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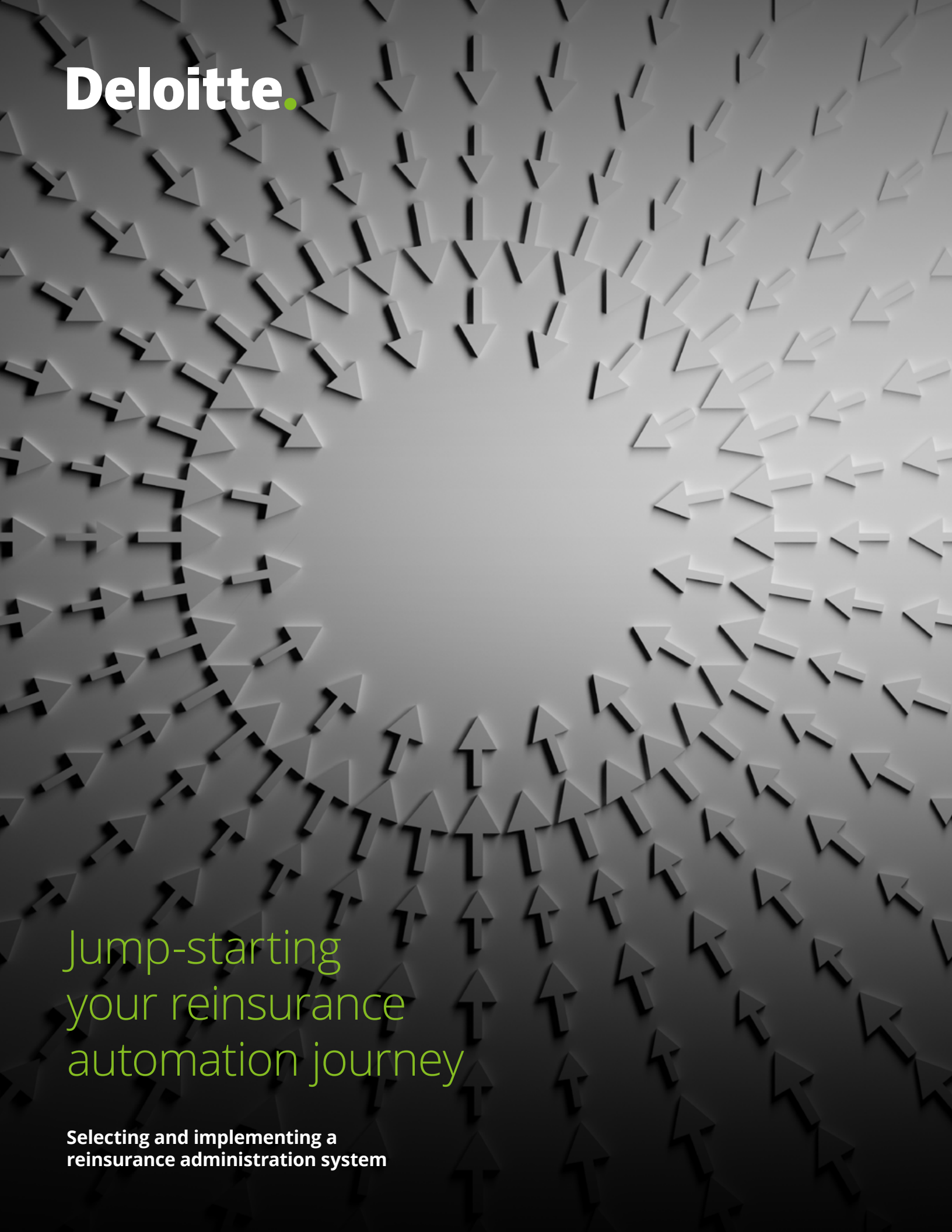

Jump-starting your reinsurance automation journey

Selecting and implementing a reinsurance administration system

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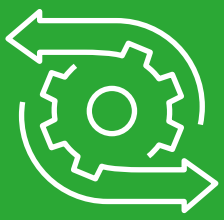
With potentially billions of dollars flowing through reinsurance contracts, there's a lot on the line for insurance companies. So, it makes sense that an effective reinsurance administration program can be a critical component of an insurer's success.

However, up until this point, there has been minimal investment in modernizing reinsurance administration. Many insurers continue to use outdated technology—such as spreadsheets—and manual processes to administer reinsurance contracts, potentially leading to errors, claims leakage, lack of insights, and slow deal implementation. In addition to accounting errors, manual or outdated processes could expose insurers to additional compliance risks, payment discrepancies, and reputational damage.

The liabilities created by these outdated approaches, along with other driving factors—increasing contract complexity, operating cost pressures, the importance of transparent financial reporting, and the need to refresh their reinsurance strategy—are motivating many insurers to begin or enhance the use of automation in their reinsurance systems.

Leveraging automation can allow insurers to enhance their transparency, controls, analytic capabilities, and speed to market; increase efficiency and accuracy; and reduce strain on internal resources.

In this report, we explore several steps and considerations to help insurance and reinsurance companies advance their modernization journey by conducting build-versus-buy analysis, selecting a vendor, and implementing a new reinsurance administration system.



What's involved in reinsurance administration?

Insurers develop customized reinsurance contracts that are tailored to specific risks and negotiated individually with reinsurers. Administering these contracts requires companies to integrate data from multiple sources, products, lines of business, and administration systems. And large companies could be trying to manage thousands of these contracts—which often span decades of policy data.

Figure 1. Opportunities for enhancement across reinsurance

Automation
Reducing manual processes, touchpoints, and calculations can result in more efficient, effective, and accurate processes

Enhanced analytics
Enhanced analytic capabilities can provide organizations with the ability to make more informed/improved decisions regarding the direction and performance of the company

Simplification and standardization
Process redesign and streamlining enables the business to operate as effectively as possible while reducing strain on internal resources

Control enhancements
Enhancements to the reinsurance control environment can allow for increased efficiency and effectiveness while also providing organizations with the understanding there aren't any current issues or financial leakages within the reinsurance space

Quality and conformance
Conformed and aligned reinsurance data can better enable organizations to understand their performance as well as reduce processing and potential financial errors and claims leakages

Increased transparency
With greater transparency, companies can gain better insights into overall performance, ease the burden of audits, address arbitration and pricing issues, and easily trace reconciling items

To build or to buy?

In situations with highly customized programs and products, reinsurers may choose to build an in-house solution that meets their needs. These opportunities require careful consideration in determining the viability of the solution and value of investment. Hybrid platforms combining purchased solutions and in-house builds are also popular, as they may offer additional value by streamlining data ingestion, better alignment to business needs, or greater insights in reporting.

	In-house build	Buy vendor platform
PROS	• Solution customized to specific business requirements • Utilize current technology stack • In-house resources with capabilities to customize and enhance with changing business needs • Tailored reporting and analytics	• Prebuilt system ready for operation upon implementation • Leverage vendor resources for implementation • Multiple implementation options, including cloud capabilities, reducing in-house technology footprint and data storage requirements • Prepackaged reporting and analytics capabilities, as well as system add-ons (treaty repositories)
CONS	• Must dedicate resources away from day-to-day activities to facilitate build, as well as the overall maintenance of the system • Continuous support services for life of use • Potentially long lead times to execute the build • Increased calculation complexity could be difficult to implement and increase risk of inaccurate reporting	• Solution may need enhancements or customizations to meet all business needs • Reliance on third-party vendor and their resources for implementation and maintenance • Limited to vendor data structures, which may require up-front data preparation activities

Laying the foundation for implementation

Planning

A productive way to begin the modernization planning process is by defining the organization's goals, what its future state will look like, and the high-level requirements of the new platform.

Once agreement has been reached on the goals for implementation, the next step is to define the scope and approach. Organizations should consider what's included and excluded from the preliminary and expected subsequent scope, the timing and key dependencies, and the initial design of the approach. But it's important to recognize that this initial approach will likely evolve as the project advances.

The final phase of the planning process is to determine the most important vendor and system requirements. These requirements should be weighed by their importance, which may change over time as the organization better understands business needs and the prioritization of the functionality.

Vendor and solution selection

As they move into the vendor selection process, many organizations can create a scoring framework influenced by focused selection criteria (like those outlined in figure 2) that reinforces critical project elements, such as breadth and depth of functionality, strength of company and resources, technology platform, ease of use, and cost of ownership.

To dive even deeper into a vendor's capabilities and how they match up with the requirements, a request for proposal (RFP) provides an opportunity to gather additional information about the company, the types of resources they'll bring to the project, their customers, the technology platform, and the

costs. While this can be a helpful data-collection method, each available platform has distinct features, so tailored demonstrations are more critical than an RFP to gather information. In certain situations, a demo and more focused RFP can be used to streamline the process.

Once all system demonstrations are complete, vendors with the best score—indicating the likelihood of project success—may be given a proof of concept to help illustrate the vendor's capabilities. Some organizations decide to embed the proof of concept during the RFP, while others may use it when making their final selection.

The proof of concept allows the organization to work directly with the vendor as they demonstrate real-world capabilities using the organization's own contracts and data. This not only provides insights into applicability and customization needs, but also highlights working styles and communication protocols that could affect how the partnership will function.

As insurance companies begin to dive into a greater level of understanding of their selected platform and vendor, they'll likely continue to discover gaps and opportunities. Moving into the implementation phase, organizations should establish a process to work through those gaps, analyze the outcomes, and track the cumulative impact on the business.

Figure 2. Illustrative vendor selection criteria

1. Technology strength	• Flexibility and extensibility of the reinsurance management solution to support reinsurance transactions with different reinsurance conditions • Quality and reliability of the overall reinsurance • Availability of additional extensions, tools, and accelerators • Cloud or on-premises offering • Ease of integration with various services (both internal and external) and applications (such as policy admin and claims)
2. Breadth of functionality	• Ability to manage treaty and facultative terms and conditions • Support for multicurrency, multigeography • Reinsurance tracking, reporting, and visualization in real time and the capability to export and email reports • Automate reinsurance calculation of ceded premium, as well as segregate premiums between various treaty agreements • Ability to calculate and create ceded reserves and recoverables for various treaty agreements
3. User acceptance	Subjective evaluation regarding: • Ease of use • Intuitiveness • Overall appeal
4. Quality of service and financial strength	• Number of successful implementations • Size and experience of the support team • Financial health and the clarity of financial reporting • Market leadership
5. Total cost of ownership	• Cost of implementation, licensing, and hosting and support fees

Vendor contract considerations

What should be included in the contract and agreed-upon implementation governance? Here are a few examples of issues organizations can address before embarking on their implementation journey:

Governance

- What is the program governance, what are the roles and responsibilities, what named resources will be part of the team, and for what amount of time?
- Will you have a seat on the vendor's customer steering committee that has road map input?

Services and extras

- What services are specifically included and excluded?
- Are any upgrades or customizations required? If so, which ones will you pay for, and how much?

Technical considerations

- What is the decision process for design changes or unexpected issues?
- How will code be implemented, updated, and integrated?

Budget and pricing

- What is the pricing structure for changes and extra services?
- How will the budget be monitored?

Implementing a new system

While every implementation is different, this nine-step methodology can help guide your journey. Although it may look like it at first glance, this isn't a linear process. Organizations embarking on their first system implementation will quickly learn that there is a lot of interrelated work that will need to take place before go-live, and some of these steps will be revisited and refined over time.

Processes and controls are likely to change or need an overhaul as a result of the introduced automation. It's important to evaluate these early in the process to confirm proper resource alignment, process and control design, and customization definition. A key guiding principle is to build based on how the process should be designed, not how it works today.

Throughout the implementation journey, data and reporting activities can be one of the work streams that may take the longest, so we recommend getting this step designed and started early.

Step 1: Program management and prep

Before kicking off implementation planning, organizations typically focus on their program governance structure and change management strategies. To develop the governance structure needed for a successful implementation, companies often engage a team of integrated resources across the business, IT, controllership, and support functions.

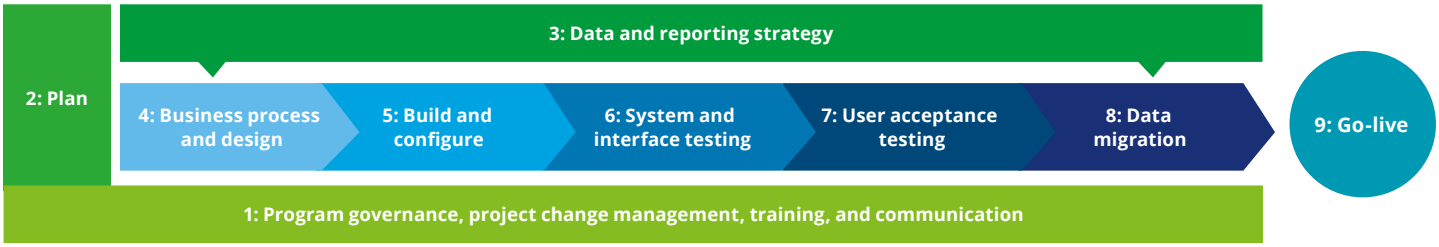
Change management will also be a critical component to help provide continuous training opportunities, job aids, formal training before go-live, and tailored communications that will help prepare end users for the new system.

Common implementation challenges

There are several common challenges that organizations face during the implementation phase. Addressing these hurdles and thinking through the road ahead often helps companies better anticipate and manage risks:

- Not establishing a cross-functional team with sufficient time allotted to the initiative
- Insufficient funding at the start of the implementation
- Lacking a reporting strategy and a related data strategy, including sourcing high-quality data
- Insufficient vendor management, including roles and responsibilities and issue resolution
- Insufficient time allocated for testing and lack of use of automated testing tools
- Automation of broken processes instead of future-state ones

Figure 3. The implementation journey



Step 2: Implementation planning

To lay the foundation for a successful implementation, consider defining the plan, the approach, and what's included in the scope of the project. This is the chance for the project team and vendor to discuss the project needs in greater detail and come to an understanding about the steps that will need to be taken along the way to achieve those goals.

This is also an opportunity for companies to determine and understand the capabilities that won't be addressed during the system implementation—and what needs to be developed internally to close those gaps. While a lot of these details may have been discussed initially, it's important to take another look now that a vendor has been selected. This is often done through blueprinting or fit-gap sessions.

Step 3: Data and reporting

There's a reason why the data step spans all the other implementation steps: It's one of the most critical components on the path to go-live—and can also take the longest. After project planning is complete, it's important for organizations to set a data strategy, identify data requirements, and conduct sourcing and quality exercises.

This step can drastically differ if an organization is converting or upgrading an existing reinsurance system versus coming from a manual environment. For example, in a spreadsheet environment, there really is no digitized source of contract terms, so building that source may require significant effort. The number of administration systems and the complexity of the environment can have incremental effects on project scope and timeline, so it may be better to source them after aggregation in a data warehouse.

In order to formulate a successful data strategy that will help enhance the new reinsurance system, identifying data requirements and enhancing reinsurance information will be key and will inform the initial data migration strategy. During this phase, organizations may need to adjust their initial approach based on the desired reports they want to generate from their new reinsurance platform.

Step 4: Business process and design

Now is the time to review the current state processes and re-imagine them enabled by technology.

Documenting business requirements and translating processes into detailed functional analysis will help identify opportunities for organizations to align their process with both their new reinsurance system and leading industry practices. Failure to properly align processes will not only limit the efficiencies created by the implementation, but may also increase costs associated with customizations aimed at automating poor process design.

Step 5: Build and configure

Once business processes and desired outcomes have been solidified, the system configuration details and the custom functionality list will be updated. This includes not only items within the reinsurance administration system, but potentially also the upstream and downstream platforms. This will further inform the interfaces that will need to be developed to meet those business requirements.

This is also the opportunity for organizations to gather in-house build requirements to address capabilities not available within the selected platform. Similar to the vendor implementation considerations, it's important for the build and configuration activities to be coordinated and aligned with the overall implementation strategy and vendor timeline in order to realize benefits of the new reinsurance solution.

Step 6: System and interface testing

During this phase, organizations conduct specific tests depending on their approach, as well as an integrated end-to-end test. Selecting a representative set of contracts and related data to feed the system, executing the calculations, and reviewing output will be an important part of this testing step. This is also the time for the project team to figure out how they'll address any problems that may arise. Will they have time to fix any coding issues? Will they have to come back to certain issues after the initial go-live?

While one manual workaround here or there may not seem significant at the time, organizations should take a step back and look at the system holistically to make sure they don't inadvertently revert to old ways of working. This could also increase complexity in system maintenance or create a reliance on IT resources for change management.

Step 7: User acceptance testing

Now that the system is connected, it's time for users to come back and see if it operates the way they thought it would. In many implementations, this wouldn't be the users' first exposure to the system, as they may have undergone some training early in the process. But during this step, the focus switches to the customizations and application of broader data sets—and having a core set of scenarios that should work in order to administer the program is key.

Are outputs accurate? Are reports formatted the right way? This phase is designed for the everyday user to review the end-to-end system, assessing that the information is being tracked and administered appropriately so users can conduct their jobs efficiently and effectively upon go-live and platform rollout. It's also important to keep leadership involved to make sure the new system adheres to processes and guidelines.

Step 8: Data migration

Once users have given the green light after testing—and most likely created a wish list for day two (which we'll cover later)—it's time to execute on the data migration strategy. This strategy will include several components:

1. **Referential data:** Key data elements that are universal to the system—such as reinsurer IDs, state codes, and date types—will usually be the first tables required to begin data transfer.

2. **Treaty or contract setup:** In many cases, resources will be needed to key in contract terms. But contracts can be analyzed early in the process to confirm this step is nothing more than data entry.

3. **Historical data:** Some history is generally required to meet reporting needs and manage current changes to historical contracts, but term and granularity could vary by type (premium or claims) and line of business. It's critical to accurately capture the required data without overloading the system with unnecessary detail.

4. **Live data:** The data that drives ongoing operations will generally be provided via automatic feeds from either administration systems or an in-house data warehouse. This data will be subject to the same evaluation as the historical information with additional focus around frequency and timing.

Beyond data quality checks and remediation, additional regression and performance testing will also likely occur during this step.

Step 9: Go-live

Prior to the formal go-live approval, organizations should complete a readiness/risk assessment—in addition to the steps outlined above—to address questions such as:

- Are the critical functions of the system working?
- Is the data load complete, and are the required interfaces functional?
- Are the procedures and controls documented and the users and team trained?
- Is the day 1 issue resolution team in place?

But "go-live" isn't just a one-day event; this phase will likely continue for weeks—or even months—until a steadier state is reached where issues have been minimized and users have more robust knowledge of the system.

Automation in action: Reinsurance administration case studies

Supporting the implementation life cycle
A global insurer was facing challenges due to disparate and legacy technology, as well as inconsistent data formats across multiple jurisdictions resulting in significant manual effort to administer the reinsurance portfolio and generate the corresponding financials. They needed to identify an end-to-end reinsurance solution that would reduce and/or eliminate the manual intervention points and streamline the reporting capabilities of the organization, drastically reducing the time and effort associated with the preparation of financial and regulatory reports. We supported the organization through their system selection process, facilitating the vendor demonstration, proof-of-concept reviews, and final decision-making process. Further, we supported the client through the implementation life cycle, including process redesign and operating model considerations, as part of the newly designed reinsurance process.

Setting the data strategy
A domestic property and casualty insurer was executing its existing book using a complex structures of queries, manual data manipulation, and spreadsheets. After selecting a new platform, we worked closely to set a data strategy for sourcing the data required by that new system. This included identifying the specific needs of the landing system, the calculations implicit in the contracts, and the data required, as well as mapping to each source across multiple administration platforms, profiling the data and quality remediation steps, and building the interfaces. This provided the client and vendor a data definition document that could be easily leveraged to build the interfaces between admin and reinsurance systems, as well as insights into where data enhancements would be required or could provide further benefit if actioned.

Correcting reconciliation errors
A global specialty reinsurer noticed a large reconciliation difference during the closing process. We worked together to conduct a diagnostic study that identified two spreadsheet errors: One was related to a failure to update a quota share after an endorsement, the other due to a business changing a line of business code for a business that was to be filtered out in the spreadsheet as excluded.

These errors occurred across a period of four years, affecting allocation between the company and its captive in the range of tens of millions of dollars. After corrections were made, restatements were executed, and an interim control was set, our client was off on its journey toward a new reinsurance administrative system.

Moving into day two

So the new system is live. What happens now?

After go-live, organizations should be prepared to manage day-to-day support—from answering user questions to addressing errors and conducting quality assurance.

Ongoing maintenance can also include integrating vendor releases and new endorsements into the system, making necessary changes when business processes are altered, monitoring key business case assumptions to see if the new program aligns, and making adjustments to the system where needed.

Many organizations aren't able to achieve their entire wish list during the initial implementation, so now is the chance to revisit other high-priority functionalities and configure or customize other elements of the system.

How Deloitte can help

Setting off on a reinsurance transformation journey can be a daunting task—especially given the associated costs, resource requirements, and implementation timelines. However, with appropriate planning—and an experienced guide—the end results can drive increased controls and efficiencies and provide your organization with insights.

Deloitte's reinsurance services are designed to improve the strategic alignment, performance efficiency, and effectiveness of reinsurance administration.

Our approach includes:

- Governance and organization
- Process and controls
- Technology selection and implementation
- Diagnostic capabilities
- Leakage studies
- Data strategy and execution
- Reporting and analytics
- Treaty database and maintenance

Let’s connect

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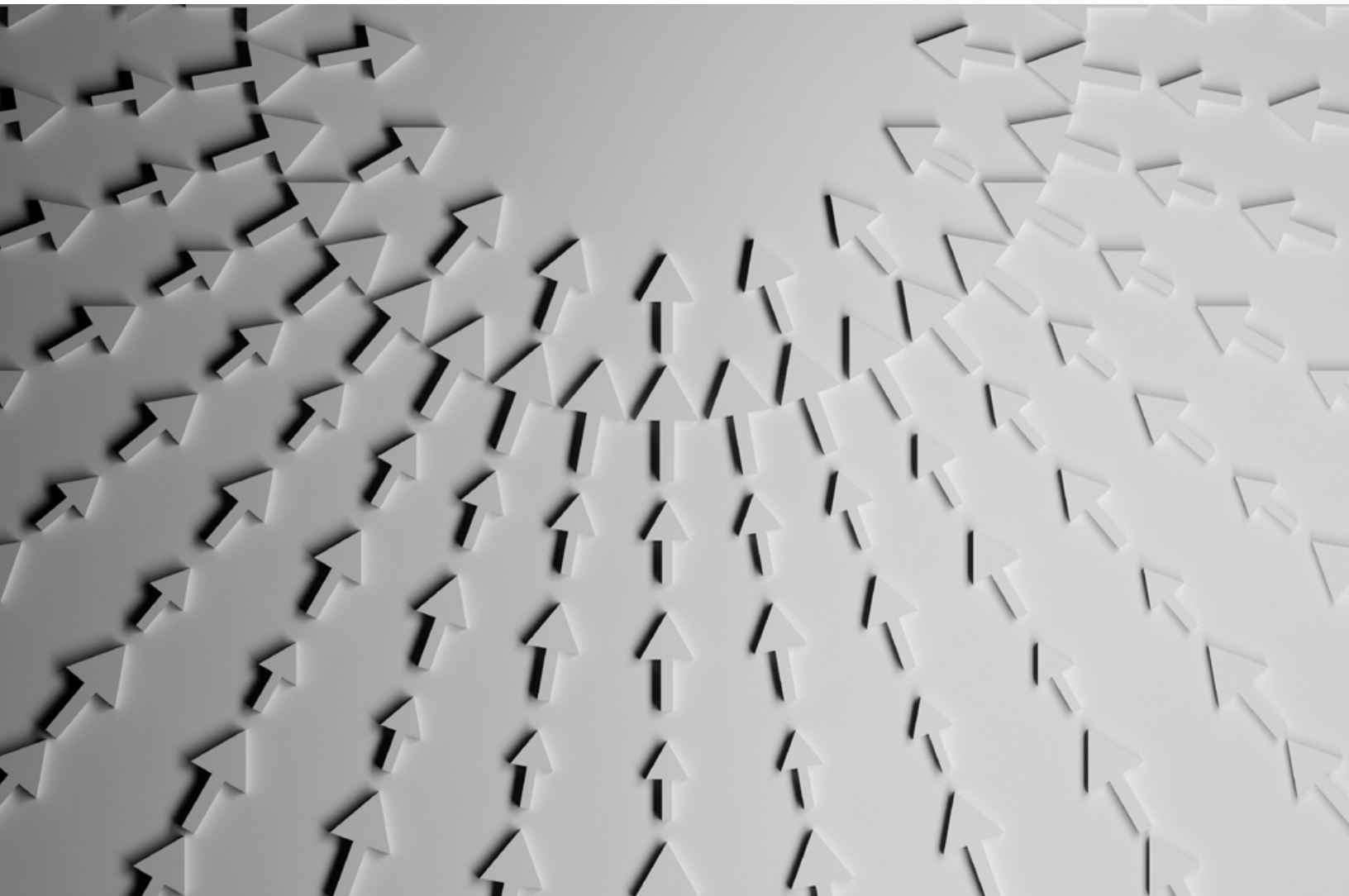

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