance and Stewardship or those in the trenches who want confirmation that their work matters. Respondents' answers by-and-large promote venturing into or seeing progress in these areas.

Common themes about the evolution of Data Governance and Stewardship included:

- There is greater awareness and knowledge about Governance and Stewardship.
- Best practices now exist in the context of more formalized policies and processes, as companies gain more experience and learn from mistakes.
- There is more communication – webinars, articles, and media coverage of Data Governance topics – even if not specifically framed as "Data Governance."
- The business community is coming to appreciate the importance of properly governed data.
- There is a need for more controls around data as a result of new regulations, including the General Data Protection Regulation (GDPR), as well as a result of cybersecurity breaches.
- There is greater awareness of increased risks for companies not engaging in these practices.
- Data volume and variety continues to grow from multiple sources and in different formats, challenging companies to bring order to and get value from these assets.
- Vendor engagement and improving commercial software that help maintain Metadata and support Data Quality provide an alternative to traditional and home-grown Data Management techniques, including manual procedures.

5. Emerging Trends in Data Governance and Data Stewardship

Going forward, one hope is that constant and consistent improvement in Data Governance and Stewardship will be the norm. That would pair well with the high percentage of companies that agree or strongly agree that their organization considers data to be an important asset (87.3%). And it could narrow the space that exists between organizations holding that belief and the considerably lower percentage of businesses that consider themselves to be particularly data-driven (55.8%). Such organizations likely continue to rely more on gut instincts for critical business decisions due to a lack of trust in their data. Without that trust, the Self-Service Analytics critical to becoming data-driven won't make much of a dent in business agility.

To find out what respondents themselves believe is the future of Data Governance and Stewardship, we asked them an open-ended question:

- "What do you see as the next emerging trend or trends in Data Governance and Data Stewardship?"

As you might expect, there was a clear focus on leveraging Governance and Stewardship for getting Metadata Management right. With functions including enterprise data classification and organization as well as imposing consistent business rules for data wherever it resides — from a silo to a Data Warehouse to a Data Lake — Metadata makes it easier to search for and access the right data for the right analysis in support of fast and accurate business decisions.

Some of the answers from the respondents relating to Metadata Management included:

<div>

Anthony's Take:

A focus on good Metadata Management will be a prominent trend in Data Governance and Stewardship.

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- ◦ "I hope for better Metadata creation at source and better Metadata Management and usage throughout the lifecycle. Semantic Technologies seem more powerful than purely relational approaches — I am hoping they become more fully realized."
- ◦ "There will be more integration of Data Quality and Governance into applications, perhaps by exposing APIs from Data Governance and Metadata tools, consumed by applications, to manage the quality of data entry, and Data Integration."
- ◦ "The emphasis on higher quality Metadata should increase. The current situation around Big Data has been mostly oriented to improve access and Analytics for

volumes of data. The lack of adequate context or a complete record for some forms of information (such as research data) is still a large issue."

- "It is very important as an emerging trend to establish a Metadata Repository and to manage Data Quality through Data Integration."
- "I see the overall integration of Metadata as being an untapped area."
- "Big Data Metadata that drives healthcare decisions in real-time will provide more accurate diagnosing and better patient care. This will require agile software to pull data from warehousing as it is happening. It also will require real-time updates into the Big Data Warehouses rather than next day updates."

Artificial Intelligence (AI) and Machine Learning were also cited by many. These have an impact on:

- Automation of processes.
- Contributions to Smart Data Catalogs that implement the classification of data assets and the automatic support of business user search, discovery, and identification of related data.
- Business users' effectiveness at performing Self-Service Analytics.

One respondent who saw AI becoming an increasing part of the Data Governance picture had the same outlook for Blockchain. According to IDC, Blockchain's influence will grow given that it enables "group consensus on the most recent version of the truth for a given entity, and full instance lineage (provenance) of the data."

The respondents also gave a number of their own thoughts about AI and Machine Learning, including:

- "The automation of Data Governance tasks by leveraging AI and Machine Learning will take things to the next level."
- "There will be an increase in automation and in software vendors' providing additional ML/AI out-of-the-box features in conjunction with that."
- "AI or Machine Learning will be needed to manage/govern semi-structured and unstructured data."
- "Artificial Intelligence will be used for automated discovery of data sources and lineage."
- "AI and Machine Learning will be used to assist in defining Governance and Stewardship rules."
- "Machine Learning, AI and probabilistic models will influence what is governed… and Governance of Machine Learning, AI and probabilistic models."

We also saw users discuss issues around the use of Data Governance and Stewardship to prepare compliance with increasingly stringent regulations, especially around data privacy; to bring all of an organization's human resources into Governance and Stewardship roles; and to put in place those oft-ignored metrics and measurements that help define an organization's progress and success in their endeavors. Most answers trended positive, but a few outlooks were bleak.

To couch these themes and other common ideas about expected trends in respondents' own words, we grouped some of the answers under further categories:

People Power

- "There will be more formally recognized roles in organizations to manage, guide and operationalize these practices."
- "Think people. Governance is a people process, not a software product."
- "Everyone becomes a Data Steward. Data becomes a way of doing business and business stakeholders are versed in the need for quality data and how they manage this as a key asset."
- "Leaders will not allocate full-time positions, but rather add another role for existing employees to fill."
- "A few basic standards will need to be accepted by all employees."
- "I think there will be broader acceptance and understanding of data mining and analytics by users. Those topics still feel like a very niche subject in a lot of cases, but I think as the general population begins to understand more and more about what data is out there and how it's being used, it's going to be a much bigger focus point for them."
- "This will lessen the importance of project management/managers."
- "Most business folks see these activities as clerical and beneath their skill set. I do not see how this can be overcome. The future for these disciplines remains dim."

Metrics and Measurements

- "Staff performance metrics will be based on their ability to better manage the data they use."
- "There will be more focus on KPIs for program measurement."
- "Expect more use of technology in the structure and measurement of implemented programs and their health check."
- "Management metrics around Governance activities will develop."

Modeling Methods

- "I see the application of Graph Technology to model the data relationships more flexibly."
- "Graph Databases will be used to allow the modeling of complex relationships."
- "There will be more federated models with control over principles and core (Stewardship) values while allowing for more Big Data and Analytics-efficient environments."

Data Flow

- "We have to impose Data Governance beyond a company's boundaries, as there will be more complex Data Governance processes through digitalization."
- "Data Governance should be totally redesigned to be directly connected to the data supply chain, creating an assembly line for managing data as it flows within the company."
- "Governance initiatives depend on re-engineering of data flows."

IT and Technology

- "Data roles should break out from under information technology and instead fulfill Information management as a separate business unit."
- "More companies will use the Data Governance framework within their business service lines while moving away from the historical IT service industry."
- "Data Governance will be offered as a service like SaaS."
- "There will be more use of technology in the structure and measurement of implemented programs and their health check."
- "Hopefully we'll see tools that integrate the various components of Data Governance."
- "I'm looking for more automation and better tools to help with Data Quality."
- "I see more software vendors getting into the marketplace because right now there is not one tool that can do everything when it comes to Metadata Management, ETL/Data Quality activities, and Data Stewardship functions."
- "Data Lakes and Big Data require Data Governance or all you have is data storage with no retrieval."

Analytics

- "We want to assure data integrity, definition and usability such that Data Science can create predictive models and monetize data more readily."
- "We need Data Lineage from source to report, using analytics to support data profiling and to support Data Quality measurements, especially in non- or semi-structured data."
- "It's important to introduce [Governance and Stewardship] to streaming/real-time data."

6. Organizational Leadership

To gain a better understanding of how senior leadership looks at Data Governance and Stewardship practices – in respect both to their thoughts about the importance of these practices and the actions they take or fail to take to back up positive considerations – the survey asked three questions. We asked respondents to choose their level of agreement with each statement – whether they strongly agreed, agreed, had a neutral opinion, disagreed, or strongly disagreed. (Please note that not all the findings of these statements are included in the text commentary, but can be seen in the chart below.) [Figure 12]

A. Please indicate your level of agreement with the following statements.

- *"Our organization considers data to be an important asset"*: As we noted earlier, close to 90% of respondents indicated that this was true in their organizations.
- *"We have C-level support for our Data Governance program"*: 54.9% percent of the respondents agreed that the highest-level roles in the organization do support such programs.
- *"The executives of our organization understand the importance of a Data Governance program"*: 55.4% percent of respondents said that understanding was clearly there.
- *"The line of business heads within our organization understand the importance of a Data Governance program"*: There was a slight drop-off here to 42.7%.
- *"All members of our organization – business and technical – recognize and take seriously their part in Data Stewardship"*: Just one-quarter of respondents were positive on this point.

Taken altogether [Figure 12], one can conclude that there is some progress being made in terms of CEO, executive, and Line of Business (LoB) understanding of the importance of Data Governance. But it is perhaps still less than it should be considering the high percentage of those who claim that the business "gets it" when it comes to data being an important asset. The perception of data value and Data Governance value are not perfectly correlated – Data Governance is underperforming. This brings us again to the lack of performance accountability that appears to exist in many businesses: only 23% agree or strongly agree that they have formal metrics to measure the success of Data Governance programs.

Likewise, 41.8% of respondents disagree or strongly disagree that a high level of data trust exists in their enterprises and fewer than one-third agree or strongly agree that there is significant trust in Data Quality. This correlates to another finding: only 23.9% agree or strongly agree that their companies have a formal metrics program in place to measure the success of Data Governance, while more than 50% of respondents disagree or strongly disagree that such a program exists. The relative immaturity of these practices may contribute to this lack of trust. It's hard to expect businesses to trust Data Quality without accountability and measurement of performance.

Outreach is important to engaging more people across the organization with Data Governance and Stewardship efforts. If the importance of Data Governance and Stewardship is to be recognized, these practices have to become more relevant to all stakeholders.
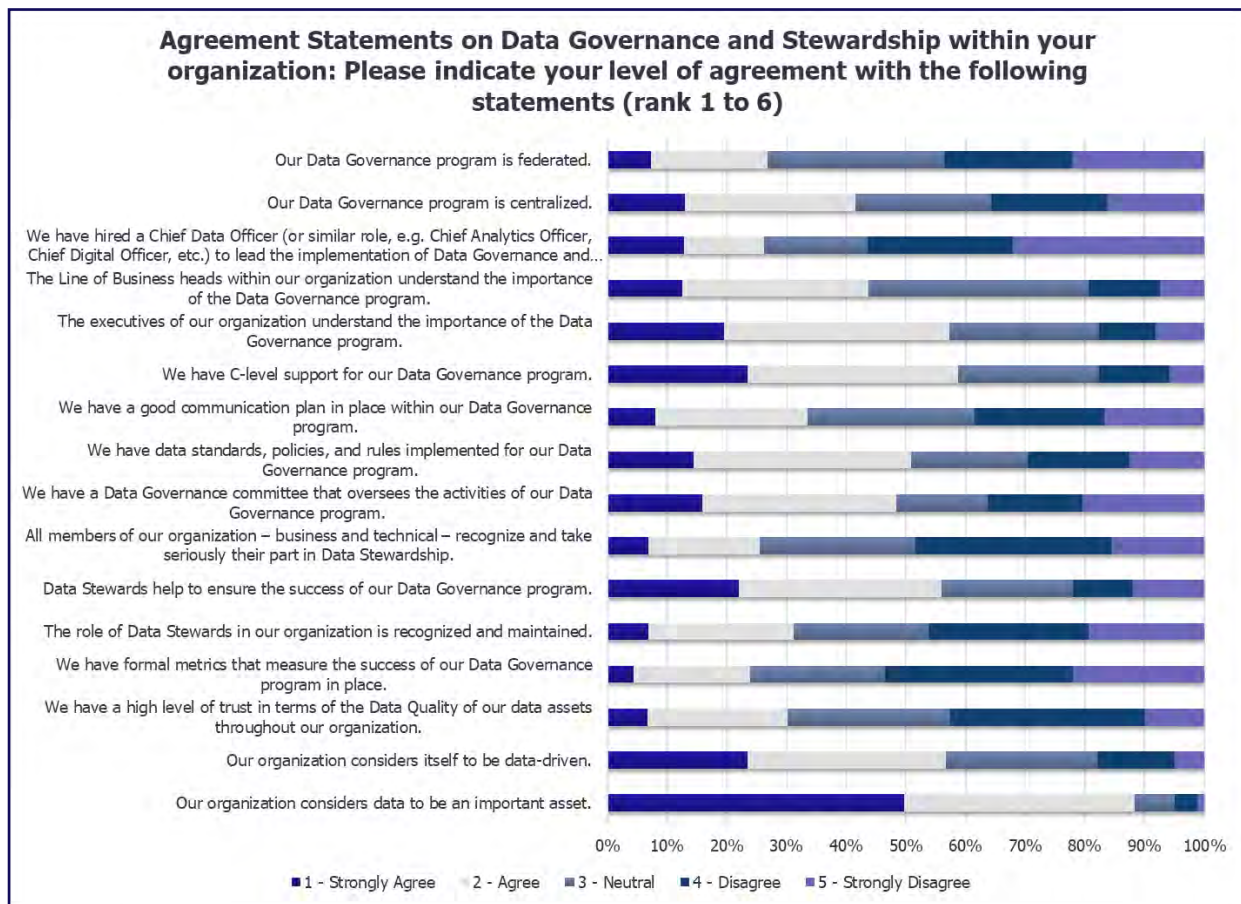

Figure 12: Agreement Statements

B. Regarding senior management, what level of understanding do they have? [Select all that apply]

While a smaller percentage than might be expected – given some of the above responses – claim there is uncertainty about the value of Data Governance and Stewardship in their business, a larger percentage (one-third) don't believe that the level of understanding management has about the value of Data Governance necessarily translates to action. There's fear around pulling the trigger, especially due to concerns about the cost of implementing these programs and the interference they may create with existing activities [Figure 13].

Similarly, just 14.3% claim that their company as a whole understands, supports, and sponsors Data Governance program activities – much below the percentage of respondents in the previous question who said they get support from their C-level parties. That support may not

be messaged well throughout the organization and, in fact, may be far down the list of projects leaders want to support. One respondent noted, for example, that, "there has never been any mention of Data Governance from senior management at townhalls or in newsletters."

In fact, just 6.9% see active roles being played by senior management in Data Governance efforts. That's half the percentage of those who see senior management making headway with understanding, support, and sponsorship. Given the low level of hands-on involvement, it's easy to imagine how little it would take to shut whole Governance and Stewardship programs down.
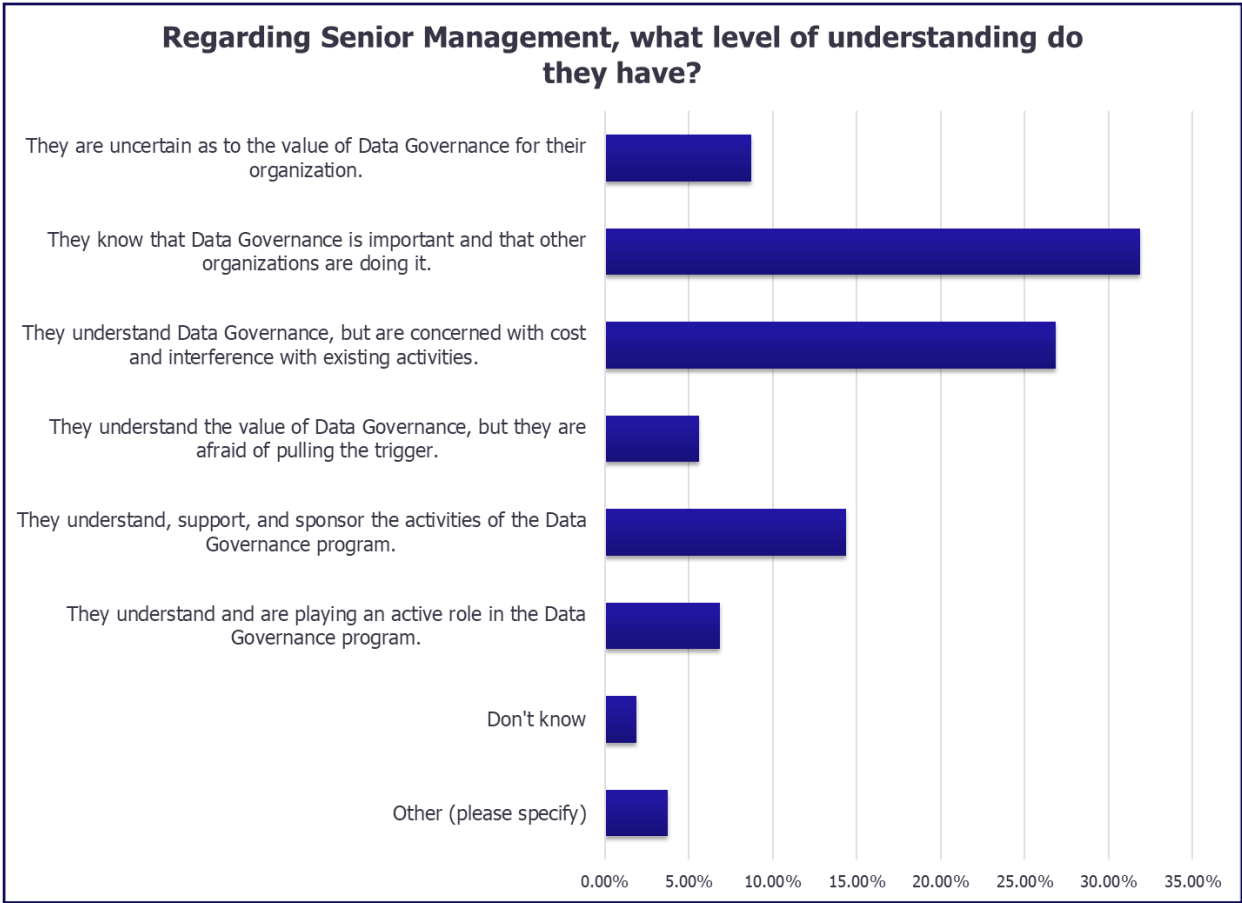
Regarding Senior Management, what level of understanding do they have?

Response	Percentage
They are uncertain as to the value of Data Governance for their organization.	~9%
They know that Data Governance is important and that other organizations are doing it.	~32%
They understand Data Governance, but are concerned with cost and interference with existing activities.	~27%
They understand the value of Data Governance, but they are afraid of pulling the trigger.	~6%
They understand, support, and sponsor the activities of the Data Governance program.	~15%
They understand and are playing an active role in the Data Governance program.	~7%
Don't know	~2%
Other (please specify)	~4%

Figure 13: Senior Management

C. Are resources allocated for defining, implementing, and communicating about Data Governance?

Yes... and no. Here we have a pretty even split, with 46.2% noting that yes, dedicated resources were allocated by senior management, and 46.3% percent saying either that no resources had been allocated or that the work was being undertaken by informal resources.

Given some of the other results we've noted regarding organizational leadership, it was surprising to see such a high percentage of respondents claiming that dedicated resources were there to take on the tasks. It is possible that the results may be skewed due to the population of survey respondents. Another possibility is that the formal resources dedicated to these efforts are below what they should be — a nod to executives who know that Data Governance should be on their list of priorities but don't make a true investment in it.

As one respondent who replied "other" noted, "Two years ago four staff were hired for this effort. Currently there are two remaining and soon there will be just one." [Figure 14]
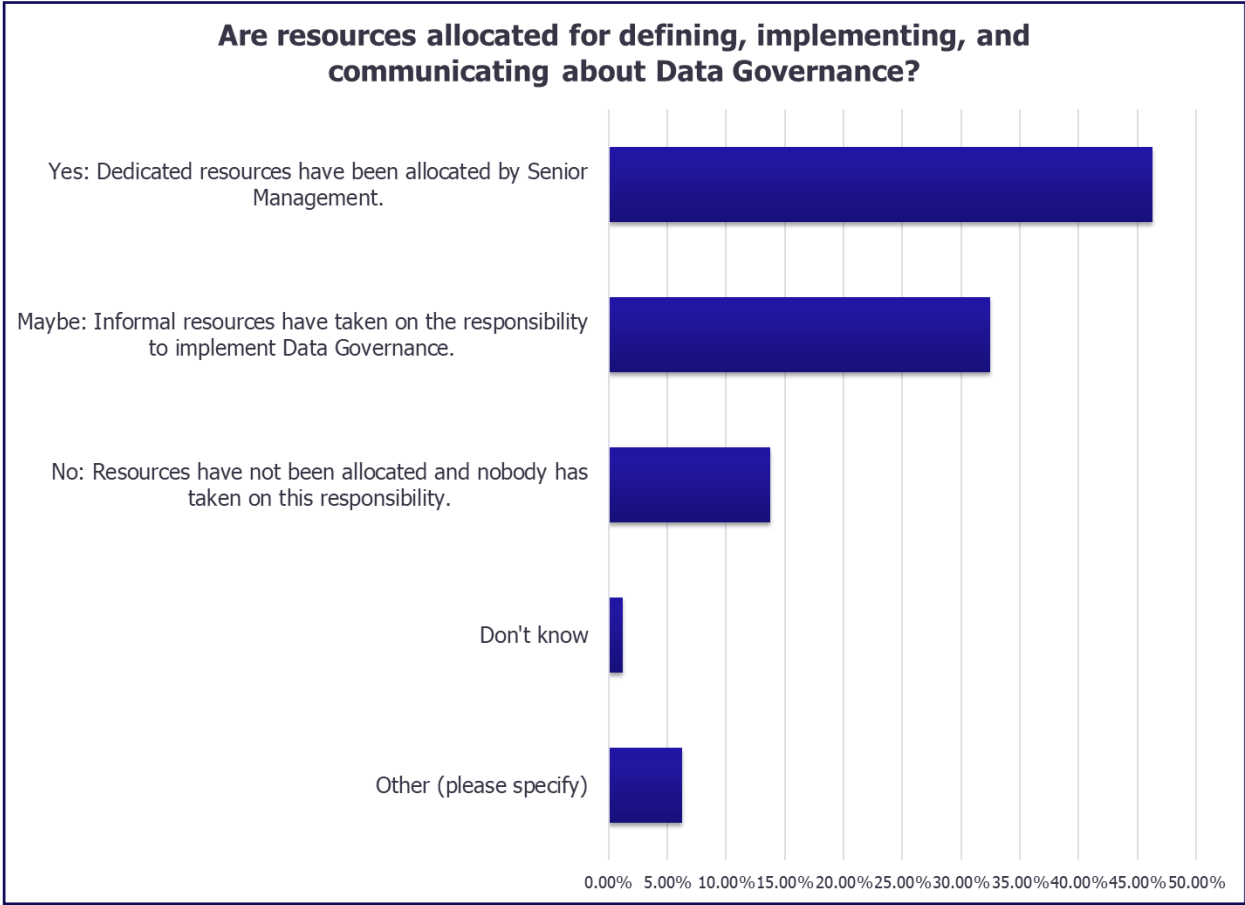

Figure 14: Allocation of Resources

7. The Software Connection

As we have seen from the open-ended answers that respondents gave about emerging Data Governance and Stewardship, there's certainly a sense that they expect more software solutions to enter into the market and more capabilities from the many software solutions that already exist. They want more integration among components for the array of Data Governance and Stewardship requirements, more automated support in the service of Data Quality, and perhaps even Software-as-a-Service (SaaS) solutions that take much of the burden off the organization.

To explore the software issue in greater depth, the survey asked two questions.

A. How do you feel about the quality of current tools for Data Governance and Data Stewardship available in the market today? [Select all that apply]

The greatest percentage of respondents (35.2%) indicated that what's out there today works well for some functionalities, while only 20.2% said what they're using meets the majority of their needs. Those needs may include Data Quality, Data Stewardship, policy management, data cataloging, security, privacy for GDPR compliance, increased automation, Master Data Management, and business and technical user support with role-based access.

About 14% don't find software solutions to be any help at all, and 22.2% are put off by their cumbersome nature and cost [Figure 15].

From these responses, it's clear that while tools are part of the Data Governance and Stewardship story, they aren't the whole story.
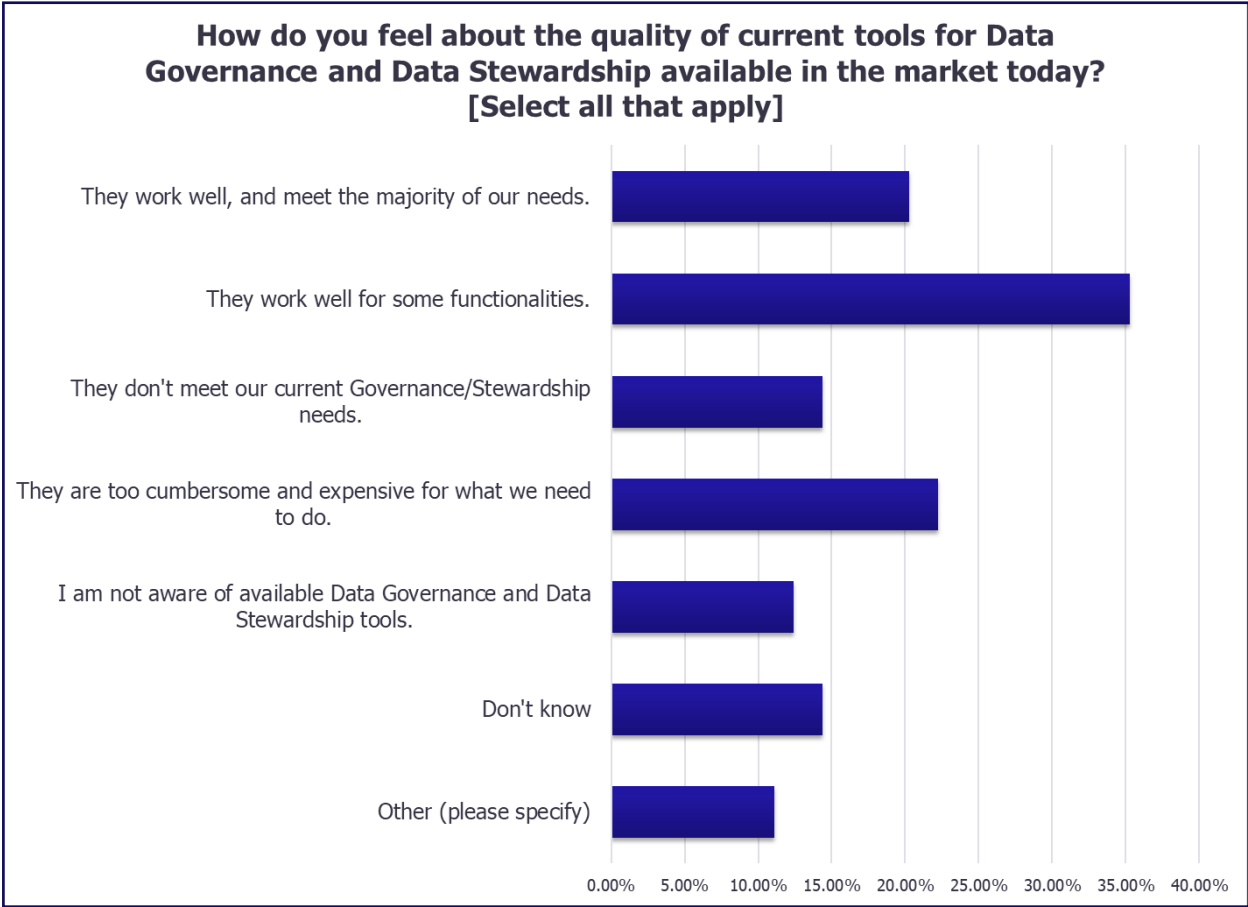
How do you feel about the quality of current tools for Data Governance and Data Stewardship available in the market today? [Select all that apply]

Figure 15: Quality of Tools

B. How much of an impact has the (or will the) selection and purchase of software tools had on the direction of your Data Governance program and the Metadata associated with the program?

The takeaway here was that — for all the added capabilities that organizations want to see in tools along with the increasing number of solutions available — organizations don't exclusively or even particularly rely on software to impact their initiatives. Close to 50% responded that software tools either played only a minor role in their implementations or had no impact at all in developing their Data Governance programs. Just 29.4% considered software to be a major influence on their programs. Once again, Data Governance and Stewardship tools aren't the whole story [Figure 16].

Software is not a Data Governance driver for the majority of respondents, nor should tools set the direction for these programs. People and processes count far more than technology facilitators.
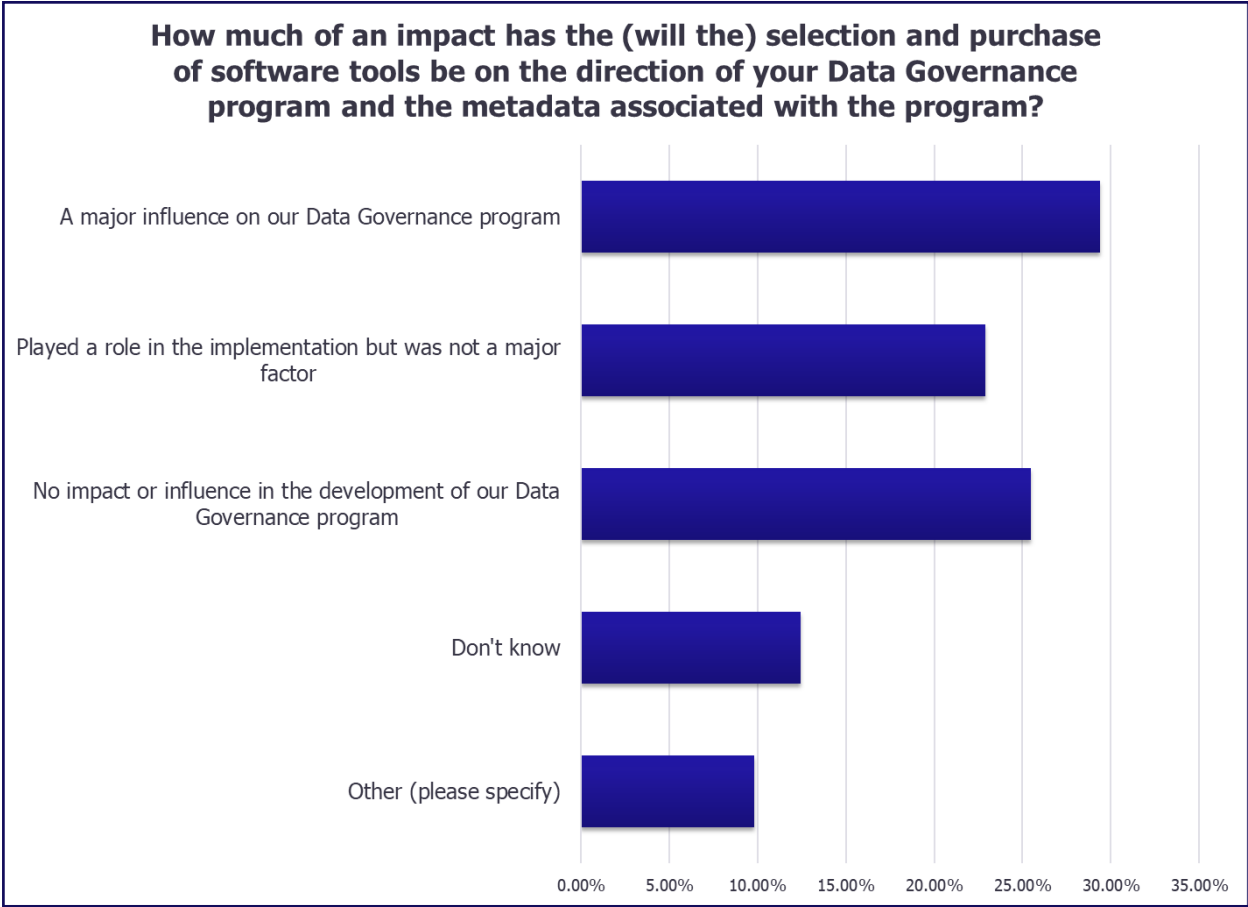
How much of an impact has the (will the) selection and purchase of software tools be on the direction of your Data Governance program and the metadata associated with the program?

Figure 16: Impact of Tools

8. Data Governance and Stewardship Drivers

It's heartening to learn that most respondents (90.1%) said that Data Governance and Data Stewardship are more important today than they were ten years ago. Mindsets still may need to shift to better correlate the value of data with Data Governance and Stewardship, but there is substantial recognition that the increase in the amount of data available for enterprise use and the power of new data technologies leads to an increased need for oversight [Figure 17].
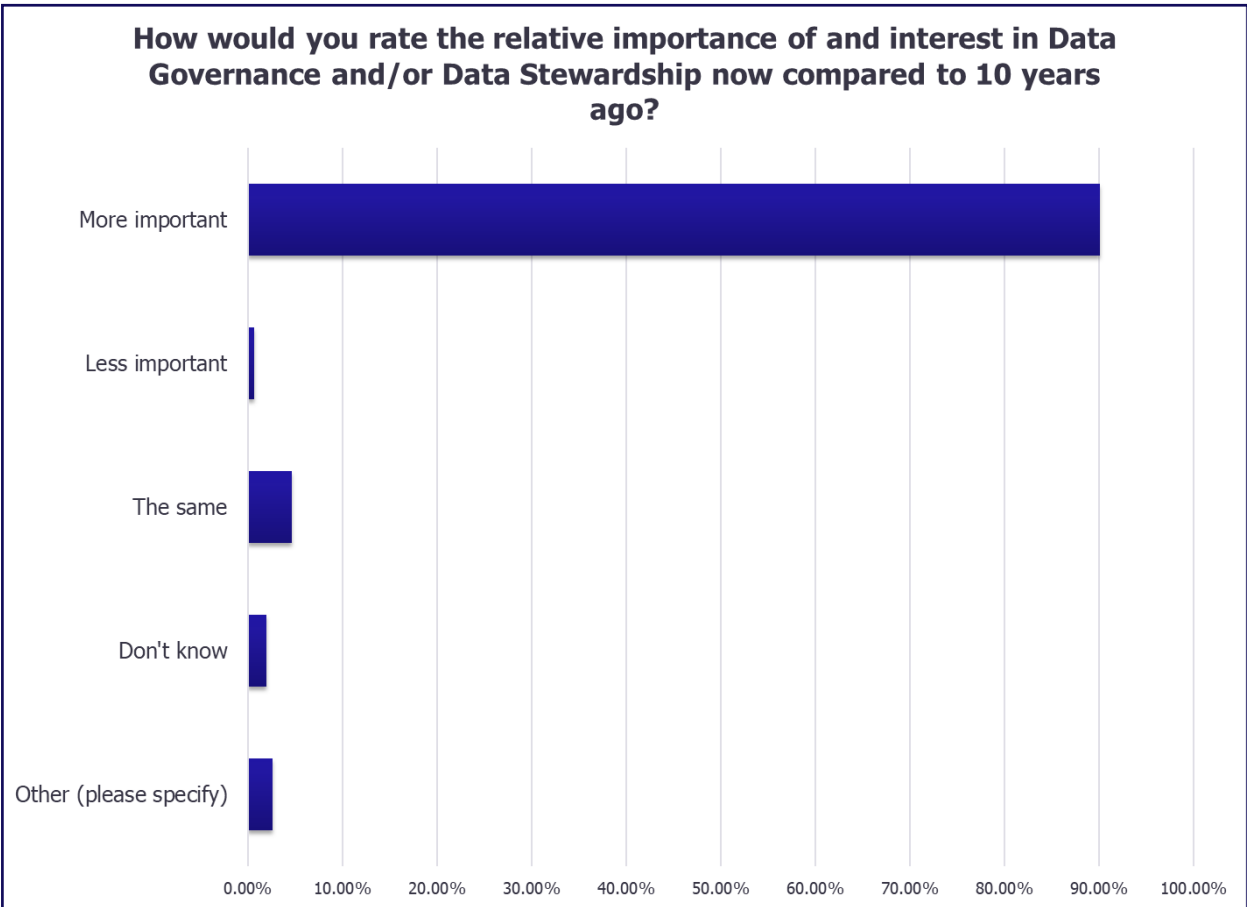
Figure 17: Importance of Data Governance and Stewardship

The survey asked three questions that aimed to reveal more about why companies think it can be to their benefit to implement Data Governance and Stewardship – or at least inch towards it. Each is discussed and analyzed below.

A. From among the following trends/technologies, which ones drove the implementation of Data Governance in your organization? [Select the Top 5]

In what is likely not a surprising response, Digital Business Transformation rated as the most significant factor in the #1 spot in driving Data Governance at 39.4%, followed by the need to leverage Advanced Analytics technology (33.7%). That makes sense, as delivering real-time insights by way of Data Analytics is key to becoming a disruptor in a market – not the disrupted [Figure 18].

Blockchain in support of the "single version of the truth," as recorded in the latest block in a chain, rates high among Data Governance drivers, too. After all, data integrity is critical to obtaining Analytics users can trust – and consequently helping an organization meet its digital transformation goals.
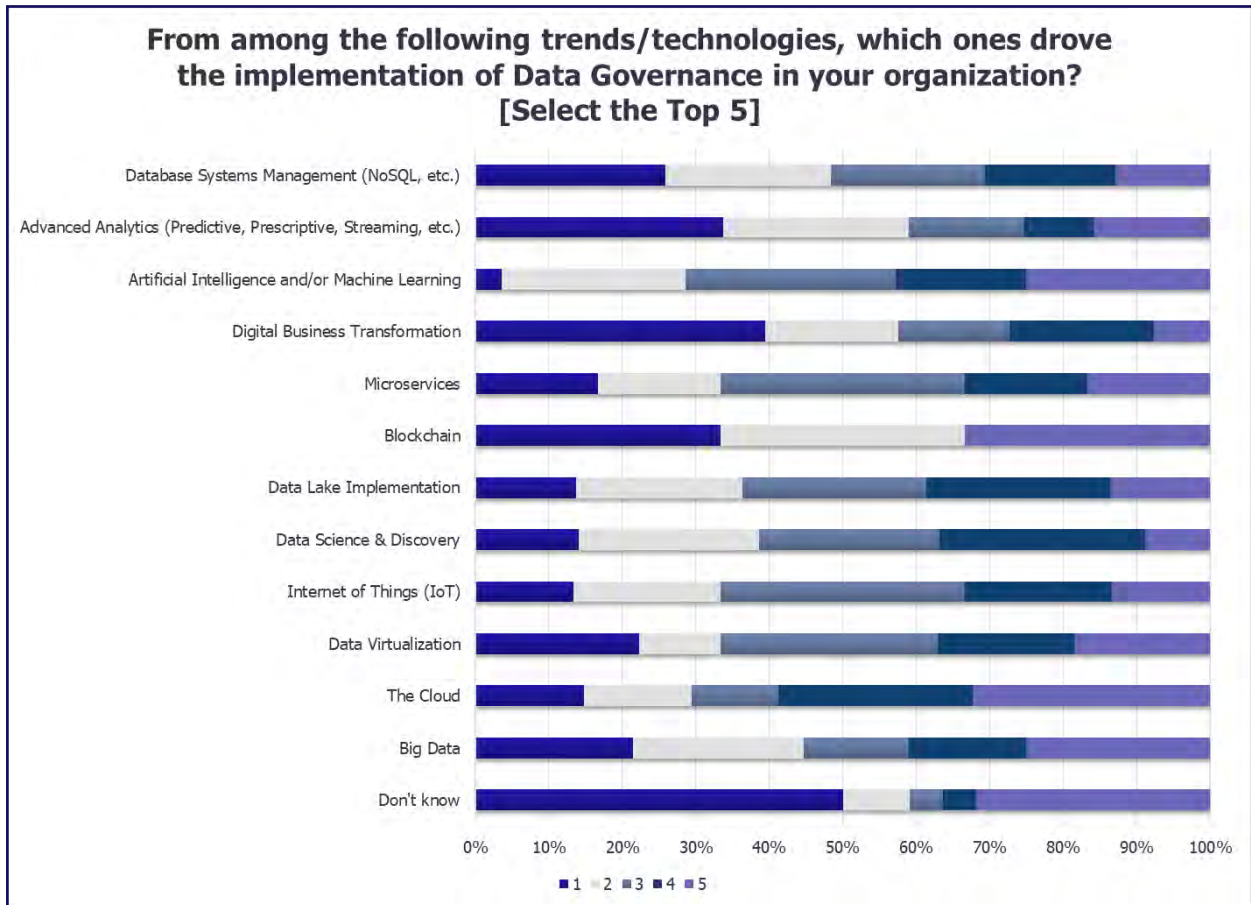

Figure 18: Trends/Technologies Driving Data Governance and Stewardship

B. From among the following Data Management disciplines/business trends, which ones drove the implementation of Data Governance in your organization? [Select the Top 5]

Master Data Management (42.7%) is a key driver for Data Governance, as is Regulation and Compliance at 41.2%. Data Strategy (31.4%), Data Modeling (20%) and Data Quality (17.1%) rounded out the top drivers.

Perhaps what's most interesting about this finding is that Data Strategy doesn't take the lead. One might see an association with another finding in the survey: when respondents were asked about the first step they took to define and implement a Data Governance program, the majority of users said their first step was to put the program's building blocks in place, including policies, roles, and processes [Figure 19]. It's a mistake to define policy, process, and so on before there's a good grasp of Data Strategy – that is, what value is intended to be added via Data Governance. Closely aligned to developing a Data Strategy is defining business need, use cases, and/or requirements, which came in second. Focusing on Metadata had a third-place showing.

As one respondent to the "other" choice clearly proclaimed, "we defined a Data Strategy, then started with Metadata Management." [Figure 20]
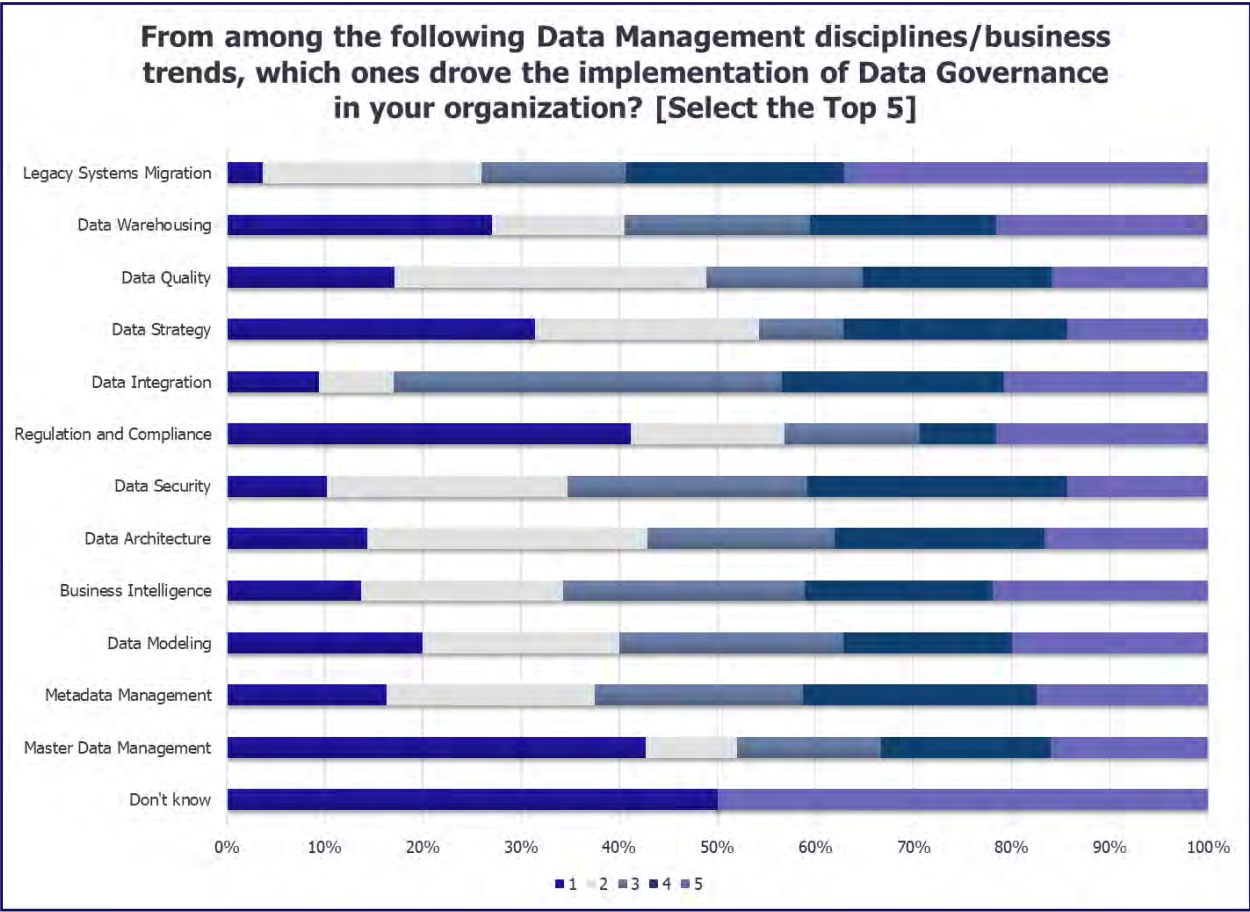

Figure 19: Disciplines/Business Trends Driving Data Governance and Stewardship
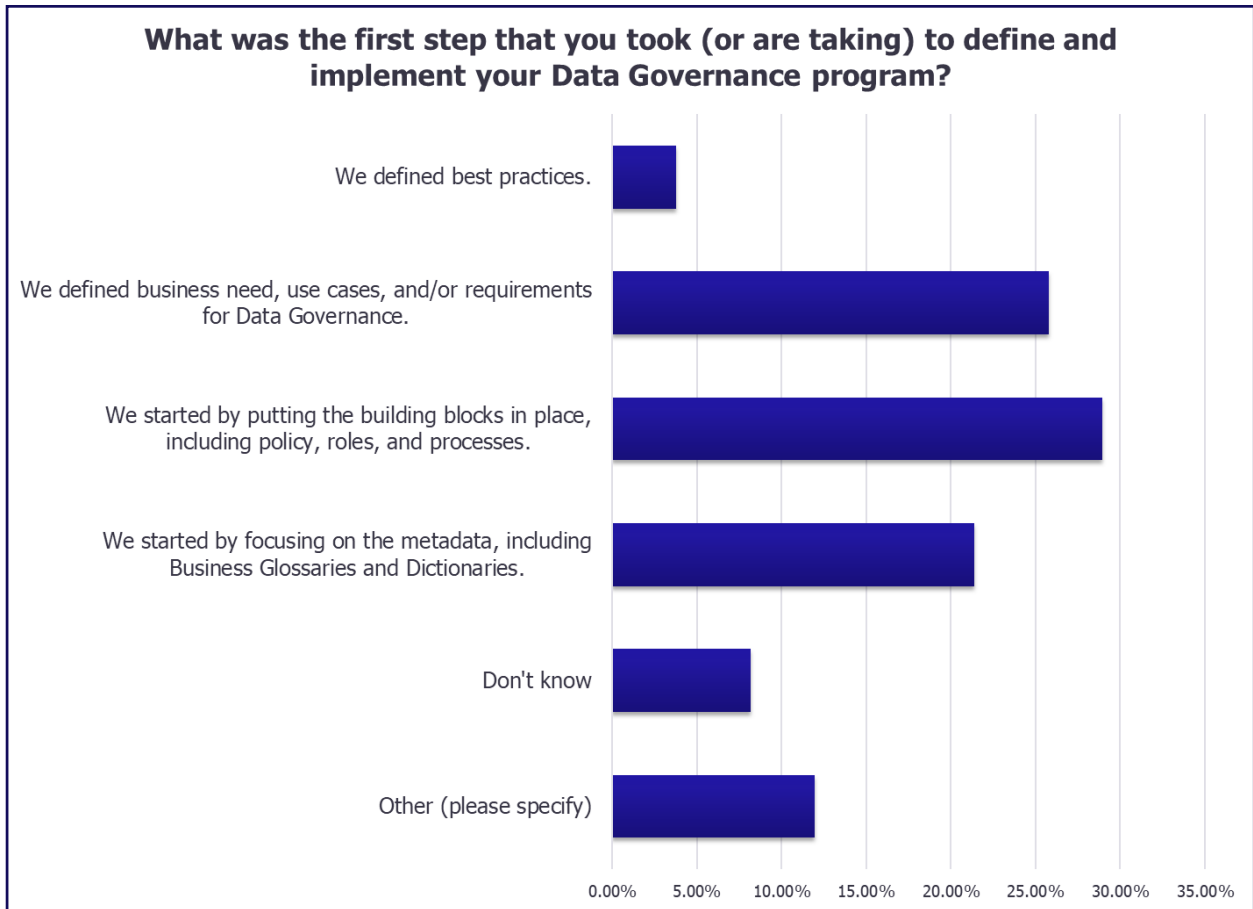
What was the first step that you took (or are taking) to define and implement your Data Governance program?

Figure 20: First Steps for Implementation

C. Regulatory compliance is often considered to be a driver for implementing Data Governance. Have any of the regulatory mandates below played a significant role in your DG/DS program? [Select all that apply]

GDPR and HIPAA were chosen, respectively, by 36.6% and 26.8% of respondents. PCI DSS has caught the attention of close to 20% of respondents. An inability to have processes in place for data control, including privacy protections; to monitor and report on key data metrics across the enterprise; and to conduct Data Quality audits jeopardizes adherence to these regulations [Figure 21].

While non-compliance with any regulation can create major problems, non-compliance with GDPR is particularly frightening, as its administrative fines can reach 20 million Euros or 4 percent of annual global turnover, whichever is highest.

Regulatory compliance is often considered to be a driver for implementing Data Governance. Have any of the regulatory mandates below played a significant role in your DG/DS program? [Select all that apply]
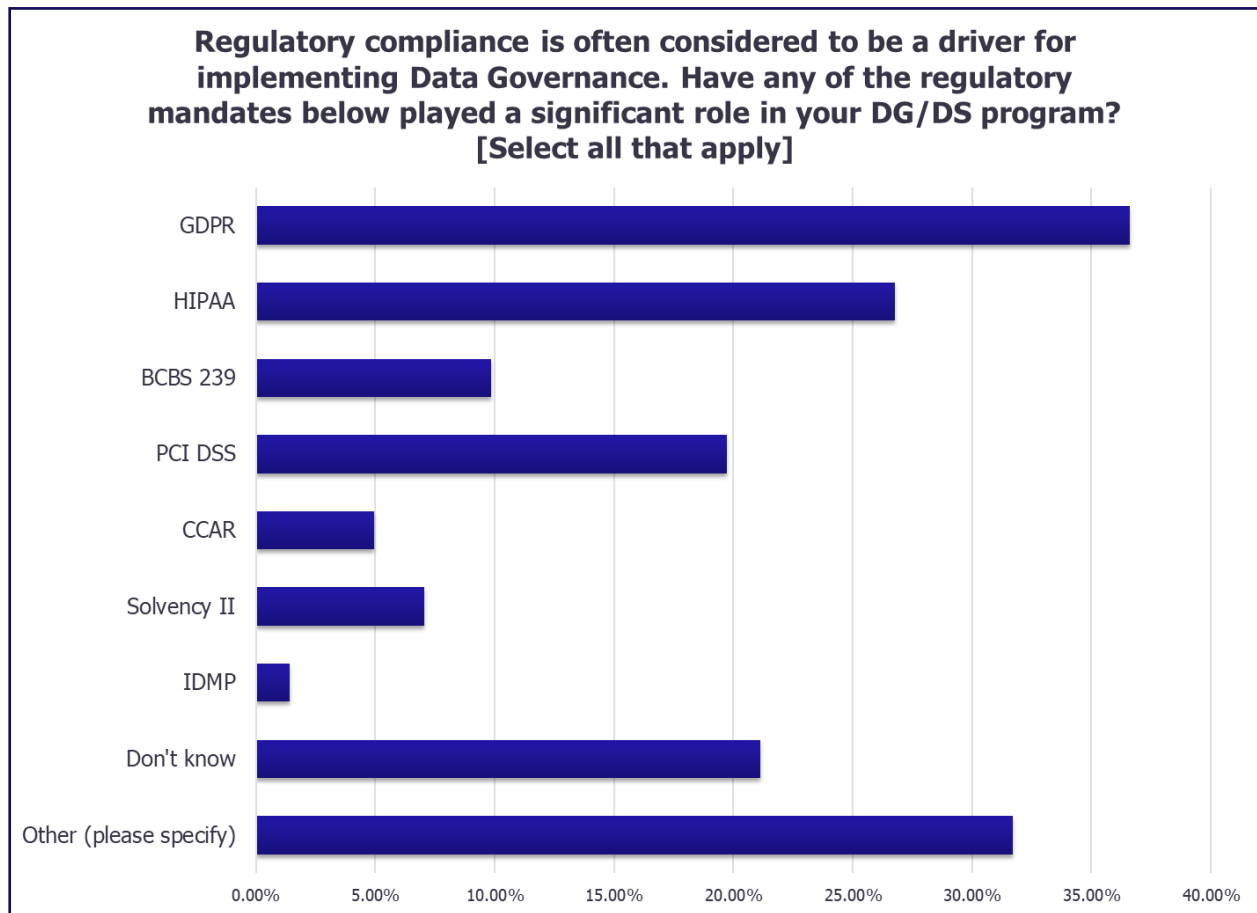
Figure 21: Regulatory Compliance

When they gave their opinions on the emerging trends in Data Governance and Stewardship, respondents noted that regulations will be a factor. A few of the direct statements from the respondents included:

- "There will be an emphasis on Data Quality to enable tighter controls to comply with regulations, such as GDPR, which deal with protecting private data."
- "We will need to be able to truly anonymize and delete data for GDPR."
- "More countries will adopt something like GDPR, which will require more people, processes, and technologies for Data Governance."
- "I believe we will see regulations such as GDPR begin to proliferate throughout business, with vendors providing more regulation-specific solutions."
- "I see more regulatory Data Governance requirements – especially around Big Data and cloud storage."
- "While not necessarily the main drivers of Data Governance efforts, GDPR, BCBS 239 and some other regulations are still a concern."
- "Privacy-based practices need support."

9. Conclusion

While data professionals have long been familiar with Data Governance and Data Stewardship and have tried to promote the concepts to the rest of the organization, they haven't always met with success. Admittedly, there are still some obstacles to overcome before enterprises completely accept these functions as critical to the business' ability to use its data with confidence. But change is coming, if not immediately, then in smaller increments.

We are seeing that Data Governance and Stewardship is considered more important now than a decade ago. That may be thanks to a number of developments over the last few years, such as the understanding that new regulations require stricter data controls and the understanding that there is real risk in not embracing these practices.

The future is exciting, as respondents contemplate emerging trends in these areas – from Metadata Management to AI to measurements and metrics. While not all of this is new, these ideas are getting more attention than in the past.

Great things can happen for businesses that are ready to get started or get on with their Governance and Stewardship efforts. They'll be able to better analyze their knowledge, digitize their businesses, and get ahead of the competition.

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Visit algmin.com to learn more about Algmin Data Leadership and their training and consulting services.

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