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WHAT IS YOUR PATH TO
DATA UNDERSTANDING?

A Playbook for Bridging the Gap Between Data Promise and Success

The Promise of Data

Data literacy is undoubtedly essential in our current climate. The movement from merely acknowledging the significance of data to taking meaningful, informed action is a transition that today's businesses can no longer afford to delay.

Historically, organizations have operated with functional silos across departments, leading to communication and collaboration gaps. However, these silos can be bridged with enhanced data literacy, enabling a more unified, holistic approach to business operations.

We find ourselves in a shifting labor landscape, with the loss of skilled workers resulting in a depletion of intellectual property and tribal knowledge. Concurrently, the demand for data-literate employees is surging. Understanding, creating, and communicating data has become a fundamental skill in today's world of work, especially as industries embrace smart facilities and IoT-connected assets.

In the spirit of the Four D's of Digital Success, as outlined by SIG - Data Quality, Data Access, Data Compliance, and Data Security, I'd propose a fifth "D" - Data Availability. It's not just about access but having the right data, in the right format, at the right time, which often needs to be sourced from our suppliers and partners.

Data availability is crucial in multi-site facility management organizations, manufacturing, education, and other asset-intensive industries. These sectors are witnessing increased adoption of digital technologies and, thus, an elevated necessity for data literacy.

As more people are exposed to data in their daily work than ever before, it is imperative to harness it effectively. Organizations need to identify issues, plan for continuity, prevent overspending, and have a detailed roadmap to de-risk the supply chain and implement real-world changes to succeed in this digital world.

We should recognize the importance of data and capitalize on it. Data can transform not just procurement but organizations as a whole. Let's drive data literacy in our workforce and leverage it to bridge the divide between data promise and realizing its benefits. The promise of data awaits us. Let's act on it.

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Data Strategy
SDI: The Digital Supply Chain Company

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Introduction: Is Data Important?

It seems like a rhetorical question to which there is an obvious answer. YES!

However, recognizing the importance of something is different from heeding the call to take meaningful action. The fact that **only 5% of all data is analyzed** proves the disconnect between acknowledgment and action.

Why dormant and dark data exist is one of many questions this paper seeks to answer. Beyond answering the "whys," the paper will ultimately create a pathway to bridging the divide between data promise and the realization of its benefits. It will do this by showing you how you can capitalize on this unclaimed capital and its impact on your organization's financial and brand fortunes — and society as a whole.

Let's be honest with one another — for many, data isn't sexy or exciting. It is an unwieldy mass of information limited to spreadsheet parsing and siloed analysis for many procurement organizations. Unfortunately, the result is that our data's real-time impact is compromised at a time when we need as much actionable insight as possible.

For example, I doubt anyone would argue that we need complete visibility into our suppliers and their suppliers. To get to this extended and extensive level of insight, we need to capture and assess thousands of data points on each supplier to ensure that our procurement dollars drive good in this world. Quarterly Business Reviews (QBRs) or annual updates — currently the norm — will not suffice when it comes to requirements

such as Risk assessment framework, ESG reporting, etc.

It's also worth noting that technology limitations no longer pose the obstacle they once did, as today's AI-driven solutions are intuitively capable of scraping and analyzing large volumes of data rapidly and accurately.

The fact that current tools will free-up procurement teams to focus on more strategic versus functional activities is of even greater importance. Procurement professionals can now proactively leverage complete data visibility to manage their extended supply chains instead of sourcing in the dark using "limited" information, and then reacting to disruptions. They can now get ahead of the sourcing events curve faster than ever before.
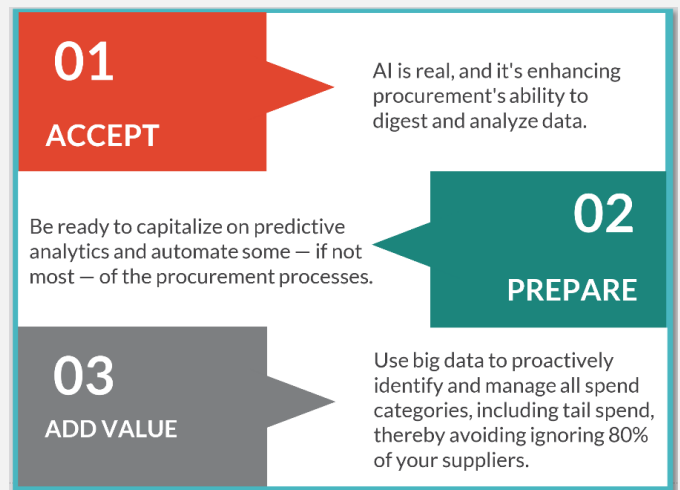
CEO & President

A Time To Step Up

Even though it hasn't traditionally been procurement's primary responsibility to oversee supplier data, procurement must take a leadership role in its organization's data modernization transformation process.

Why must procurement take a leadership role? Because it touches all critical delivery points of a company's products or services and therefore requires our centralized coordination of efforts with internal and external stakeholders. Everything from effective risk assessment and response to data management must be on procurement's agendas, including cybersecurity.

In the context of the above, the **three big takeaways** you will gain from this paper are:

01 ACCEPT
AI is real, and it's enhancing procurement's ability to digest and analyze data.

02 PREPARE
Be ready to capitalize on predictive analytics and automate some — if not most — of the procurement processes.

03 ADD VALUE
Use big data to proactively identify and manage all spend categories, including tail spend, thereby avoiding ignoring 80% of your suppliers.

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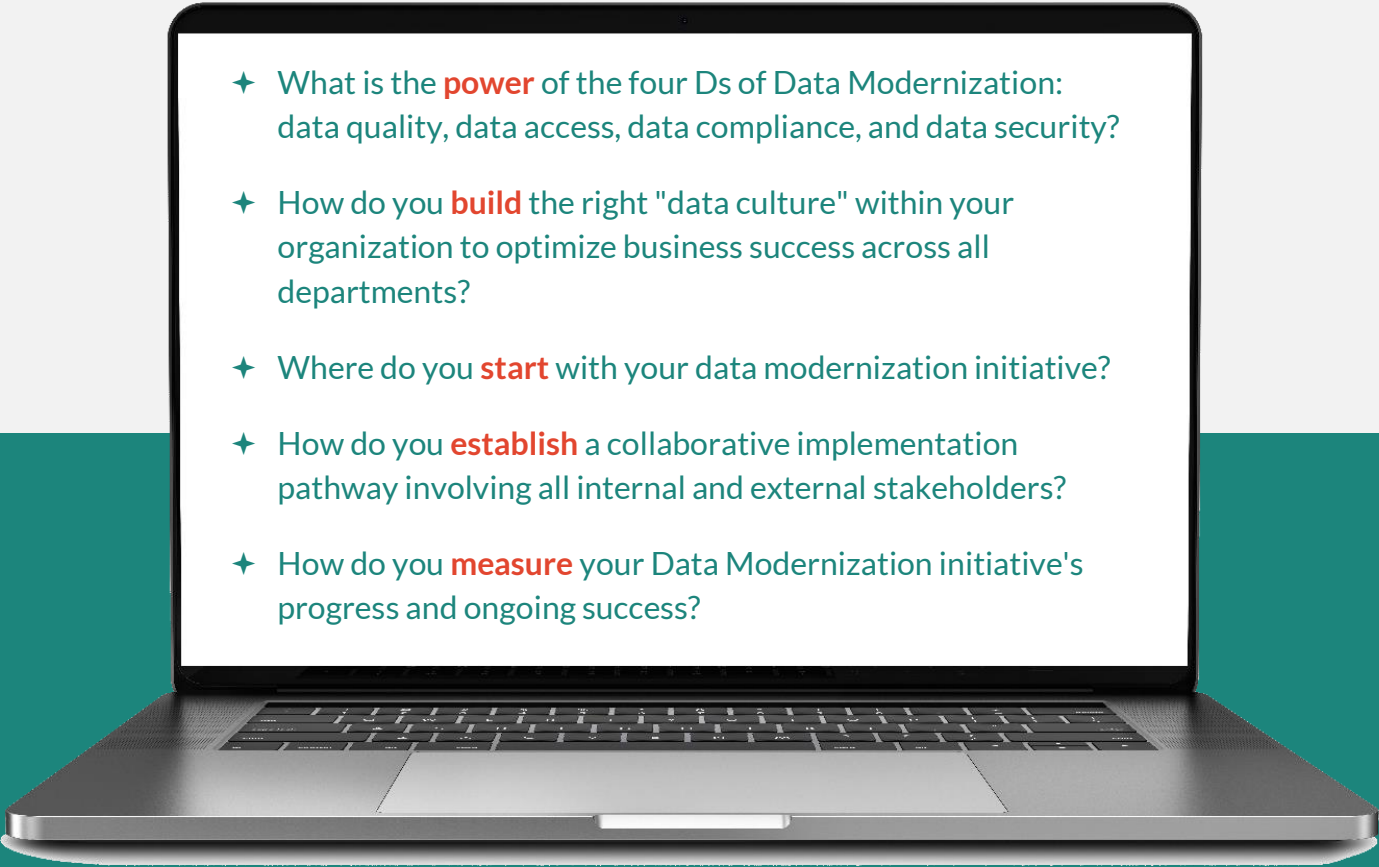FUTURE of SOURCING
a SIG|ORG Publication

Overview

Even though digital transformation is impossible without clean data, a relatively minuscule percentage of all collected data is ever analyzed. A recent Deloitte survey reporting that most CPOs are "dissatisfied" with their data and the progress of their digital transformation strategies suggests a link between the lack of digital success and poor data quality. A joint SIG-Spend Matters survey regarding complex services procurement supports this assessment. Therefore, this SIG Study and white paper aim to bridge this gap between data quality and digital promise by leveraging the uniquely diverse and experienced Members of Sourcing Industry Group (SIG) to help you develop a data pathway that works for your organization.

Transformation leaders often struggle to develop data playbooks that are clear, accessible, and compliant with strategic digital objectives. One of the main benefits of SIG's recommended roadmap for transforming raw information into actionable knowledge is driving digital success.

Within this text, SIG will profile industry trends, including testimonials and case studies from innovative leaders, benchmarking these questions and more:

✦ What is the **power** of the four Ds of Data Modernization: data quality, data access, data compliance, and data security?

✦ How do you **build** the right "data culture" within your organization to optimize business success across all departments?

✦ Where do you **start** with your data modernization initiative?

✦ How do you **establish** a collaborative implementation pathway involving all internal and external stakeholders?

✦ How do you **measure** your Data Modernization initiative's progress and ongoing success?

Big Data, Big Challenges!

According to our research, by 2025, it is estimated that the world will generate 181 zettabytes of data. To create some context of how big that number is, 181 zettabytes is the equivalent of 175 trillion USB sticks. Alternatively, on average, it takes 14 minutes and 18 seconds to download 1 gigabyte. Given that there are one trillion gigabytes in a single zettabyte, your download time of the latter would be 27,188,960 years.

No matter how you calculate it, that's a lot of information. It's also one of the reasons, if not the primary reason, why 95% of businesses can't see the forest for all the trees when it comes to managing, analyzing, and protecting their data. When you think of Big Data as BIG DATA, extracting value can be a daunting exercise for which procurement teams do not often have the necessary cycles to effect meaningful change and results.

Many organizations are pinning their data management hopes and dreams on digital technologies such as Business Intelligence and Artificial Intelligence solutions. Unfortunately, as SIG partner Spend Matters recently noted, "BI tools are like a Swiss Army knife." While these intuitive, agile solutions "can do anything you ask, they're simply not

designed for a specific business function out of the box."

As a result, these robust solutions "often fail to provide the insights necessary for full spend visibility." The fact that global CPO surveys over the past few years indicate that most procurement leaders are unsatisfied

with their digital transformation efforts is a telling statistic.

But is it solely a technology problem?

In the early days of procurement automation, one of the biggest challenges was the lack of timely access to data through enterprise-wide planning platforms. With today's real-time, user-intuitive solutions, acquiring data on a real-time basis is no longer an issue. The real challenge is what organizations can do with the data once captured.

According to Gartner, rather than technology being an obstacle, the lack of "BI and analytics (digital) maturity" hinders 87% of all organizations.

What Is "Digital Maturity"?

At a high level, digital maturity starts with digital readiness, enabling the procurement team's ability to effectively manage the four Ds of Data Modernization: data quality, data access, data compliance, and data security.

However, to get to this level of "maturity," procurement must assume a lead versus follow mindset and build the "data culture" within the organization to optimize business success across all departments. Given the post-pandemic realization that supply chains impact all areas of an enterprise and, by extension, our everyday lives, who better than procurement to assume the role of lead facilitator of an organization's data and digital transformation?

The following pages will provide a definitive digital readiness and maturity roadmap through a procurement lens, including where to start with your digital modernization initiative. We will then provide the framework to enable you to look beyond the procurement department and establish a collaborative implementation pathway involving all internal and external stakeholders.

Finally, we will show you how to measure your Data Modernization initiative's progress and success to ensure optimal agility and adaptive capability.

Why Procurement?

Over the past four decades, SIG's membership — which includes the industry's top executives from some of the world's most notable corporations — has enabled us to leverage our advanced research capability and empirical insights to accumulate a wealth of knowledge and expertise.

Through this lens, we have and continue to view procurement and its influential leadership position beyond the profession.

With this expanded view, we now have a unique and broader understanding of the impact sourcing and procurement organizations have on enterprise success. So, tapping into SIG's growing and diverse membership base will continue to provide needed insights and direction, including why procurement should always take the lead in their organization's data modernization efforts.

"To ensure that there is "single source of truth" on spend data, allow access to the respective business teams so that they can better understand their spend and work with them on supplier strategies to optimize the spend and improve margins."
- SIG Community Member

As you will note in the graph below, for most respondents, it is not a question of whether procurement should take the lead regarding their organization's "spend" data modernization efforts, but on what area or areas to prioritize the focus.

62%	55%	55%	34%	7%
Data Quality	Data Access	Data Compliance	Data Security	None of these
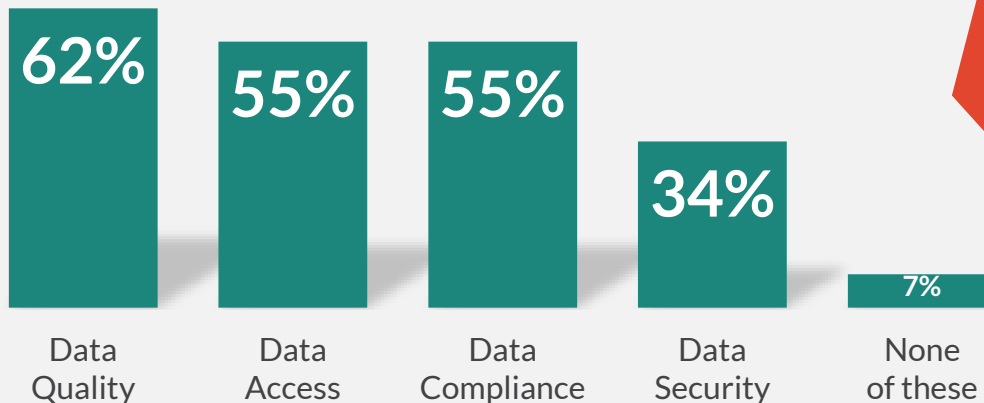
Where Should Procurement Take the Lead?

Comments such as procurement "should be accountable for data cleansing first, before starting procurement journey," highlight the importance of data quality for 62% of respondents.

Data modernization is not a "go it alone" proposition, with one respondent emphasizing that "this new venue must have a champion within the executive office to fund, remove roadblocks, and share stories of success and failure along the journey."

Two other data areas or concerns — data access and data compliance — were given equally weighted importance. Our research found that "data compliance supports data quality, and the appropriate access of quality data enables business' decisions/performance insights for continued improvements."

Although lower in overall positioning, data security was still a notable area of interest for 34% of survey respondents. Traditionally considered to be the responsibility of the IT department, past studies have reported that more than 50% of all enterprise breaches occur through a third-party partner or supplier. Who owns the supplier relationship? When you consider the

consequences of non-compliance with regulations such as the General Data Protection Regulation (GDPR), the upswing in procurement taking a more proactive view of data security is understandable.

The quality and accessibility of data are not just boxes to be checked off; they're essential drivers of strategic sourcing and crucial for leveraging spend data effectively. Procurement plays a pivotal role in the organization's data modernization journey. While every facet of the enterprise benefits from high-quality and readily available data, procurement is uniquely positioned to champion this cause. Data literacy isn't just about understanding the data but leveraging it to create value. It is how you generate savings, mitigate risks, and make informed decisions that drive strategic growth.

Given the individual and collective importance, the Four Ds of digital success are the cornerstones for organizations to build a sound data modernization strategy.

In the next section, we will delve deeper into these Four D areas, including the direct and indirect impact data quality, data access, data compliance, and data security has on procurement.

1
Data Quality

Data Quality

Have you ever used an app on your phone or your car's system to enter your destination point? Most people have likely used Google Maps or the "Hey Siri" command to chart the best route. Do you trust the app to give you the right directions?

In a recent interview, [Joseph Yacura](#), MBA, MS, MQM, observed that people generally trust these apps to get them where they need to go without hesitation or question. However, Yacura went on to say that when it comes to digital transformation at work, many people do not trust the systems or the data.

This challenge with trust is not due to a lack of data. According to our research, between 2016 and 2020, overall data grew to 44ZB. As cited earlier in this paper, that number will grow to an astounding 181ZB by 2025.

It is not just about harnessing the vast amounts of data but refining it into trustworthy, actionable insights. A substantial portion of data quality lies in the hands of suppliers, making procurement teams dependent on them. Hence, it's crucial that supplier data sharing capabilities become a key consideration in sourcing strategies. This includes API/EDI abilities, catalog data, and electronic ordering/automation features. Procurement's approach to supplier selection should inherently be shaped by the ability of potential partners to provide quality data, fueling data-driven strategic decisions.

Therefore, the greatest challenge is corralling or harnessing that data to turn it into actionable knowledge, which is the new organizational currency in the post-pandemic world. Achieving this result takes more than upgrading technology or going digital alone. It requires a deliberate and dramatic shift in culture.

A New Culture

Procurement's cultural shift towards data-driven insights is a transformative necessity, not an optional upgrade. Realizing the full potential of a company's data, and thus its ability to drive significant business outcomes is tightly tethered to the evolution of processes, personnel, and leadership attitudes. Data is no longer just a byproduct of business activities; it's a pivotal asset directly impacting regulatory compliance, employee empowerment, and end-customer satisfaction. Procurement leaders, recognizing this, are progressively demonstrating their value through analytics, connecting business outcomes to data. Indeed, if we are to leverage the 93% of leaders who understand this value, an effective data strategy, complemented by the right tools and methods, needs to be in place. The goal? Fostering a unified, innovative data culture that prioritizes data in business process decisions, propelling the organization towards a data-led future.

93 % of respondents believe in connecting and demonstrating outcomes to data and analytics	
79 % of respondents believe in prioritizing the use of data business process decisions	**What contributes to a successful and innovative "data culture"?**
52 % of respondents believe in investing in leading tools and showcasing use cases	
48 % of respondents believe in creating a unified mission to lead with data	

A March 2020 Harvard Business Review article champions the idea that successfully laying a solid data practice foundation requires the creation of a new data-driven culture to improve data quality. Unfortunately, for 95% of all executives, the biggest obstacles to realizing the full potential of their data cache through big data and AI initiatives are linked directly to organizational and process challenges. **In other words, the problem with accessing and using quality data is a people and process issue — and ultimately, a leadership issue.**

The consensus is that company leadership, including the CEO, must view data as a bottom-line asset that impacts everything from regulatory compliance and employee empowerment to end-customer satisfaction.

Once there is the recognition of data's value as a business currency impacting the extended enterprise and beyond — including end customers — the question becomes how versus why.

From a procurement and sourcing standpoint, the SIG Survey, "What is Your Path to Data Understanding?", identified the "key drivers" to establish a "successful and innovative" data culture.

Connecting And Demonstrating Outcomes

It is ironic and encouraging that the top "key driver" to creating a successful and innovative data culture starts with demonstrating the outcomes of pursuing a data modernization strategy.

Based on our research, dating back to the early 2000s, when procurement professionals were first encouraged to start thinking like a CFO, the profession struggled to demonstrate its value beyond cost savings. This irresistible force of change was problematic because of the immovable belief that purchasing was tactical versus strategic. In other words, there was no "real" direct link to buying smart (a function) and its strategic impact on the enterprise beyond a narrow scope of money spent (or not spent).

Even within the narrow focus of cost savings, the May 2006 article, "How to Speak Like a CFO," reported that "too often, finance executives in Corporate America simply don't believe that purchasing departments are really bringing in the savings they claim." What is telling is that the 2006 article is, for many procurement professionals, still relevant in 2022.

The above raises the fundamental question: how does procurement move from a cost savings mechanism achieving skeptical savings to a strategic partner impacting all areas of a business right through to the bottom line? It starts by recognizing that while there is a great opportunity in data, merely having a lot of it is not enough.

> "Don't hide the elephant in the room. Data is messy, but with a collective effort, it can start to tell stories." - *SIG Community Member*

How does data, and more specifically procurement data, drive successful business outcomes beyond a transactional event? It seems that those responding to this study's survey recognize that there is not one area of our daily lives in which supply chains do not have an impact — either

positive or negative. If anything, the pandemic and today's geopolitical uncertainty have demonstrated this truth on multiple levels in many ways.

Based on the above, the key is not to view procurement data through the narrow lens of cost or cost savings alone, but to understand its extended impact throughout the enterprise ecosystem — including external stakeholders such as suppliers and, ultimately, the end-customer.

Prioritizing The Use Of Data

Why is it important to take this broader view of supply chain impact?

As one company responding to the survey put it, helping users to "understand the value of data normalization" and the "many places that data is used" to achieve strategic outcomes begins with procurement's understanding of its significantly broader impact. Without this understanding, how do you prioritize and leverage data to make better business decisions from both a procurement and enterprise-wide standpoint?

For those responding to the survey, answering this question is one of the reasons why prioritizing data usage was highlighted as the second most important "key driver" to creating a successful and innovative data culture.

Investing In Leading Tools

Digital technology, including AI, plays a major role in an organization's data modernization journey. 52% of those responding to the survey emphasized the importance of their organization making the necessary "investment in leading digital tools" as a priority for developing an effective data culture.

While identifying the importance of digital tools seems obvious, the above results indicate that the industry has finally started to evolve beyond a technology-first approach to data modernization. Instead of turning to the latest and greatest technology first, leaders are now focusing their efforts on demonstrating data outcomes (93%) and prioritizing data usage for decision-making (79%) beforehand. It's a significant breakthrough primarily driven by the disappointment that CPOs have expressed regarding the success of their digital transformation strategies to date.

> "Any conversation that starts with tools is the wrong conversation. You should start with a business problem." - *Anthony Scriffignano, Chief Data Scientist at Dun & Bradstreet*

There is no doubt that understanding the outcomes you want to achieve with technology and how you can leverage it to get to where you need to go will enable you to identify the tools that best

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align with your capabilities and goals. The reason is quite simple: you are now using technology to achieve your objectives versus defining them.

Creating A Unified Mission

Of the four key drivers" for establishing a successful digital culture within an organization, 48% of those responding to the survey felt that creating a unified mission to "lead with data" was a priority.

What's interesting about this driver being ranked fourth on the priority list is that one could interpret it to mean that to most survey respondents, it has less importance than the earlier referenced three drivers. However, suppose you consider the evolution of procurement from a functional cost-savings role to a strategic one that impacts all business areas. In that case, it's an indication of the industry's self-awareness that there's a bigger picture to what it does beyond its traditional, limited scope. Starting to be recognized as "the newest C-Suite strategists," Chief Procurement Officers are now playing "an increasingly strategic role across executive leadership," as "top-of-mind business issues" are now part of their portfolio.

To put it in another context, when it comes to procurement's recognition of the importance of leading a unified data mission, survey results in the past would likely have been much different than today. **Instead, our research now indicates that the functional silos that historically defined C-Suite roles are experiencing tremendous change, creating an open-door opportunity for procurement to step forward into a more strategic role within the collective enterprise.** What is noteworthy from a decade ago is that procurement professionals are beginning to recognize and embrace this new, expanded vision of greater responsibility.

> "The biggest piece is that you need to start with a data culture and define what it means. Not all organizations have bought into the concept. If your leadership does not actively align, you don't have any leverage." - *SIG Community Member*

Of course, assuming leadership in an organization's data modernization efforts doesn't mean that CPOs and procurement should go it alone. It means that given the breadth of procurement's ever-expanding responsibilities in areas such as organizational competitiveness and market research, as well as being a driver for building economies, the profession is the natural one to take the lead in creating a data culture.

2

Data Access

Data Access

In a paper about creating a path to data understanding, the discussion would inevitably turn to address the elephant in the room: spreadsheet usage.

We are introducing the spreadsheet topic when discussing data access because, at its core, access is not about having data to download. Data access is about using that information to achieve real-time strategic business objectives. It means having reliable and timely access to your data pipeline to make better, clear-line-of-site business decisions.

In June 2022, two separate polls of procurement professionals and CPOs revealed an interesting perspective on spreadsheet usage and data access.

44% of procurement professionals and 38% of CPOs indicated that ease of use and versatility was the primary reason spreadsheets are "widely used." For 25% of procurement pros and 31% of CPOs, being able to share data in a "common format" was the second most important reason for continuing spreadsheet usage.

But are spreadsheets the best tool to gain critical insights?

Given that only 3% of the data quality scores from a Harvard Business Review study were rated as acceptable — meaning that 97% is not "in a usable state" — what type of data are spreadsheets analyzing?

To put it bluntly, ease of use, versatility, and data sharing in a common format are of little value if data veracity is in question. What it means is that the challenge is not in having or getting access to data, as much as it's a problem with accessing "quality data."

"Spreadsheets are holding your supply chain operations back." - *Supply Chain Brain*

Based on the results of this study's survey, managing data quality is the top priority for procurement. While spreadsheets are an easy and convenient receptacle for receiving and sharing information, the old garbage in-garbage out analogy still applies. What procurement needs are the tools that facilitate the generation of clean data to analyze and utilize to drive optimal outcomes.

Data modernization technology delivers enterprise-wide continuity by embedding automated data collection capabilities into company policies and procedures. In other words, everyone across all business units will have access to the same "cleaned" information simultaneously in real-time through a single repository with clear taxonomies and accurate data tagging.

Regarding compliance and risk management, which we will be talking about in the upcoming sections, having quality data securely available at your fingertips takes on even greater importance.

"It's time for supply chain network technology. The need is clear for multi-enterprise collaboration and coordination, for financial supply chain enablement and oversight, for converging strategic and tactical decision-support based on higher quality, real-time data." - *Supply Chain Brain*

3

Data
Compliance

Data Compliance

What is data compliance, and why is it essential for procurement to take a leadership role in overseeing or managing this part of the data modernization process?

Traditionally, "procurement compliance" was limited to verifying the department's adherence to internal guidelines or rules to ensure ongoing alignment with company policies and procedures. For example, off-contract or maverick buying in the past was a significant challenge — and for some companies, it still is.

However, compliance requirements are expanding considerably with the supply chain's extended impact moving beyond a transactional level to include strategic commitments such as brand reputation and data security.

> "Data compliance supports data quality, and the appropriate access of quality data enables business' decisions/performance insights for continued improvements." - *SIG Community Member*
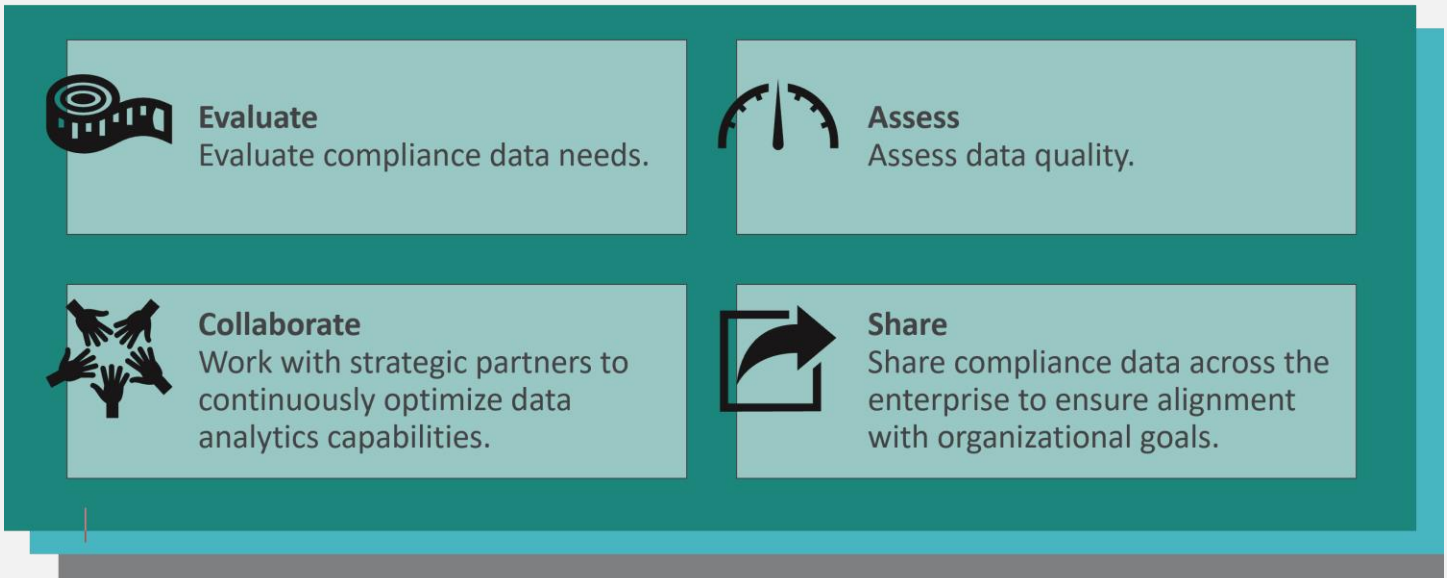
Our digital age has seen an explosion of data, with 90% of all data created since 2020, yet only a fraction is effectively analyzed. This reality underscores the urgent need for expansive data literacy across the workforce. Such literacy will equip organizations to leverage emerging technologies to optimize data and analytics capabilities in core areas, including evaluation, assessment, collaboration, and sharing. As procurement's role continues to evolve, so does the expectation for comprehensive, data-driven leadership. Data literacy isn't merely a beneficial skill anymore; it's a necessity for modern business operations.

Those responding to the SIG Survey recognize this growing responsibility, with 55% indicating that when it comes to compliance issues, procurement professionals need to take more of a leadership role than in the past. But what does taking a leadership role entail? According to SIG industry research, compliance management starts with leveraging emerging technologies to optimize data and analytics capabilities in several key or core areas.

> "Data quality and compliance are also needed to ensure supplier risks are managed and mitigated." - *SIG Community Member*

These areas, which mirror a similar operational framework used by Chief Compliance Officers, include:

Evaluate
Evaluate compliance data needs.

Assess
Assess data quality.

Collaborate
Work with strategic partners to continuously optimize data analytics capabilities.

Share
Share compliance data across the enterprise to ensure alignment with organizational goals.

Compliance provides the rules and regulations that protect organizations from risks. The link between compliance and risk management is nothing new. What is different is that the nature and impact of risk have changed dramatically in recent years.

For example, the number of people working remotely because of the pandemic has forever changed the "in-office" working landscape. Due to the emergence of a widely dispersed workforce, the demands for better system performance, improved data quality, and advanced analytics capabilities have significantly increased.

Because of events such as the pandemic and current geopolitical instability in many parts of the world, the ongoing fluidity of these changes are likely permanent. Volatility, uncertainty, complexity, and ambiguity are now the new normal, meaning that compliance and risk management capability must more readily adapt to greater uncertainties. Matt Kelly believes that the "slow evolution to a data analytics world" means that organizations are now in a "mad scramble, as even our basic assumptions about risk, policy and procedure are being tested like never before."

Against such a backdrop, compliance is a multi-faceted challenge that demands ongoing and proactive data certainty. At its core, compliance and risk management ultimately depend on having quality data available at your fingertips. **A data modernization strategy that encompasses data quality, access, and compliance will consistently deliver that accessibility.**

4

Data Security

Data Security

In their response to the question, "When it comes to data quality, access, compliance, and security, in which areas should procurement take the lead," 34% of SIG Members indicated that data security should top the list.

What is both interesting and encouraging about these results is that it is unlikely that data (or cybersecurity) would have been on the procurement radar a decade ago.

Based on our research, up until 2012, supply chain security was primarily limited to concerns regarding the safety of shipments. It was not until 2012 that there was an "increased awareness and emphasis on cybersecurity in the supply chain process."

The following comments from those responding to the SIG Survey provide current-day proof of the progression in thinking regarding cybersecurity.

> "However, security and other measures should be left to the experts in those areas — do not expect continuity/fidelity without the infrastructure in place to accommodate and support it."

> "Data Security is a big risk in all environments. We are having multiple issues of data security breaches in spite of all the controls in place."

> "Procurement needs to ensure that the contracts provide information for any subcontracts that protect Data and monitor that the subcontractors are compliant with the data security program."

Why Dwell Time Is the New Supply Chain Hot Topic

When asked why procurement professionals should care about cybersecurity, the initial response usually centers on the risks associated with a breach of the invoicing and purchase order system and how it can disrupt business. It's a valid concern to which there is a tangible cost.

Beyond process and business disruption costs within the operation, data breaches can also occur throughout the extended supply chain. Even though your organization can have the necessary protection protocols in place on a localized basis, your security is only as strong as the weakest link in your supply chain. **According to various reports, over 50% of all enterprise breaches occur through a third-party partner or supplier.**

What exacerbates the situation further is that most CPOs don't know the security protocols of their suppliers, **nor do many believe that it is their responsibility.** In other words, if there is a breach with one of your suppliers, the consensus is that it is up to the supplier to identify and address it.

The problem is that most breaches are not discovered for anywhere from 60 to 100 days — in some cases longer. This period of non-detection is known as dwell time. Can you imagine what a malevolent intruder could do in that amount of time? Making the situation worse is that even after an intrusion is detected, it takes even longer to determine the impact it has on individuals both within and external to the enterprise.

So, how many suppliers does your organization have? How many do you communicate with regularly via email or online? What measures do you take to protect your information throughout your extended supply chain?

As systems become more automated and more data is put out into the great big world, does your risk or exposure increase or decrease?

Given the digital transformation of procurement and the resulting extension of supply chains globally, unanswered questions such as these are why CPOs are starting to take notice of data security and risk like never before.

As a procurement professional, what are you doing about data security in your organization?

Data Modernization Path

In response to the question "What practices should an organization initiate on its road to data modernization 93% of SIG Members identified "upskilling existing talent" as the critical first step.

What practices should an organization initiate on its road to data modernization?

Build Talent
93%

Enhance Tools
72%

New Tools
55%

Skilled Hires
38%

Partner
24%

What is most interesting about this survey result is that it reflects the assertion of most CPOs over five years (2013 to 2018) that their teams generally "lacked the ability to deliver on their strategic objectives."

According to Spend Matters, the "real challenge for procurement organizations" was getting the "right level of talent." In 2018, the way to address this shortfall was to "bring in younger talent that is analytically adept and more familiar with digital tools."

Based on the SIG 2022 survey regarding the need to upskill talent, it seems that little progress has been made to address this issue over the past four years. What is most noteworthy about the apparent lack of progress is the degree of funding, or lack thereof, in training programs. The following excerpt from the Spend Matters article speaks directly to this last point:

"Yet, procurement leaders are spending less on talent development. The report finds that 72% of respondents spend less than 2% of their operating budgets on training and development programs, compared with 66% last year."

When it comes to bridging the disconnect between recognizing the need to upskill existing talent and making the corresponding investment, there are many questions that procurement leaders need to ask, starting with:

What skills are required?

How much is the company investing in their people to develop said capabilities?

To answer these questions, this paper will examine the other responses in the following sections, including enhancing existing tools and bringing in third-party services.

Enhancing Existing Tools

What is the old saying about "a poor worker blames their tools?" Perhaps a better version regarding digital automation is that "an under-trained, unengaged worker will never find the right tool."

As referenced earlier in this paper, a recent Deloitte CPO Global Survey reported that most of CPOs were not satisfied with the results of their digital transformation initiatives.

While there is no doubt that enhancing the use of existing tools should be a top priority, what form does the enhancement take?

To start, and as discussed in the previous section on upskilling talent, organizations need to assess their team's capabilities to identify where further development is necessary before shifting their attention to existing technology within the enterprise.

Once the talent assessment has taken place with the gaps sufficiently addressed, the focus should be on assessing the purpose for and utilization of current technologies — legacy and digital.

Regarding legacy systems, it's worth noting that in 2021, 88% of organizations believe that their ERP system has enabled them to succeed. It is also worth noting that 63% of organizations use a "cloud-based" ERP platform. However, despite the move to the cloud, just 5% of these companies "use their ERP effectively to create and augment high-quality data."

As quality data is "the key to effective analytics and insights," how do you enhance your organization's current tools to address this serious gap in technology utilization regarding data modernization?

> 👤 "In-house database modernization holds the key to success." - *SIG Community Member*

Our adjunct post-survey research into the utilization of emerging digital technologies finds that 72% of companies have moved beyond the development stage of their digital transformation strategy. However, only 7% of these organizations have fully implemented their digital initiatives. This low implementation rate means that despite the promises of the digital revolution to transform processes to deliver optimal returns in critical business areas such as data management, most companies have been unable to overcome several key obstacles.

In the context of potential obstacles, one SIG Survey participant commented that "collaboration of business strategies throughout the organization to use existing and future data to build, strengthen, and innovate" is critical for success. Another survey participant cautioned that

"purchasing new tools is only useful if you have buy-in from the team and they appreciate the benefits to the company."

When it comes to data modernization, who within your organization has taken the leading role in creating and implementing your strategy? Who should be involved that isn't?

You can have the greatest technology in the world. Still, without buy-in from key internal stakeholders and support from external partners, success regarding digital transformation and data modernization will continue to elude most companies. Successfully utilizing existing digital technology tools requires greater communication and collaboration — and ultimately, leadership. Note the subject of communication and collaboration will be covered more extensively in the Collaboration Implementation Pathway section later in this paper.

Purchasing New Tools

While 72% of SIG Members indicate that enhancing existing tools should be a priority, 55% believe that an investment in new tools is required.

With only 7% of companies fully implementing their digital strategy, is there a bonafide need for new technology or a greater focus on capitalizing on what is already in place?

As a SIG Member stated in the previous section, "purchasing new tools is only useful if you have buy-in from the team and they appreciate the benefits to the company." In our monitoring of technology implementation trending in both the public and private sectors since 2004, the failure to obtain buy-in has led many organizations to expand their technical footprint horizontally versus strategically growing it vertically through progressive enhancement of existing technologies.

How does horizontal technology expansion negatively obstruct your data modernization pathway?

Based on our research, since 2020, 90% of the world's total data has been "generated." That trend will likely continue with the steadily increasing use of emerging technologies. However, even though technology use has grown significantly, leading to the capture of more and more data, our ability to analyze it remains consistently low.

In 2012, less than 1% of the world's data was analyzed, with more than 80% unprotected. Fast forward to 2022, and despite the significant increase in overall data globally, just 0.5% of it is being analyzed today. This downward trend is troubling because our ability to generate more data is rapidly and exponentially increasing while our ability to manage it is declining. It is an untenable situation and one that requires the implementation of a sound data modernization strategy. A critical element of that strategy is determining what technology is currently in place at your company and how much it is being "fully utilized" to analyze your key data. Then and only then should an investment in new technology be considered with a priority focus on solutions that can enhance your data analysis capability.

Data And Analytics Skills

> "To accelerate, you are better served to bring in a 3rd party to structure the program and have them assess and upskill your current talent. Just bringing in new tools won't move the needle." - *SIG Community Member*

38% of survey responders indicate that new company hires should have data and analytics skills. In comparison, 24% believe an outside third party is necessary to "structure" a data modernization pathway and "upskill" talent.

As is the case with each of the other "practices" referenced in this survey segment, in which there is a high degree of overlap, there must be an alignment of efforts across the board to effectively develop, launch, and successfully implement a data modernization strategy.

> "The folks handling the data and those who want to extract from the data need to understand what keeps data from being more segmented and work to resolve that." - *SIG Community Member*

Collaborative Implementation Pathway

When it comes to implementing a data modernization strategy, the importance of communication and collaboration is a notable, integrative theme throughout this paper.

Implementing a data modernization strategy demands extensive communication and collaboration. Practices like regular stakeholder meetings, workshops, training sessions, and learning from peers are crucial in building a collaborative implementation pathway. The value of data, especially its timeliness, cannot be overstated, as it informs strategic decisions based on the most recent and relevant information.

Promoting data democratization is key; it breaks down silos, providing the right people access to the right data. This enhanced access facilitates more informed decisions and a quicker response to evolving needs. An effective approach to data literacy involves nurturing cultural acceptance and understanding of data's power. By simplifying data access through user-friendly interfaces and offering opportunities for user acceptance testing, we instill confidence in data-driven decision-making.
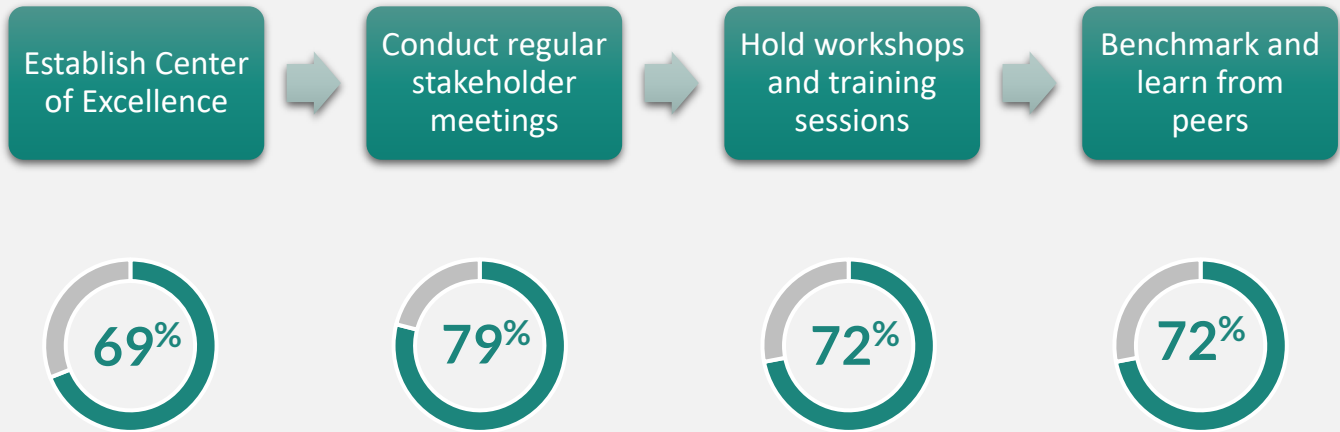
Data should not be seen as a threat but as an enabler of informed decision-making. It frees individuals to concentrate on tasks requiring their expertise. Leading with data and embracing digital technologies continues to drive the digital transformation journey, bolstering performance and productivity in a constantly evolving business landscape.

In their response to the question: "What practices should an organization adopt to establish a collaborative implementation pathway involving all internal and external stakeholders?" SIG Members responded to four specific options. These options included conducting regular meetings, participating in networking opportunities to learn from other practitioners, to establishing a center of excellence.

Conducting regular meetings between stakeholders to share best practices was ranked number one, with 79% of those responding identifying it as their first or primary choice.

However, unlike the other survey questions referenced in this paper, the difference between the most important and what was considered the least important (69%) was a narrow swing of 10%. all four practices for establishing a collaborative implementation pathway were equally important, both individually and collectively.

That said, one of the Members responding to the survey took the question and their responses to the next level by prioritizing them into the following executable flow plan.

Establish Center of Excellence	→	Conduct regular stakeholder meetings	→	Hold workshops and training sessions	→	Benchmark and learn from peers

69%   **79%**   **72%**   **72%**

As stated previously in this paper, even though procurement must assume the leadership role in an organization's data modernization efforts, it is not a task to be undertaken in isolation or driven by "siloed" objectives.

Each of the above four practice areas will involve different elements for different stakeholders, as will their measurement of success. The above provides a high-level, unifying framework for individual and collective teams' success.

> "The first step should be to assign a dedicated project manager and establish a cross-departmental committee to answer to the project manager, so every facet of an organization is represented in data modernization." - *SIG Community Member*

The next obvious question is, who must be involved in the collaborative implementation pathway for your organization's data modernization strategy?

There will be the usual areas of representation, including Finance, IT, and a Chief Data Officer if you have one. Given that all aspects of data modernization and management extend beyond the internal organization, supplier, or partner, involvement in at least part of the planning process is essential.

Achieving Data Modernization Success: Measuring Results

How do you define data modernization success?

According to multiple sources, it is all about "getting the right data, in the right hands, at the right business moment" to empower people to make the best or optimal decisions on a real-time basis. This paper referred to it earlier as providing actionable knowledge when it counts the most.

Even though success will mean different things to different stakeholders, SIG Members provided their take on what a successful data modernization initiative should achieve. Here are a few examples:

+ High confidence in data quality and its application for business insights.

+ I think several areas have to be measured: 1) Monitoring cost savings and verifying the data is being utilized and 2) Surveying the associates using the data to ensure it is helpful in their responsibilities.

+ Increased automation of data downstream from collection point.

+ An increased ability to provide reporting tools for decision-makers.

+ Increased use of data-based decision-making in systems.

+ Reduction in person-hours, the accuracy of data, and TAT to produce a data set.

+ Quickness and ease of data retrieval.

+ Timestamp or historical period of the data.

+ The trend of commodity prices and other material prices linked with the data.

+ Saving in % obtained with each sourcing purchase order.

+ Benchmark the complete value chain of the company and make sure that each step has defined leading and lagging KPIs with the platform and people.

What Is Your Path To Data Understanding?

As stated at the beginning of this paper, it aims to leverage the uniquely diverse and experienced Members of Sourcing Industry Group (SIG) to provide important insights into data modernization and deliver a workable framework that you can easily modify and adapt to your organizational situation.

To accomplish this objective, SIG focused on the following core elements of a sound data modernization strategy:

- ✦ What is the power of the four Ds of Data Modernization: data quality, data access, data compliance, and data security?

- ✦ How do you build the right "data culture" within your organization to optimize business success across all departments?

- ✦ Where do you start with your data modernization initiative?

- ✦ How do you establish a collaborative implementation pathway involving all internal and external stakeholders?

- ✦ How do you measure your Data Modernization initiative's progress and ongoing success?

Hopefully, you have gained much-needed insight into data modernization and how it will ultimately stimulate meaningful discussion leading to the development of an intentional and actionable plan.

The collective voices and experiences of SIG Members referenced in this paper will resonate with you and instill greater understanding and a sense of confidence as you create your organization's new data pathway to enterprise success.

About SIG

Sourcing Industry Group (SIG|ORG) is a membership organization that provides thought leadership and networking opportunities to executives in sourcing, procurement, outsourcing and risk from Fortune 500 and Global 1000 companies and the advisors who serve them. SIG is widely known as a forum for sharing "next" practices and thought leadership through live networking events, virtual forums, and a comprehensive online SIG resource center (SRC) developed by and for professionals in sourcing and outsourcing. The organization is unique because it blends practitioners, service providers and advisory firms in a non-commercial environment. SIG is also the parent organization for SIG University, which offers a one-of-a-kind certification and training program for professionals and executives seeking deep expertise in sourcing and governance for themselves or their teams. SIG also publishes the Future of Sourcing, which provides unrivaled digital content for the opinion-formers and decision-makers at the heart of the outsourcing space.

About SIG Research

Our team of experts, analysts, advisors, and researchers have been conducting studies and reporting insights on sourcing, procurement and third-party risk for decades. Our work has helped executives build business cases for innovation and transformation in development, operations, and talent. We have bridged gaps for our providers, created must-have resources for our practitioners, and led the industry in trend awareness and research.

More at sig.org/research
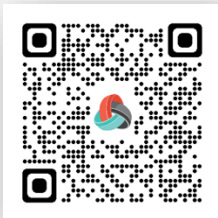
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