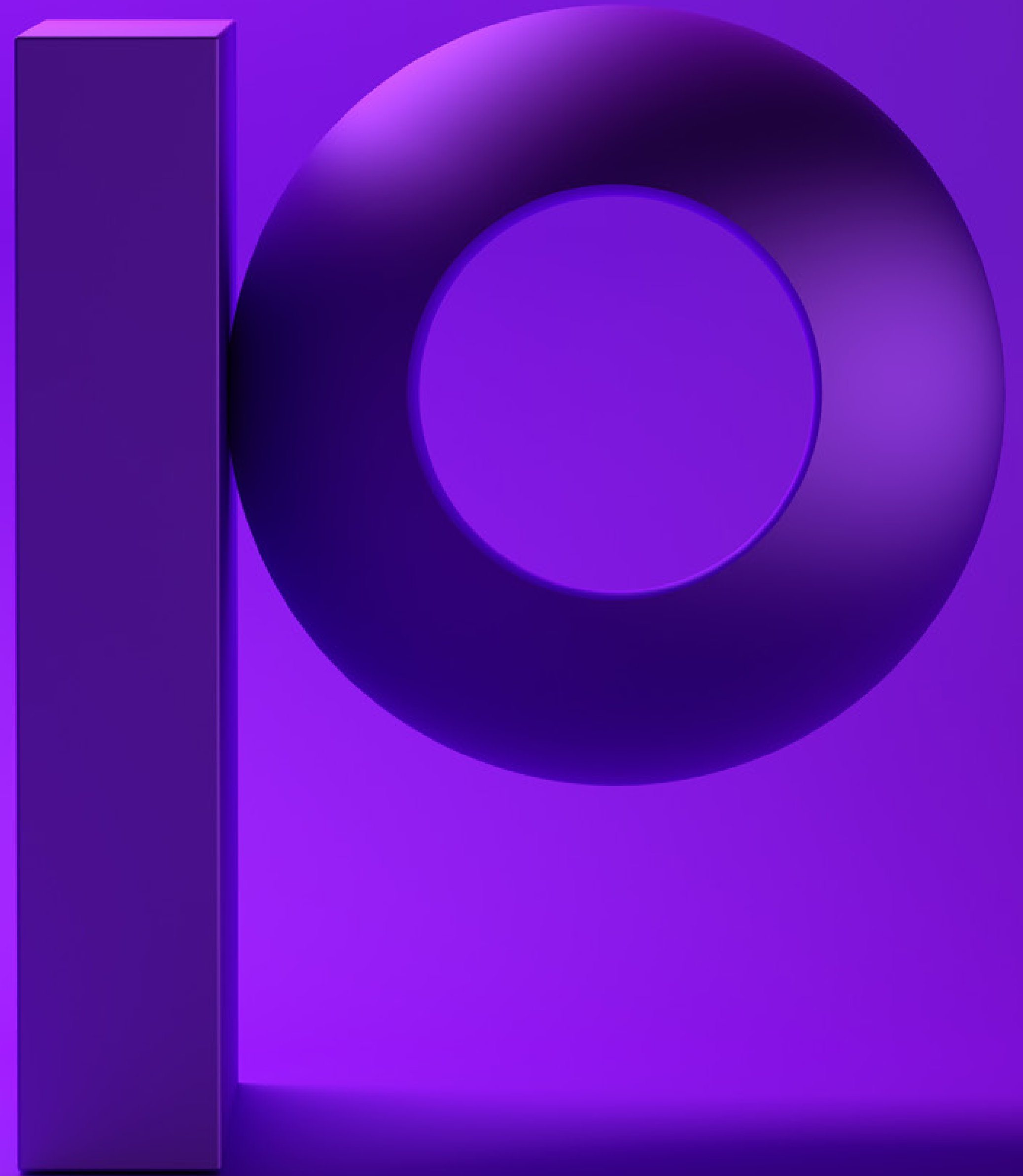precisely

How to Start and Build a Successful SAP® Data Management Program

Practical tips for creating and developing a data program that makes a lasting impact

Introduction

If you're a data governance or SAP® master data professional responsible for improving the quality of the SAP ERP data, this eBook is for you. It will give you a high-level overview of what to consider if you're building an SAP data management program from scratch or looking for ways to boost the performance of your current program.

You'll get practical tips on everything from creating a blueprint for success to empowering the business with tools they can use to implement your business rules. We hope it helps you find ways to use the information to put your data governance in itiatives into action and make a lasting impact on your organization.

Create a blueprint for success

If your organization has committed to improving the quality of your core SAP data assets, a good first step is to put together a strategy document that describes the fundamentals of your data program. This blueprint will lay out what data gets governed, cross-functional responsibilities, the structure of your data team, and how you measure success.

This living document will evolve and grow as you operationalize and mature your program, learn from what did and didn't work, and as the priorities of your organization shift.

Elements of a good strategy doc include:

- Guiding principles
- Types of data governed
- Data organization structure, function, and roles
- Data governance strategies, methodologies, and process
- How to measure business value impact
- Data governance operating model
- Governing bodies and roles
- Data quality metrics
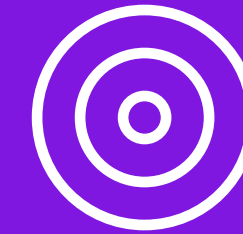
Get and keep funding

Data quality can make or break an organization's ability to survive and thrive in an everchanging digital economy. The integrity of dayto-day transactions, executive decision making, and everything in between relies on getting that data right. But, there are always many projects competing for budget and resources, so it's key that you tie your data program into your organization's strategic goals.

You need to connect the dots between improvements in data quality and processes and the metrics that matter most to your executive team. Make a direct impact on business KPIs, and you'll secure the executive sponsorship you'll need to start and continue your data program.

> "Data and analytics leaders need to understand the business priorities and challenges of their organization. Only then will they be in the right position to create compelling business cases that connect data quality improvement with key business priorities."
>
> Ted Friedman
> VP, Distinguished Analyst, Gartner

Connect the dots between business goals & program metrics

BUSINESS GOAL

Reduce vendor over-payment by 75% by Q4

DATA PROGRAM METRIC

Reduce duplicate vendor records by 90%

BUSINESS GOAL

Reduce customer attrition by 10% over next year

DATA PROGRAM METRIC

- Cut customer create cycle time by 60%
- Improve ship-to and bill-to address accuracy by 60%

BUSINESS GOAL

100% adherence for data privacy compliance requirements by Q2

DATA PROGRAM METRIC

Mask all sensitive data fields by Q2

Establish a common language

For your data management program to succeed it's critical that people on your data team, in the business, in IT, and from outside firms have a shared understanding of key terms. This will not only make for easier conversations but also clarify roles and responsibilities to streamline execution.

In this section, we'll define some core terms, but there are many more you'll need to document and share to keep everyone on the same page.

TIP: Publish a glossary of terms
This glossary is not the same as a data dictionary or the repository of your business rules—more on that later.

- Make it easy to access for everyone
- Make it easy to understand for all audiences
- Keep it up to date

Data Governance vs. Data Stewardship

Let's get started by dispelling the confusion about two common data management terms—data governance and data stewardship.

Many people use the term data governance loosely, and it's become an umbrella term for all sorts of things related to a data management program. Rather than a catch-all phrase, however, data governance describes the framework that gives your data programs it's structure— or put another way, it's the "making of the laws."

Data stewardship, on the other hand, is all about execution, or the "enforcement" of the laws.

DATA GOVERNANCE

"The organizational bodies, rules, decision rights, and accountabilities of people and information systems as they perform information-related processes."

DATA STEWARDSHIP

"The set of activities that ensure data related work is performed according to policies and practices as established through governance."

The Data Governance Institute

Data standards vs. business rules

As your data team goes about working with the business, it's also important to define the difference between data standards and business rules to keep everyone on the same page. Let's use a traffic light analogy to help explain.

Think of the traffic light as the data standard. In the United States red always means "stop," yellow means "get ready to stop," and green means "go." You then apply business rules based on that standard. For example, a driver can go at a green light only if they don't block the intersection, or drivers can turn right on a red light at this intersection between 9 AM and 3 PM.

In a real-world SAP case, let's use the country field as an example. The data standard for that field is that it's a 2-character field that the user selects from a drop-down list. A business rule for that field could be, "block the request for a new vendor if that vendor comes from blacklisted or embargoed countries"—a good way to ensure that you comply with government regulations.

Real-world SAP example:

DATA STANDARD
Country Code
- 2 characters
- User selects from
  drop-down list

BUSINESS RULE
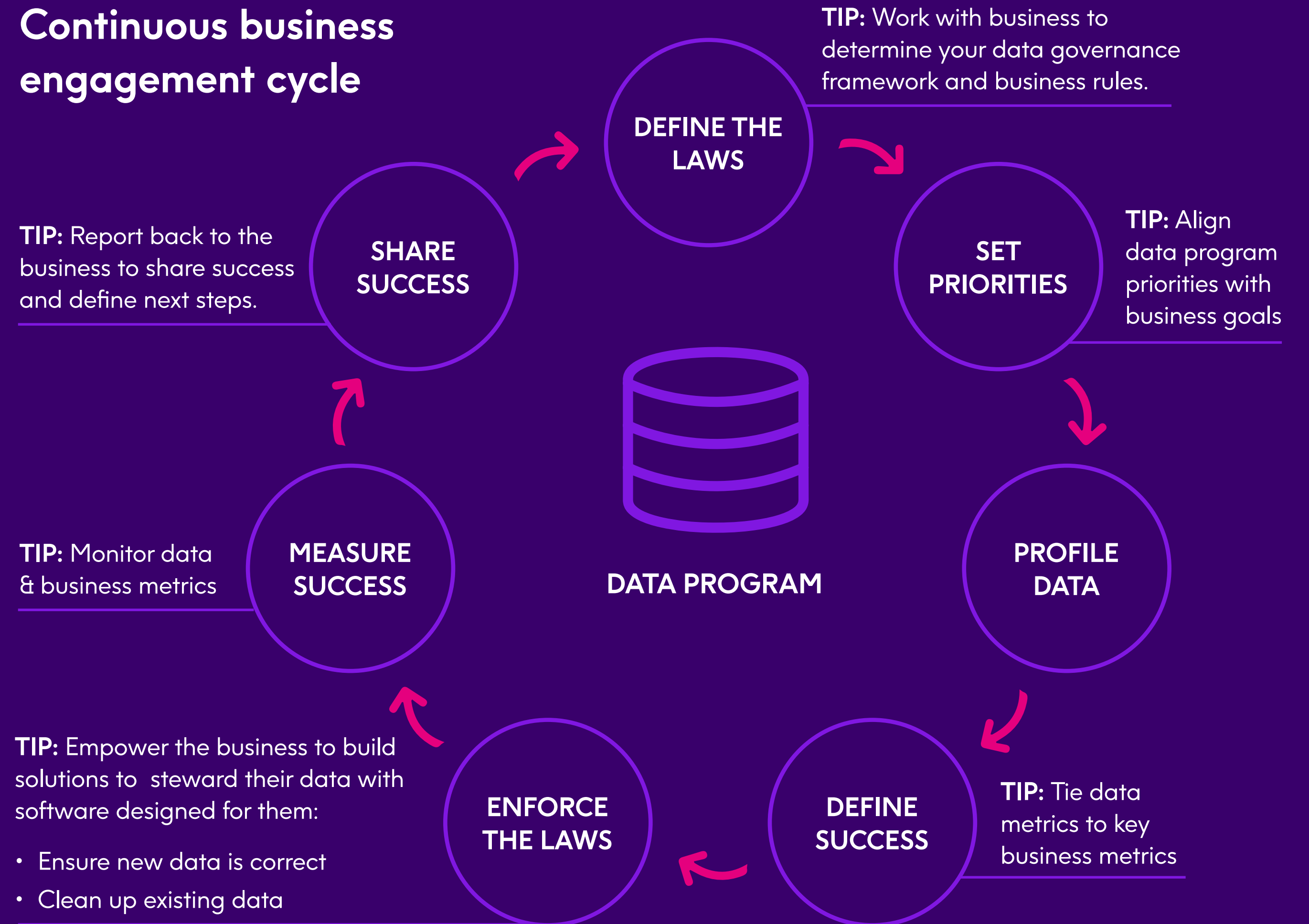Reject request for
new vendor master if
country is on a blacklist

⊘ US   ⊘ CA
⊘ MX   ⊘ FR
⊗ KR

Engage the business

There is a direct correlation between the level of engagement you have with the business and the long-term success of your data program. Fail to fully engage the business every step of the way and your data program is likely to stall or run out of fuel. In this section, you'll get some tips on who you need to work with and how to organize for success.

Follow these tips to make sure your data team is seen as an ally that provides business value, rather than an extra hoop to jump through.

Continuous business engagement cycle

TIP: Work with business to determine your data governance framework and business rules.

DEFINE THE LAWS

TIP: Report back to the business to share success and define next steps.

SHARE SUCCESS

SET PRIORITIES

TIP: Align data program priorities with business goals

DATA PROGRAM

TIP: Monitor data & business metrics

MEASURE SUCCESS

PROFILE DATA

TIP: Empower the business to build solutions to steward their data with software designed for them:

- Ensure new data is correct
- Clean up existing data

ENFORCE THE LAWS

DEFINE SUCCESS

TIP: Tie data metrics to key business metrics

Find your data champions

As we stated earlier, getting and keeping funding depends on your ability to tie the results of your data program with initiatives that executives care about. But it's not just the executives that your data team needs to work with closely.

It's key that you find your data champions or data stewards—the people who really understand and own the data in their areas of the business. No one in IT or from another centralized organization will be able to fully understand the complexities around their business processes and data.

Once you've found these key people in the business, make them your allies and give them the tools to streamline their processes, improve data quality and make an impact on their key metrics and goals. Do this, and they'll be great evangelists for your data program.

Business Data Steward Essential Skills

- Go-to person in the department for all things SAP
- Understands how data quality issues affect the business
- Loves finding ways to make it easier to work in SAP
- Been around long enough to be an expert at their job
- Can build consensus with their team
- Hands-on software person who likes to build solution
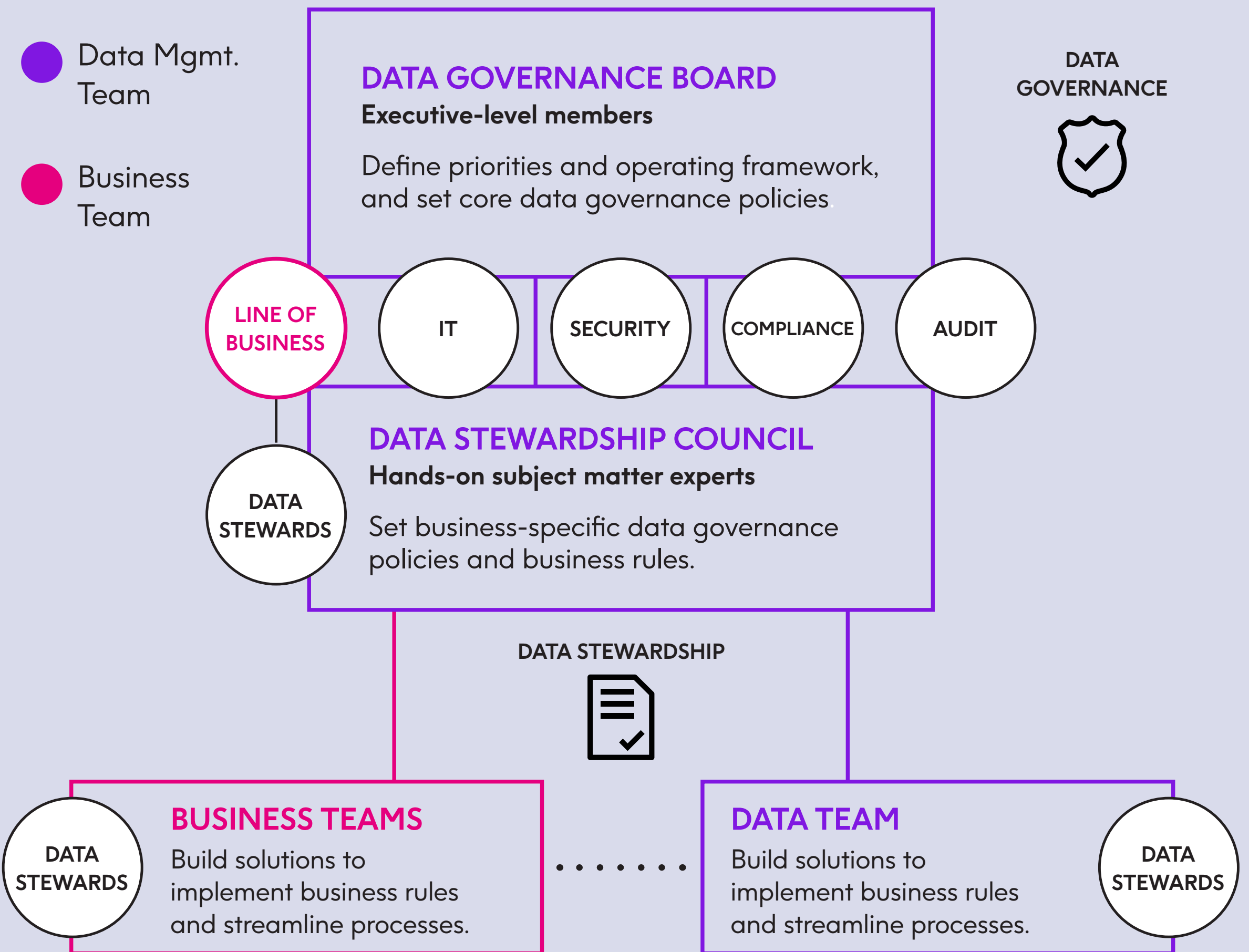
Organize for success

Improving data quality and processes is not the sole responsibility of the data team. To be successful, you must organize cross-functional teams. What you call these teams and where your core data team report into will vary by organization and your level of maturity and will certainly morph over time. So, while there are many ways to organize your data program, there are typically a few levels of teams you need to engage to ensure that decisions are made, and plans are executed.

Let's call the top-level team the data governance board. It needs to include executive-level participants from your core lines of business, along with IT, security, audit, and compliance functions. They will provide input on your priorities and be instrumental in helping you develop your data governance framework, core policies, and rules of engagement with the business.

You'll also need a team to define policies and rules around specific business functions and geographic regions. Some organizations call this team the data stewardship council. It will feature data stewards from the lines of business along with hands-on members of the other teams represented on the governance board.

The implementation of the rules can happen within the business, in a data management team, or both. To be successful in the long term, however, you must closely couple any centralized data management team with the business.

Data Governance Framework

Data Mgmt. Team

Business Team

DATA GOVERNANCE BOARD
Executive-level members

Define priorities and operating framework, and set core data governance policies

DATA GOVERNANCE

LINE OF BUSINESS | IT | SECURITY | COMPLIANCE | AUDIT

DATA STEWARDS

DATA STEWARDSHIP COUNCIL
Hands-on subject matter experts

Set business-specific data governance policies and business rules.

DATA STEWARDSHIP

BUSINESS TEAMS
Build solutions to implement business rules and streamline processes.

DATA STEWARDS

DATA TEAM
Build solutions to implement business rules and streamline processes.

DATA STEWARDS

Organize cross-functional teams made up of key stakeholders to create your data governance framework and implement your procedures, policies and business rules.

Put words into action

Earlier in this piece, we defined some key terms. In this section, we'll give you some tips to put these words into action.

Collect and share your business rules

Business rules are a critical part of your data program, but before you can implement them and impact business goals, you must first define them if they don't exist or collect them if they do.

While that might sound easy, in reality, it's a lot of work. While there are data profiling tools out there to help assess the quality of your data and how well that data complies to your rules, there's no magic software that can extract business rules from people's heads, or from the Word docs or spreadsheets on someone's hard drive.

The key is to work with your data steward allies in the business methodically and diligently to define and document those rules. Once you've done that how do you make them easy to access and consume? Use these tips to help you make this important task more efficient and manageable.

Tips

KEEP IT SIMPLE

- Work with the business to prioritize which processes and data you need to improve
- Start by collecting business rules based on prioritized list

CREATE ACTIONABLE COLLECTION TEMPLATES

- Make the information in that template easy to understand and actionable for data stewards
- Store the rules in a database, or even a simple document or spreadsheet
- Create and use a standardized rules collection template

STORE IN A CENTRAL LOCATION

- Make sure data stewards can easily access up to date rules library
- Don't bury the rules in a program that only a select few can access
- Periodically review and update rules to keep them relevant

Template

Here's an example of a data collection template for your rules and standards.

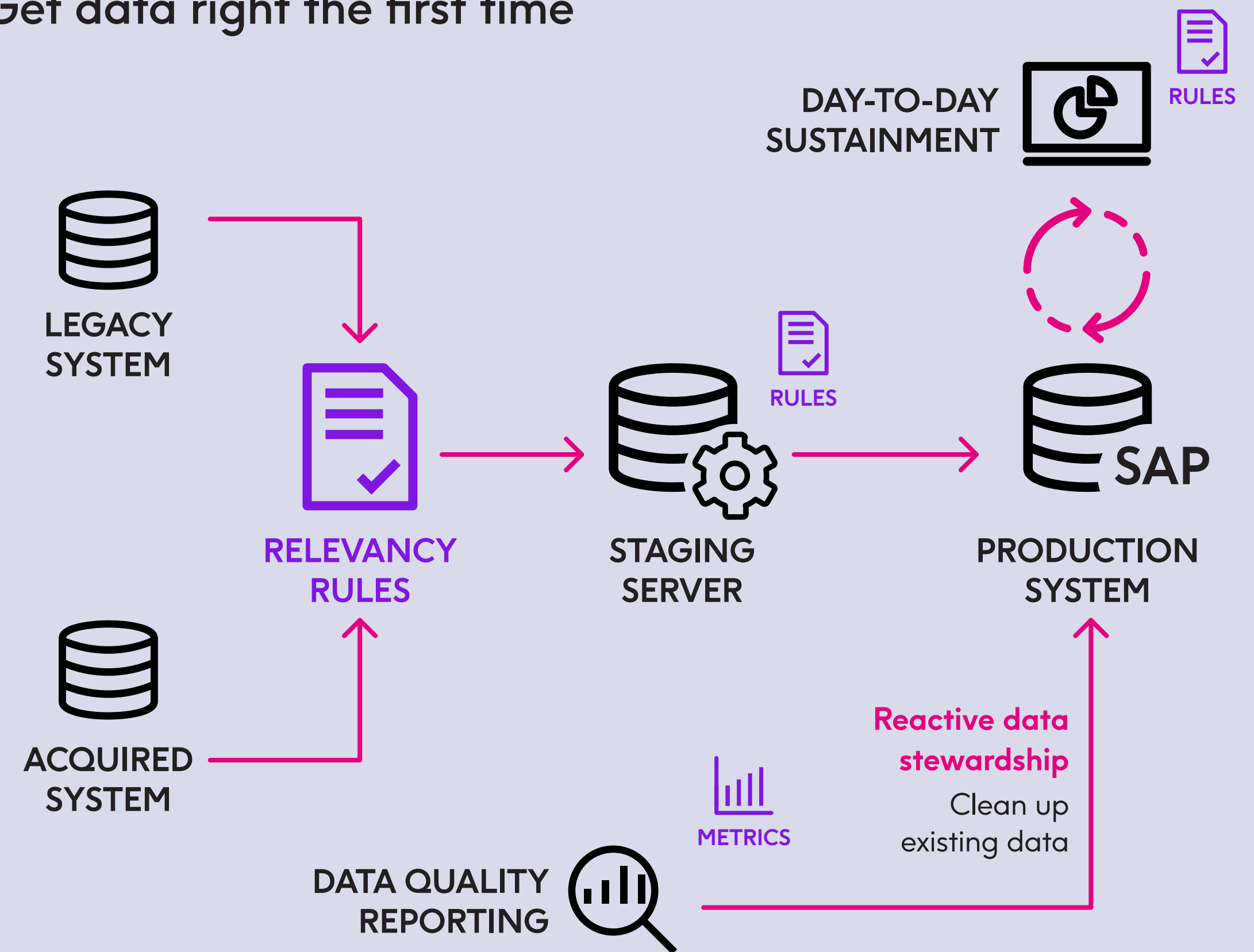| REQUIRED FIELDS							
STANDARD OR RULE	**NAME**	**BUSINESS DESCRIPTION**	**RELEVANT PROCESSES**	**BUSINESS IMPACTS**	**CRITICALITY**	**BUSINESS OWNER**	**DATA TEAM OWNER**
Business rule	Bank Accounts – Global – Mask Banking Information	Global Risk and Compliance demands that vendor banking data get masked due to privacy concerns.	Procurement, Procure to Pay	Significant operational, financial, or compliance impact.	Critical	Jorge Strict, Compliance Manager	Heather Bright, Business Analyst, Finance
RELEVANT ORGANIZATIONS	**RELEVANT SYSTEMS**	**DOMAIN**	**DATA OBJECTS(S)**	**TABLES**	**FIELDS**		
Enterprise	SAP ECC	Vendor Master	Vendor	LFBK – Bank Details (vendor)	BANKL – Bank Number BANKN – Bank Account Number		
TECHNICAL DESCRIPTION	**DERIVED/DEFAULTED**	**SOURCE CATEGORIES (DROPDOWN)**	**GOVERNANCE TYPES**	**VALIDATION TYPES**	**GOVERNANCE DETAILS**	**REMEDIATION STRATEGY**	
	Derived	Policy/procedure	Proactive	None		Users should not see this data so there is no fault to remediate	
DATA STEWARDS	**DATA PROVIDERS**	**DATA MAINTAINERS**	**ORG. DESIGN**	**ORG. DESIGN COMMENTS**	**STATUS**	**NOTES**	
Sourcing Assistants	Procurement	Procurement	Centralized				

Apply your rules throughout the data lifecycle

So, you've collected and shared your business rules based on a prioritized list of initiatives, now where do you apply them? The short answer is—everywhere. Let's walk through a simple scenario to illustrate that fact.

Let's say you need to migrate vendor data from a legacy system or a system of a newly acquired company into your current SAP instance. The first step might be to only load vendors that have been active within five years into a staging database. From there, you can apply additional business rules to meet your quality goals. Then you're ready to load the data into your production system.

You should then apply the appropriate rules to your sustainment activities so that new data coming into your system meets quality goals and existing data is cleaned up based on those rules.

Proactive data stewardship
Get data right the first time

DAY-TO-DAY SUSTAINMENT — RULES

LEGACY SYSTEM

ACQUIRED SYSTEM

RELEVANCY RULES

STAGING SERVER — RULES

PRODUCTION SYSTEM — SAP

Reactive data stewardship
Clean up existing data

METRICS

DATA QUALITY REPORTING

Apply business rules to data migration, sustainment, and data quality reporting to maximize the impact of your data program. Precisely Automate empowers your data stewards to build solutions for all your data management needs.

Improve data quality during migration

There are many tools you can use to apply your business rules as you migrate data from one system to SAP. Which one you choose will depend on the source of your dataset, the volume of data, and the skill set of your internal resources. Precisely Automate can help you simplify and streamline many aspects of your data migration projects, without your staff needing technical SAP data management programming skills.

> "With Precisely Automate, we were able to significantly improve our data quality during the migration to S/4HANA and, thus, our productivity. The solution is intuitive and easy to use, so we don't rely on service providers and have flexibility to react to changes faster."
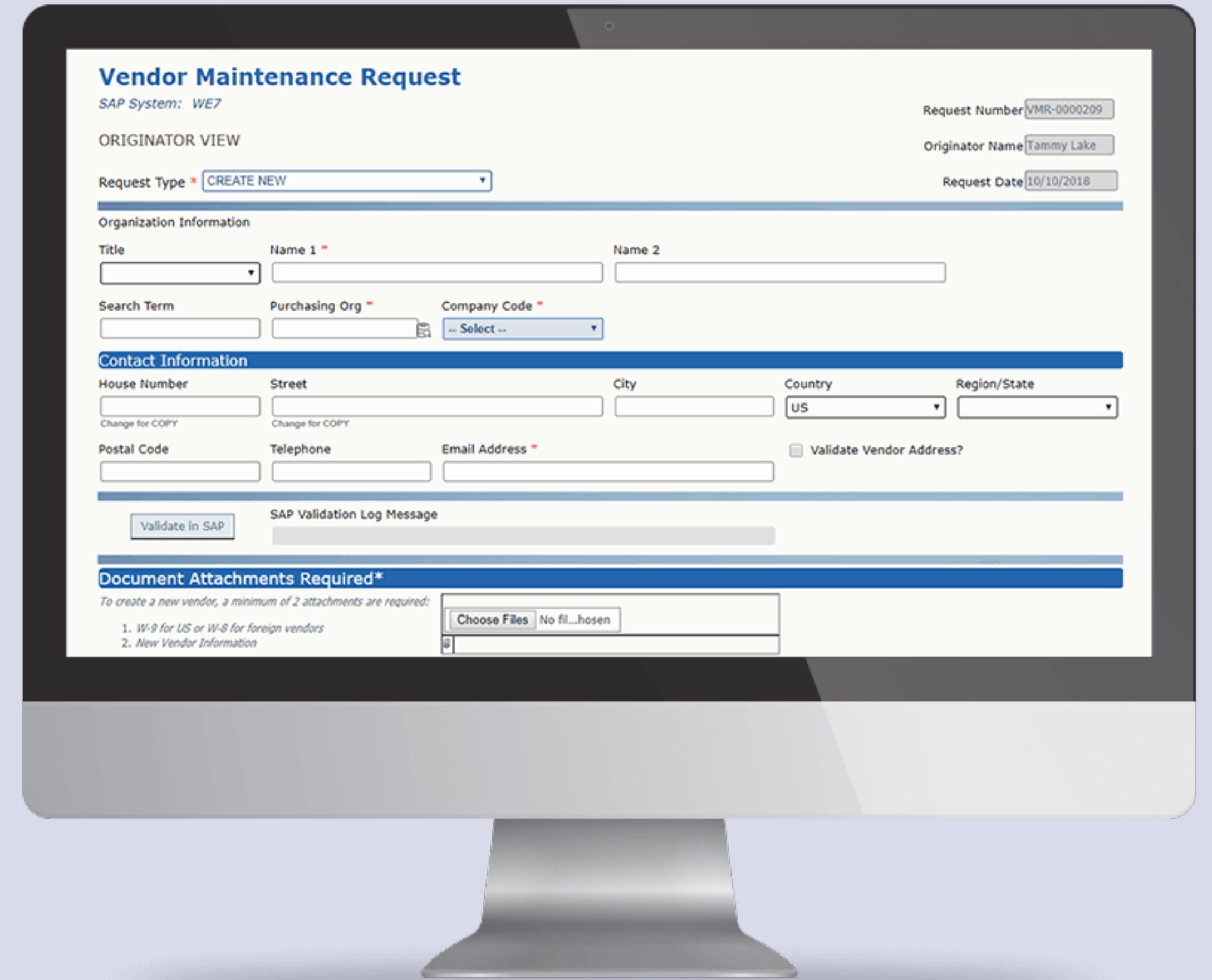>
> Corporate Accounting
> IMPERIAL Logistics International B.V. & Co. KG

Get data right the first time with proactive data stewardship

Even with the best intentions, it's tough to implement your rules consistently if your business users or master data team are entering data manually via the SAP GUI. To really impact data quality, you need to deploy solutions with built-in guardrails to ensure that data gets into your SAP system right the first time—and that means deploying technology.

The problem is that most IT-centric data management tools are slow, costly, and difficult to implement requiring people with very specialized technical skill sets—hampering the progress of your data program. The good news is that Precisely Automate is designed to empower your data stewards to author solutions that embed their business rules, enabling you to scale up the impact of your data program, faster and at less cost.
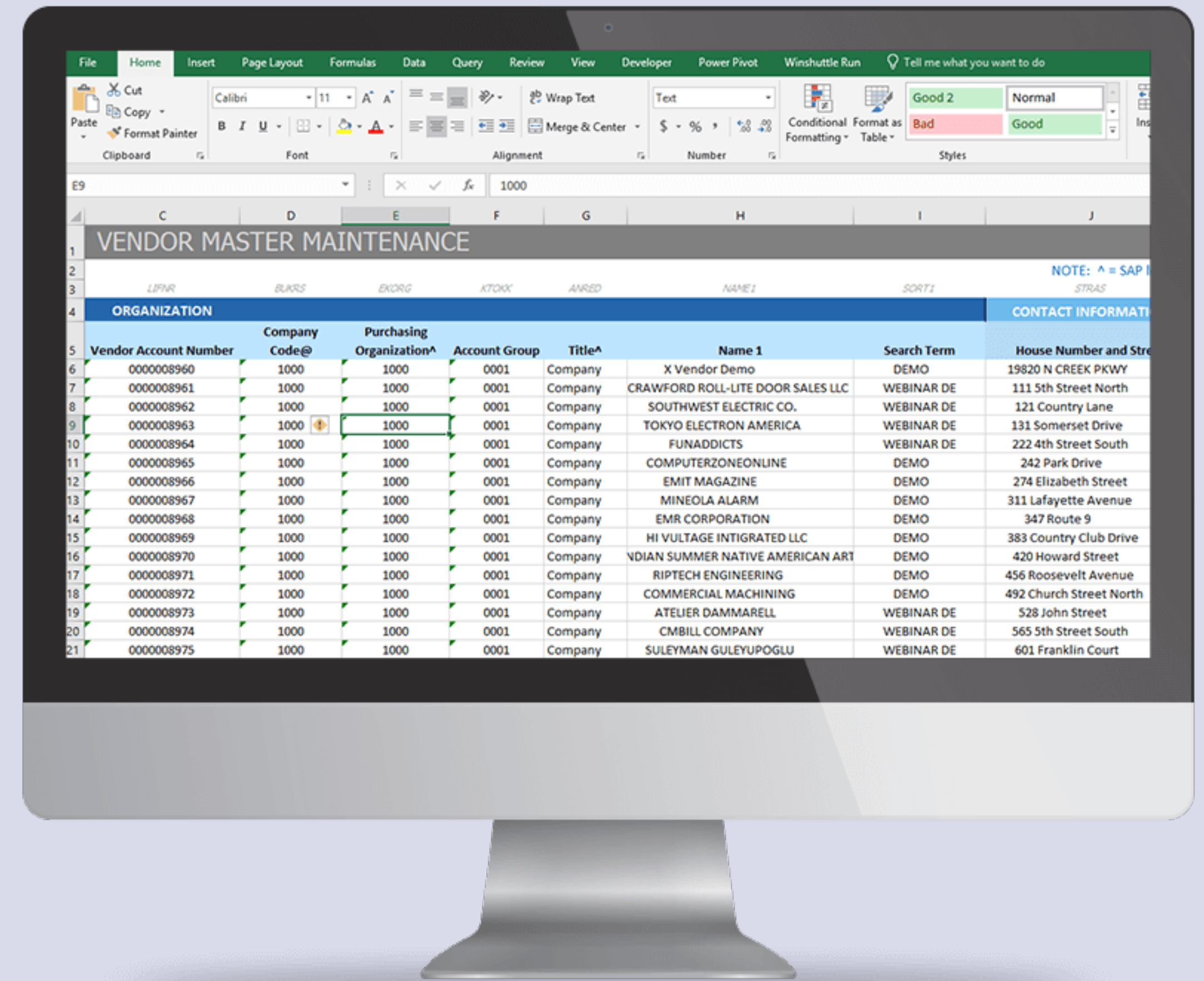

Give business teams an easy-to-use web form with built-in data 'guardrails' to supply or approve data.

Clean up existing data with reactive data stewardship

Even with the best proactive stewardship practices in place, you'll always need to update and delete existing data. That's what reactive stewardship is all about. Here again, the right technology can not only speed up data maintenance but make a big impact on your data quality metrics.

Traditionally, the business would turn to an overburdened IT department for help with mass data maintenance tasks, often delaying the project for weeks or even months. Today, you can empower data stewards without LSMW or other technical skills to build solutions that make it fast and easy for the business to maintain their data.

With Precisely Automate, business users pull records from your SAP system into either an Excel workbook or web form, depending on the number of records involved, make the necessary changes, validate the data, and then hit a button to post the updated records into SAP automatically.

Make it easy for business users to update master data in SAP with an Excel-based solutio.

"We save around $1.9 Million per year in avoided programming, reduced data entry workload costs and SLA costs with Precisely Automate. Most importantly, we have given our users a tool that enhances their productivity and the accuracy of the data in our systems."

Business Process Manager
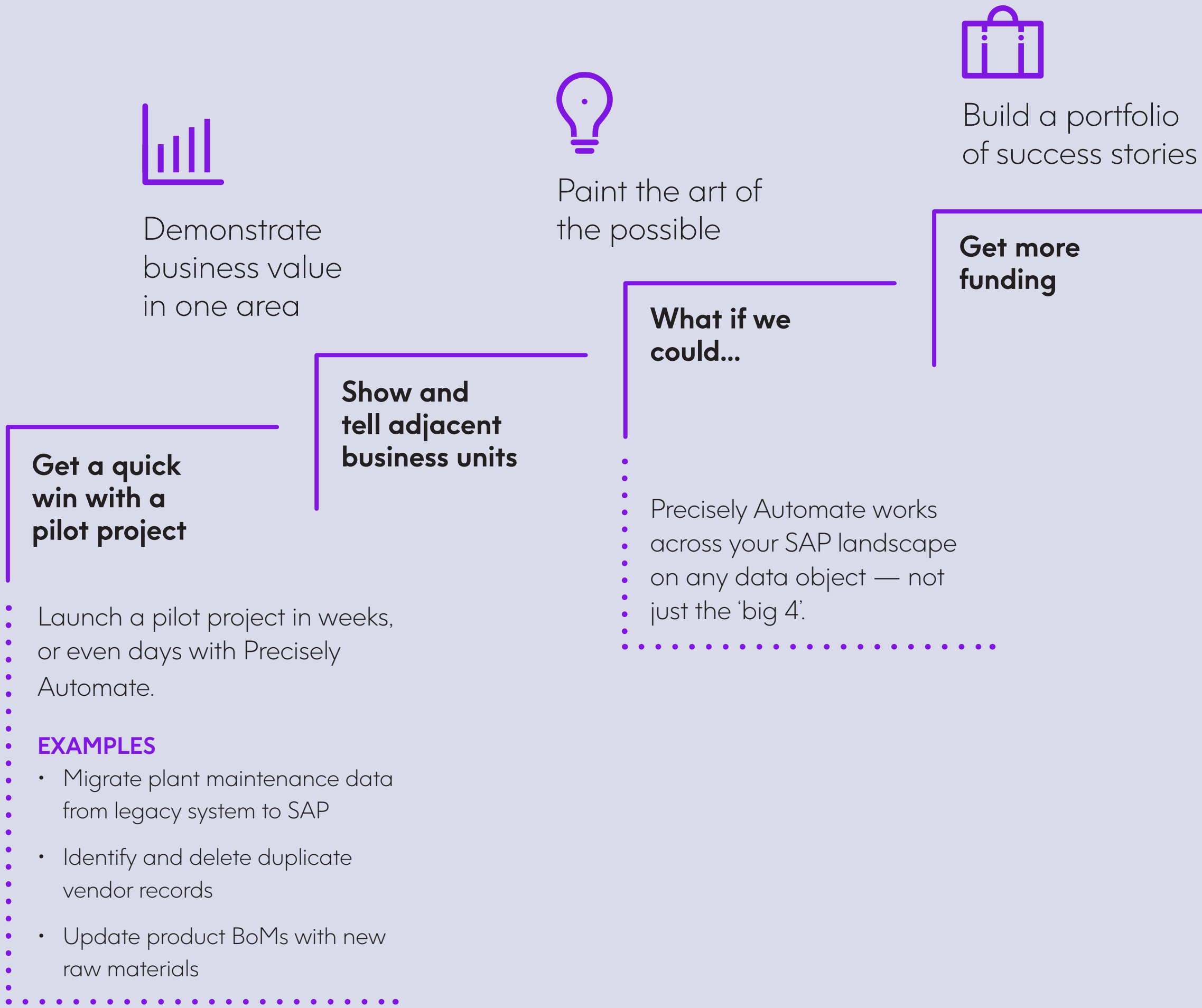SAP Center of Excellence, Canada Post

See examples of data stewardship in action

Here are just a few real-world examples of how you can use some of Precisely Automate's data stewardship capabilities to solve some common issues and improve data quality. Business authors use Precisely Automate to build Excel or forms-based solutions that people in the business use instead of the SAP GUI.

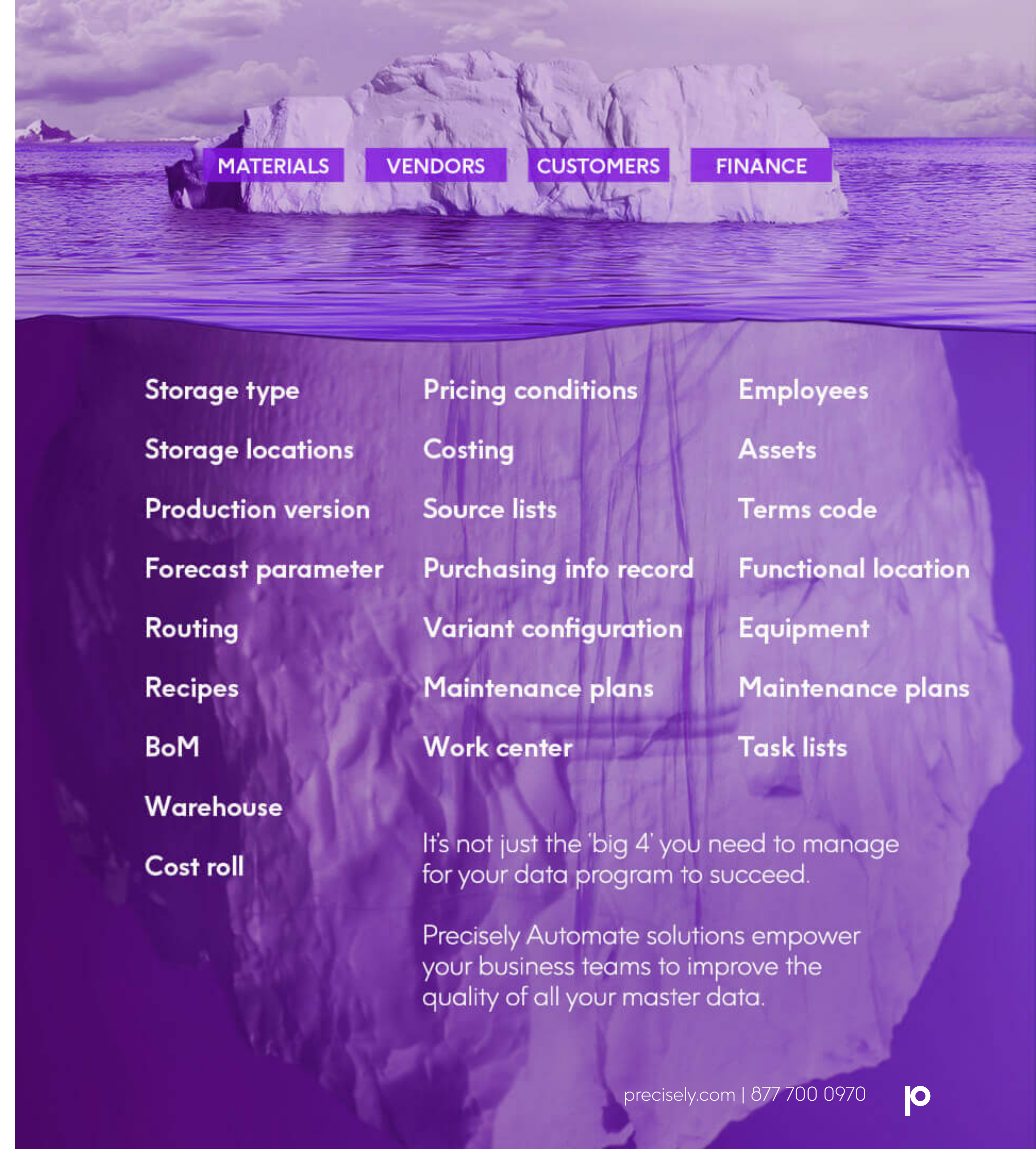| BUSINESS ISSUE	PRECISELY AUTOMATE CAPABILITY	PRECISELY AUTOMATE SOLUTION
There are lots of duplicate vendor records in SAP causing a host of downstream problems.	Search for duplicates	Give people an easy way to check for to see if a vendor record exists via a web form that supports multiple search criteria such as address or name, via numerical, text and wildcard searches.
People don't always know SAP code values for product hierarchy when creating new materials.	SAP F4 lookups	Integrate SAP F4 lookup functionality for product hierarchy into forms-or Excel-based solutions to make it easier to choose the right code based on the product name.
Business users are putting the incorrect country when creating customer records.	Restrict field values	Your sales org only does business in North America. Restrict the country choices to the USA, Canada, and Mexico, when creating a new customer via a web form.
Fields like gross weight, weight unit, and net weight are often left out when creating new materials.	Required fields	Make fields required in your materials create web form solution, without going through the pain of making those fields required in SAP.
Inaccurate address data in customer records causing downstream delivery and invoicing problems.	Address validation	Use a third-party address validation service to return valid address options for a business user to choose from in the web form used to create new customer records.
Business users are making typos when entering the material number in the component field when creating a new BoM.	Live SAP validation	Give business users the ability to check they have a valid material number via an Excel or forms-based solution, before attempting to post the data into SAP or sending the data to the next participant in the workflow.
People are wasting time understanding what data they need to supply and where it goes when creating a new material or editing someone else's data.	Role-based views	Route an Excel workbook or web form that only shows the fields that apply to their job role via an automated workflow when creating a new material. This will speed up data collection and prevent data being accidentally overwritten.
Business users are not following the rule that customer names should be in all caps.	Field value rule	Set a field value rule for customer name in either an Excel workbook or web form used for your customer create or change process to ensure that data is always capitalized.
People using unapproved payment terms when setting up new customers.	Restrict field values	Restrict the values for payment terms in the drop-down list to include only approved values in the form used to create new customers.
Business users are missing bank account number (IBAN) for vendors in European countries that have a payment method of ACH or electronic wire transfer.	Smart form logic	Build conditional logic into the web form used to create new vendors that presents the bank account number field if the vendor is from Europe and wishes to be paid electronically.

Scale the impact of your program

Every program has to start somewhere. In this section, you'll get some tips on how to get some quick wins, demonstrate value, and show what's possible with a wellcrafted data governance and management program. You'll also learn which strategies and technologies to deploy to scale the impact of your program while minimizing costs.

Demonstrate business value in one area

Paint the art of the possible

Build a portfolio of success stories

Get a quick win with a pilot project

Show and tell adjacent business units

What if we could...

Get more funding

Launch a pilot project in weeks, or even days with Precisely Automate.

Precisely Automate works across your SAP landscape on any data object — not just the 'big 4'.

EXAMPLES

• Migrate plant maintenance data from legacy system to SAP

• Identify and delete duplicate vendor records

• Update product BoMs with new raw materials

Fill the data management gap

If you've been in the SAP data management space for a while, you understand that the 'big 4' domains are just the tip of the iceberg. If you're to impact the business in a meaningful way you need to also govern the mountain of data objects below the water line—and most IT-centric solutions are simply not designed to do that.

With Precisely Automate solutions, however, your data stewards can build solutions that streamline processes and improve the quality of all your master data, including materials, customer, vendor, and finance. Precisely Automate also enables your business teams to make an impact on transactional data tasks, like invoice or sales order processing—saving the business time and improving data accuracy.

MATERIALS   VENDORS   CUSTOMERS   FINANCE

Storage type	Pricing conditions	Employees
Storage locations	Costing	Assets
Production version	Source lists	Terms code
Forecast parameter	Purchasing info record	Functional location
Routing	Variant configuration	Equipment
Recipes	Maintenance plans	Maintenance plans
BoM	Work center	Task lists
Warehouse		
Cost roll		

It's not just the 'big 4' you need to manage for your data program to succeed.

Precisely Automate solutions empower your business teams to improve the quality of all your master data.
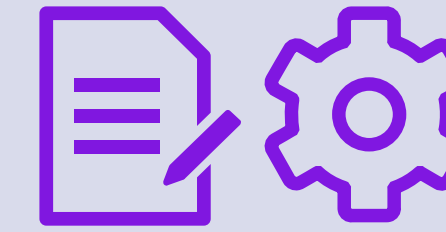
Put your data stewards to work

For your data program to make an impact at scale, you can't rely on a small number of people in your SAP IT or data team to build solutions, and most organizations don't have bottomless budgets to employ expensive systems integrators to get the work done. To succeed you need to take a different approach.

Precisely Automate solutions, unlike IT-centric solutions, doesn't require specialized SAP programming skills, so you can empower data stewards in or close to the business to build automation solutions that embed your rules.

People in the business use these solutions, either web forms or Excel workbooks with built-in data guardrails to exchange data with SAP—improving data quality while saving time.

This approach enables you to scale up the reach of your data governance initiatives, without risk to the security or operations of your SAP system. IT can maintain granular control over who can do what with Precisely Automate, and SAP permissions are fully respected, so users can only do what their SAP credentials allow.
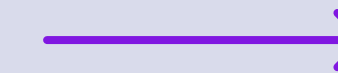
PRECISELY AUTOMATE ADMIN
- Can be the business author or IT
- Control licenses, oversee usage, define policies, run audit reports

BUSINESS AUTHOR

Data stewards use Precisely Automate to author solutions that embed your business rules.

No specialized SAP technical coding skills required

BUSINESS USERS

People in the business use Excel workbooks or web forms with built in 'data guardrails' to supply or approve data, bypassing the SAP GUI.

Deploy solutions faster, and at less cost

It shouldn't take months or years to demonstrate the impact of your data program. You need to deploy software solutions that enable you to get quick wins, while you tackle bigger projects.

With Automate Studio your data stewards can develop Excel based solutions in a matter of hours. These solutions get rolled out to business users who can quickly get to work on improving data management tasks, like doing a mass update of materials. That's in stark contrast to IT-centric tools which can take weeks or even months to deliver solutions to the business due to a backlog of requests in IT and the need for specialized programming skills.

That time and the cost difference are magnified when it comes to more complex projects. With Automate Evolve, you can create and deploy more complex projects like building an automated workflow to create customer records in a fraction of the time and cost that it would take with SAP IT-centric tools, or generic workflow software.

● IT-centric workflow solutions

● Precisely Automate workflow solutions

● IT-centric data movement tools

● Precisely Automate data movement solutions

COST/COMPLEXITY

TIME

EXAMPLE
Customer create forms and workflow solution

EXAMPLE
Mass materials update solution

The next steps

We hope we've given you some strategies and practical tips you can use to build or refine a successful SAP data management program. If you work closely with the business at all stages of your data improvement journey and deploy the right technology solutions, your data program can make a real impact on key initiatives and goals and ease the path to digital transformation.

Learn more about Automate Evolve

"We've seen much more than a return on our Precisely Automate investment. In the first ten months, we have seen a return many, many times over."

Director, Master Data Organization
Reynolds Leveraged Services

precisely

About Precisely

Precisely is the global leader in data integrity, providing
accuracy and consistency in data for 12,000 customers in more
than 100 countries, including 99 of the Fortune 100. Precisely's
data integration, data quality, data governance, location
intelligence, and data enrichment products power better
business decisions to create better outcomes.
Learn more at www.precisely.com.

www.precisely.com