Digital Business

De-risking Life and Annuity Policy Admin System Conversions

Highly effective policy administration system (PAS) conversions are those that address the involved people, processes and technologies. Life and annuity (L&A) insurance companies can improve success rates in PAS conversions when they emphasize these three dimensions as keys to the organizational change initiative.

Executive summary

A legacy policy administration system (PAS) conversion carries multiple challenges that should be addressed by focusing on people, processes and technologies. Conversion programs include many dimensions, from product , policy migrations, interface integration and process changes to user training and operational readiness — all in a single initiative.

Interdependencies among these dimensions further multiply complexity. Risks and challenges characterize each stage of the conversion journey — from establishing the business case to planning, scoping, designing and implementing the program.

Success rates improve and risk is reduced when life and annuity (L&A) insurance companies treat these programs as organizational change initiatives and not solely as an IT modernization project. Three key success criteria typically govern the success or failure of PAS conversions with success hinging on meeting expectations for time, cost and reduced risks.

Cognizant has successfully completed more than 30 PAS conversions over the past 10 years. This white paper shares our perspective on the right way to undertake these programs, infusing best practices from each of the technology, people, and process dimensions.

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PAS conversion program success criteria

1 Fulfillment of goals established upfront	2 End user acceptance of target state	3 Ease of transition for operations & IT to the new PAS
Achieving ROI as planned	**Meeting expectations**	**Ease of transition**

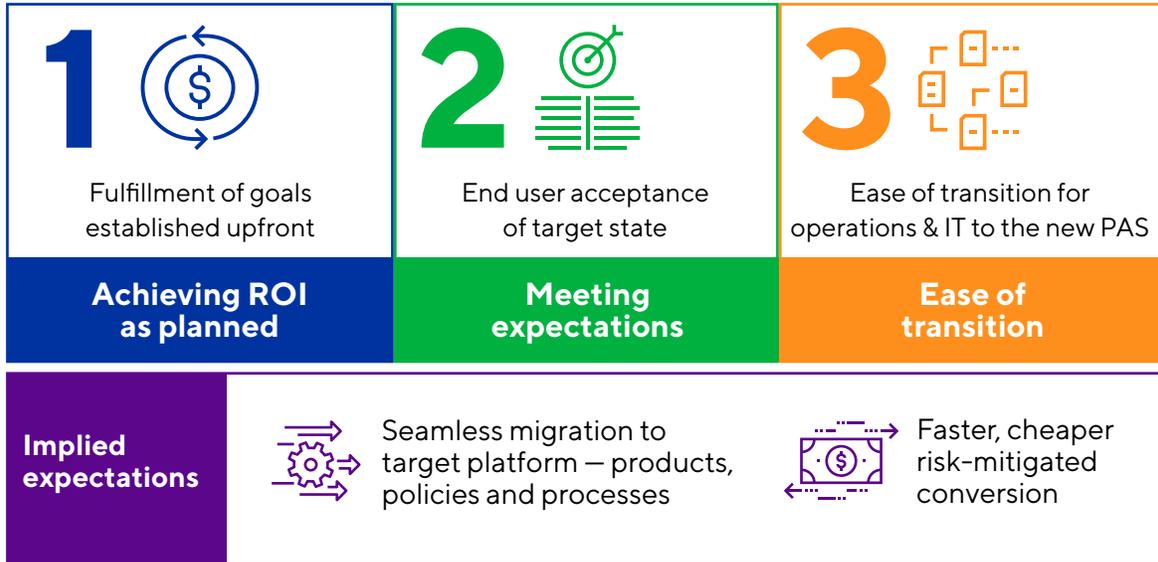| **Implied expectations**	Seamless migration to target platform — products, policies and processes	Faster, cheaper risk-mitigated conversion

Figure 1

While automation tools and solution accelerators can significantly increase accuracy and speed, and contain costs, conversion's success mostly rides on its impact on end users before, during and after the journey. The manner in which the target state is achieved is as important as the target state itself. Therein lies the significance of the processes used to arrive at the envisioned target state.

While automation tools and solution accelerators can significantly increase accuracy and speed, and contain costs, conversion's success mostly rides on its impact on end users before, during and after the journey.

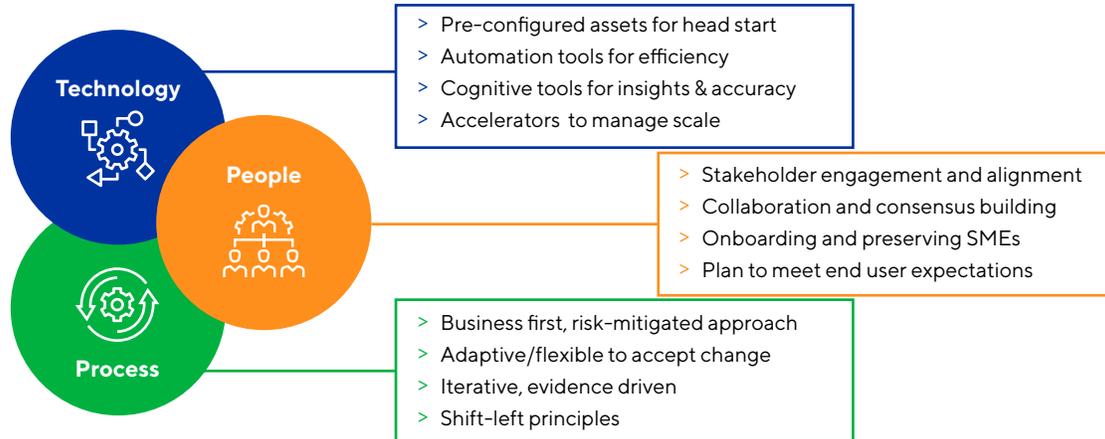## Foundational elements: Best practices to adopt in a PAS conversion

Technology
> Pre-configured assets for head start
> Automation tools for efficiency
> Cognitive tools for insights & accuracy
> Accelerators to manage scale

People
> Stakeholder engagement and alignment
> Collaboration and consensus building
> Onboarding and preserving SMEs
> Plan to meet end user expectations

Process
> Business first, risk-mitigated approach
> Adaptive/flexible to accept change
> Iterative, evidence driven
> Shift-left principles

Figure 2

Technology

Adopt pre-configured ecosystems with industry-standard features

Most policy administration systems have been built over decades. Understandably, replacing them can be a difficult and lengthy process, especially when faced with tight budget constraints — all while ensuring minimal impact on end users. It's prudent, therefore, to adopt solutions that can increase speed and accuracy. The inherent complexity and size of the endeavor calls for pre-built or pre-configured target platforms to host and administer in-scope products and policies. This approach helps to reduce program risks, costs and turnaround times.

By using a pre-configured platform, implementation teams can address functionality gaps for the new platform rather than build policy administration processes and rules from scratch. We recommend easy to configure, flexible platforms that offer a wide range of templates for the base product and riders for cloning and enhancements.

A pre-configured platform also offers working processes and provisions for obtaining end user feedback early. This can significantly expedite training for the operations team as well.

A pre-configured PAS should also provide "out-of-the-box" interface integration solutions to increase speed to market and reduce costs and risks. Policy administration systems integrate with dozens of interfaces. Most L&A companies share common internal and external interfaces. Examples include accounting ledgers, reinsurance feeds, national change of address (NCOA) feeds, commissionable event extracts, and regulatory compliance interfaces, such as Office of Foreign Assets Control (OFAC) and anti-money laundering (AML).

A pre-built toolkit for rapidly onboarding products and policies onto the target platform is another valuable project accelerator. Pre-existing data-mapping and transformation rules, rate loaders, and template-driven product onboarders are among the most important conversion tools. They help to improve quality, handle high volumes,

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reduce turnaround times, and avoid "repeat" conversion costs by automating the bulk of the project processes.

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Automation tools for legacy PAS conversions

While every PAS conversion poses unique challenges, there are also many similarities that provide opportunities to adopt reusable automation tools to more efficiently complete repetitive, rule-driven and high-volume tasks.

Reusable automation tools and accelerators also free up the valuable time of subject matter experts

(SMEs) and other key resources, allowing them to focus on more complex program problems or roadblocks.

Scaling the conversion ramp

By envisioning a ramp for escalating PAS conversion capabilities, L&A insurers can more clearly realize their conversion goals. This conversion ramp includes reusable, plug-and-play enablers equipped with automation tools, templates and process frameworks to expedite the legacy PAS conversion from start to finish.

A typical legacy conversion program includes at least four to five process tracks. Each track is a distinct project and presents opportunities to reduce costs and risks through automation and reusable components.

These tracks are the building blocks that construct the conversion ramp.

Scaling the conversion ramp

Ramp to onboard products & policies

New PAS platform

Insurance PAS conversion capabilities

Legacy 1   Legacy 2   Legacy 3   Legacy 4

Figure 3

Track	Building blocks of PAS conversion ramp	
Data migration	Source-agnostic, neutral file-based data capture to simplify extraction	Reusable asset
	Pre-existing, reusable data mapping of the neutral file to the target	Reusable asset
	Data onboarder reusable ETL (extract, transform, load) engine for target	Automation
	Automated data audit compare process	Automation
	Data profiling/rule repository	Reusable asset
Product configuration	Product grid and rate capture templates	Reusable asset
	L&A product calculation modeling tools	Reusable asset
	Product onboarding tools: automated product configuration and cloning	Automation
	Adaptive implementation methodology	Best practice
Testing	Policy lifecycle test scenario repository	Reusable asset
	Automated regression test bed	Automation
	Test-data generator for policy lifecycle testing	Automation
Integration	Pre-configured PAS interfaces	Reusable asset
	Pre-configured correspondence extracts and reports	Reusable asset
	PAS operation data store design constructs	Best practice
Requirement management	Automated business rule extraction from legacy system	Automation
	Product and process specification template	Reusable asset
	Agile and Scaled Agile Framework (SAFe): Iterative methodology with prototyping	Best practice
	Requirement traceability matrix	Reusable asset

For system integration partners and Software as a Service (SaaS)/Business Process as a Service (BPaaS) platform providers, not having good ramp capabilities should be a disqualifier.

Applicability of cognitive technologies

Tasks that require human perceptual skills can now be automated using cognitive technologies. Cognitive technologies help overcome the traditional trade-offs between speed, cost and quality. A legacy PAS conversion program includes several tasks that require managing massive data volumes. Conventional automation often cannot address the more complex data validation tasks. Such tasks typically require time-consuming human analysis, which is error prone, due to the sheer data volume and variation.

Early detection of hidden business (product and process) rules, insights and requirements can significantly reduce risks and challenges. In addition to providing early detection, cognitive tools can play a valuable role in optimizing approaches, further reducing costs and risks in a conversion, right from the early stages of the journey.

Cognitive tools also expose hidden rules and provide insights from legacy data in the policy administration ecosystem. They can be configured to monitor and study data exchanges with the PAS using upstream and downstream interface systems. By monitoring large data samples over time, these tools can provide metadata information related to the data-feed exchanges and, importantly, the hidden rules that humans often miss during conventional requirement gathering.

The table below depicts a few examples of how cognitive technologies can expose hidden requirements.

USE CASE 1: Policy lapse and grace processing rules

Monitor a large set of data feeds/exchanges and expose rules from the data feeds generated out of a legacy PAS that hosts term and traditional life insurance policies. The exposed rules can be used to re-examine or supplement business rules obtained through conventional methods, such as documentation or SMEs.

Conventional requirement gathering: Business rules obtained from existing documents or end users.

1. **Lapse rule:** Available product documentation says policies are given a 30-day grace period before the policy lapses.
2. **Paid-in-advance vs paid-in-arrears rule:** Actuarial memos suggest that the products in the source system require modal premiums to be paid in advance and not in arrears.
3. **Non-forfeiture options (NFO)**, such as a premium holiday rule, are not applicable for the block of policies.

Risk	Important exceptions and variations of the above rules can remain hidden if additional methods of validating or supplementing are not applied. These surface during data migration audits and lead to significant rework, causing delays and cost escalations.
Suggested mitigation, leveraging cognitive tools	Scan the billing/grace/lapse event-related data feeds over a period for the PAS, using cognitive technology tools. These feeds will contain date elements, such as lapse date, paid-to date and premium due, reinstatement premiums, and premium due date policy status. The cognitive tools can derive the following rules by monitoring large samples of such data feeds as: **I** What is the grace period rule for every plan under that system? Is it always 30 days or does it vary by plan (30, 45, or 60 days)? **I** Are NFO options (premium holiday) actually present? **I** Are there policies in the system that allow premiums to be paid in arrears?

USE CASE 2: Commission interface requirements

Monitor and harvest information from the data exchanges between the PAS and a commission system. Understand all data exchange triggers for commissionable events (automatic premium loan, premium holiday) using monitoring tools for a large data sample over a pre-defined period.

Conventional requirement gathering: Rules obtained from interface documents or application libraries.

1. Existing Interface documents for commissions provide a list of triggers for which data is sent from the PAS
2. A copybook/field list is obtained from the legacy source application libraries.

Risk	Outdated Interface documents do not typically contain all the interface exchange triggers as well as variations. These surface during end-to-end testing with the surround systems such as commissions.
Suggested mitigation, leveraging cognitive tools	Use cognitive tools to create a report by scanning data exchanges over a period of time or from existing data archives and data lakes. The report provided by such tools can cover the following aspects of interface exchanges: **I** What are the business transaction events for which data is exchanged? Are there any variations by products and plans? **I** What are the insurance data attributes that are being exchanged? In this case, the complete list of commissionable events includes charge backs. **I** What insurance data attributes are mandatory vs. optional in the exchange for a certain business transaction event?

Most emerging and existing cognitive technologies focus on enabling business growth goals. The insurance Industry needs more out-of-the-box cognitive tools to simplify legacy transformation and conversion programs.

Process

Shift-left strategy catches problems early

A shift-left strategy can help organizations detect problems early in the application and system integration testing phase. This strategy can also be applied more broadly across a legacy PAS conversion. A shift-left approach provides for:

1. An appropriate source-system study to ensure due diligence before conversion planning.

2. Iterative development, with early system prototypes and demonstrations for end users.

Appropriate source-system study
A critical common challenge for conversions is the need to understand comprehensive source system behaviors, referred to as business rules or logic. This challenge is further exacerbated if SMEs are unavailable and documentation is outdated.

To address this challenge, organizations should first gather all the critical facts and insights from product, policy, process and application information. With this essential knowledge, teams can then properly scope, strategize and plan the implementation. To more easily manage and analyze for commonality and gaps, this information should be captured in standardized product grids and templates. By maintaining a requirement-traceability matrix, teams can more effectively identify the impact across components.

This organized and comprehensive view of all pertinent information facilitates more productive deep-dive discussions, planning and stakeholder consensus building. Early, detailed deep dives are more productive, revealing distinct aspects and exceptions that can be addressed to prevent defects and rework.

A focused system study typically runs about six to eight weeks. Key areas to study include the legacy source application and repository of facts and insights about the product, data, system, and related business processes.

This early study helps identify hidden rules, key insights and system limitations to support the proper scope, strategy, and plan, and prevent rework and delays in later stages.

Iterative development, with early system prototypes and demonstrations for end users
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An iterative development model conforms well to "shift left" principles.

Because PAS conversions can take several months or quarters, stakeholder confidence can erode, hindering program success. Scope creep and requirement changes are expected to occur in such programs. L&A companies and implementation partners cannot realistically pre-plan and pre-decide every aspect of the project during the planning and requirement stage.

This is why it's important for end users and other stakeholders to review and test the work product early in the cycle and continuously throughout. This increases stakeholder confidence and encourages feedback to help identify missing requirements — affording the implementation team more lead time to correct errors.

Avoid using a conventional and predictive Waterfall approach, which is a linear, sequential methodology that requires the completion of each step before the next one can begin. Waterfall doesn't account for gathering lean requirements, early prototyping, or feedback.

Rather, an Adaptive Implementation Methodology accepts that project scope can and will change due to various reasons, such as changes in personnel, business process and priorities, as it divides the scope into smaller pieces for iterative deployment. Requirement changes are then captured and implemented as a planned backlog.

Adopting Agile-like methodologies, which demand that self-sufficient teams run Scrums, can also present challenges. Limited SME involvement and centralized decision-making would affect progress. Therefore, select an Adaptive Implementation Methodology that retains Waterfall's overarching simplicity and incorporates iterative development and testing processes as part of the framework.

One key objective is to provide an early, continuous, and incremental working prototype. The ability to deliver small units for testing, review and refinement elevates stakeholder confidence and helps address scope creep and design changes where needed, without causing schedule slippage.

When the product, interfaces and data migration components are complete, it's time to begin integrated testing. Initiate end-to-end testing on the converted data, which includes the full-volume data audit. This iterative development and testing approach mostly addresses scope creep and interdependencies. Any residual problems are then corrected at this stage.

Up next is the extensive migration rehearsal, or dry run, and expedited user-acceptance testing. User acceptance is accomplished quickly when an iterative development approach is followed, as most defects and user expectations are addressed during development, testing and user demo iterations.

Due diligence, planning and integrated program management

PAS conversion planning must not occur in an IT silo. There are many workflows, stakeholders and interdependencies to manage. On the next page, we outline a few fundamental planning guidelines.
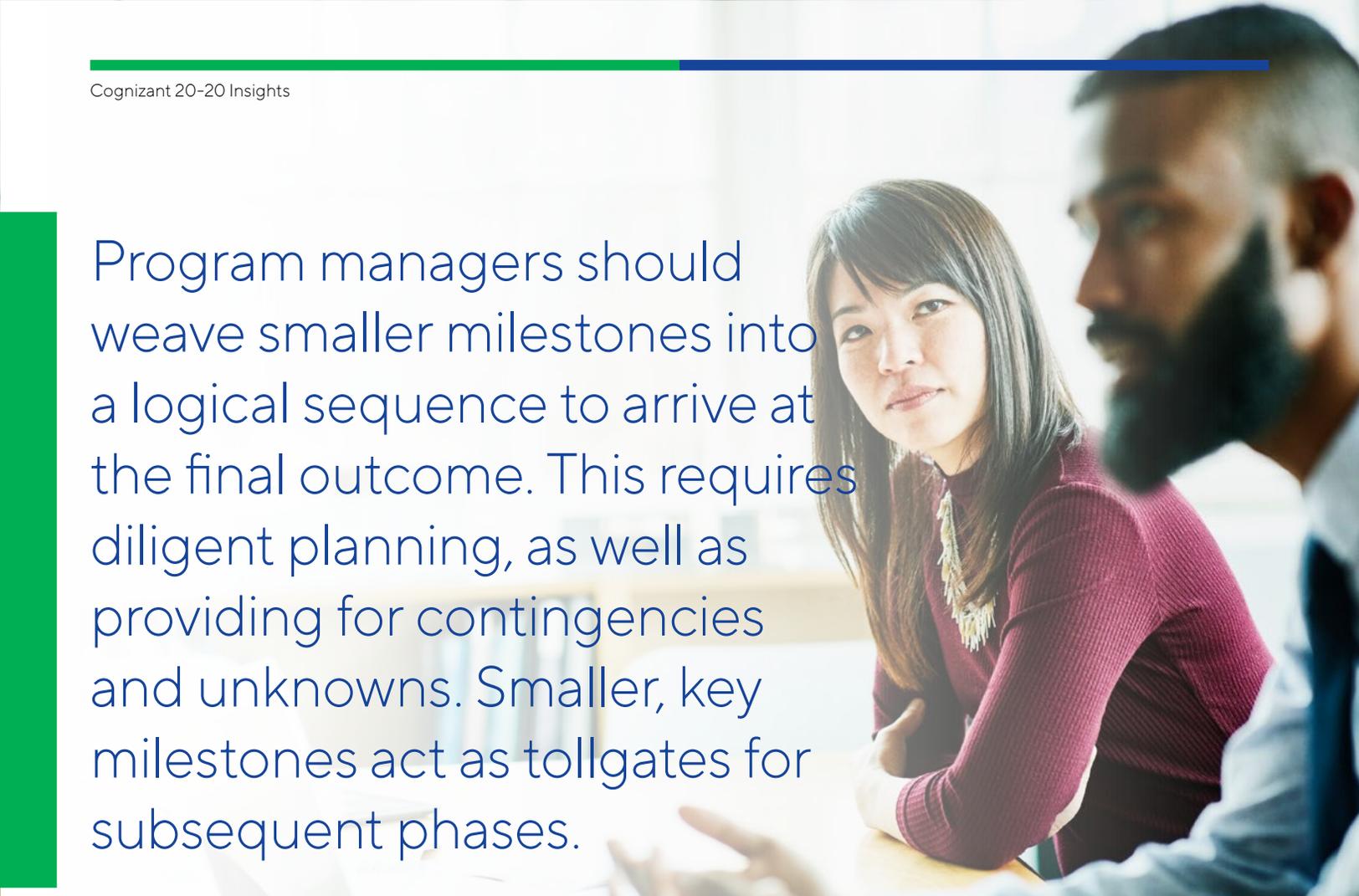
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Break apart into smaller, manageable goals

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Develop one integrated plan

Establish key milestones and dependencies within and between tracks early in the process. A few examples of this include:

▌ Before testing policy modal premium calculations and plan rates, it's necessary to have a representative sample of migrated policies (as well as all necessary coverage components) in a test environment.

▌ Policy lifecycle processing configurations – such as death, surrender, loan, and lapse – must be in order before completing end-to-end testing of accounting and commission systems.

▌ An adequate amount of converted data is required for end-to-end testing with interfaces.

▌ Data audits of policy financial information depend on calculation configurations and rate loads.

With many tracks to manage, it's important to develop one integrated project plan that includes individual track-level plans with associated milestones and dependencies. Identify dependencies and milestones that are both internal and external to each track.

This enables program management and all stakeholders to remain in sync with priorities, expectations, and the true status of the program.

People

Manage end-user expectations and sponsor confidence

PAS conversions can easily derail if business sponsors and end users lose confidence in the program's progress. Cost overruns and extended timelines can further erode the business case.

Seek to understand what's causing confidence to erode. Common reasons and possible solutions include:

	Reasons for erosion of stakeholder and sponsor confidence	Solution constructs — best practices
1	Implementation partners' lack of understanding of business dependencies and absence of consensus among stakeholders.	Carry out adequate due diligence Plan deep dive with stakeholders
2	Implementation partners' heavy dependency on SMEs for requirement, product and operations knowledge.	Onboard aptly skilled resources Implement solution accelerators for requirements
3	Error-prone, lengthy documentation and requirement gathering demands extensive SME involvement for reviews and approvals.	Adopt Agile-like methodologies
4	Lack of evidence and metrics of a working "to-be" system from the early stages creates doubts about true status and progress of the implementation among sponsors and stakeholders.	Adopt adaptive methodologies Manage using one integrated plan
5	Late detection of gaps and requirements leads to rework, delays and missed key milestones.	Conduct adequate system study Adopt shift-left best practices
6	Unavailability of an early, working "to-be" system with meaningful data for end users to train, test, and provide feedback leads to mismatched expectations during later stages.	Adopt adaptive methodologies Perform system prototyping and demos

No single solution can eliminate all of these problems. However, a set of solution constructs, best practices and methodologies can help mitigate these issues and ensure that stakeholders remain confident in the program's progress and success.

Pre-implementation prep with operations and policy administration peripheral teams

Failing to diligently complete necessary readiness and preparatory planning with all impacted stakeholders can lead to a variety of challenges, even after the conversion "go live" with interfacing systems, customer correspondence, and policy servicing functions. The likely result may include poor customer experience and missed SLAs for policy servicing.

The table below shares two examples of conversion issues and their impact on policy servicing.

Duplicate premium notice delivery	Failed remittances due to lack of updates to peripherals
A failure to analyze the impact of output processing timing gaps, like correspondence triggers, led to duplicate premium notices being sent out to customers for whom the dividend was not sufficient to pay the modal premium. The legacy policy administration system sent a notice, and the new PAS also generated another one for the same policies immediately after the conversion cutover.	A lack of rehearsals and inclusion of interfacing peripheral systems prevented premium remittance inbound feeds to reach the right policy administration system for processing.
The legacy PAS generated notices 15 days before the due date, but the new system was designed and configured to generate this trigger on the due date — a known gap.	The L&A company maintained an index of policy numbers for the PAS of record in a separate system. As blocks of policies migrated from the legacy PAS to the new system and some underwent renumbering, the indexing system should have been updated with the new PAS identifier and list of policy numbers for those renumbered.
IT and policy-servicing operations failed to adequately plan and collaborate to identify the impacted cases upfront. The failure to stop the duplicate correspondence from the new system led to a higher volume of inquiries, as some customers previously sent checks for the shortfall.	This issue was caused by a lack of end-to-end rehearsals with peripheral systems and a failure to create a common detailed implementation plan for all impacted systems. As a result, the policy servicing and IT teams manually applied the failed remittance transactions.

Post-conversion fallouts have common root causes:

	Commonly identified root cause of conversion fallouts	
A	Failure to adequately engage operations and peripheral system SMEs in implementation planning for the go-live.	One-time conversion tasks (before and after) for the operations and surround-system interdependencies can remain undetected if they are not addressed during go-live planning. These insights can prevent major fallouts.
B	Inadequate rehearsals or trial runs with all peripheral teams and stakeholders.	End-to-end rehearsals with all participants are mandatory. Neglecting to do so can cause one-time conversion cutover tasks to remain under-planned, under-rehearsed and missed, causing delays in the go-live or other fallouts.
C	Inadequate impact analysis upfront for the conversion cutover scenarios.	Migrating rules, data and processes from one system to another on a certain cutover date will always result in overlaps, special processing and one-time considerations that need to be factored in during planning.

Ensuring a soft landing and seamless transition are among the most important success criteria for any PAS conversion. Below are best practices that we follow for all such projects to ensure adoption and proper preparation for the go-live:

3. In go-live planning, ensure the right degree of engagement among policy-servicing and interface-system stakeholders.

4. Detail the planning and tracking of all one-time tasks by IT and operations before, during and after the conversion.

5. Rehearse end-to-end dry runs for the conversion; include IT and operations tasks.

6. Have all operations, user, and peripheral system stakeholders participate in conversion rehearsals (trial runs) with the right volume of policies; enact the same steps by following an hour-by-hour plan.

7. Maintain a policy watch list and a list of tasks tagged against each such policy.

Our approach requires high participation from policy-servicing operations and peripheral-system teams. We have found that early preventive participation is a better alternative than later, required corrective participation.

Stakeholder engagement and consensus building on scope, strategy and planning

End user buy-in and insights
The due diligence and planning phase must include active stakeholder participation in planning, detailed scoping, and migration strategy using deep-dive sessions to obtain insights and approvals on strategy decisions, detailed scope, and planning. Early deep-dive scoping and planning workshops with all impacted IT and business stakeholders will elicit important insights and uncover risks. Then the team is ready to revisit the strategy, re-plan risk-mitigation steps, and conduct a walkthrough with stakeholders to gain consensus and allay any fears. These early insights also help identify required corrections and clarify stakeholder dependencies, roles, and responsibilities.

Conclusion

A PAS conversion is a major undertaking that requires intense focus on the people, processes and technologies involved. Unfortunately, there's no single "silver bullet" among the many available tools, accelerators and approaches. As we explored, while automation tools and accelerators can significantly reduce project complexity and boost speed, people and processes play an equally important role. By engaging with the right implementation partners, who are well experienced in PAS conversions, L&A insurers can ensure a successful conversion and mitigate risks by adopting the best set of conversion accelerators, skilled resource pools, and holistic solution frameworks to serve their organizations.

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Acknowledgments

About Cognizant

Cognizant (Nasdaq-100: CTSH) is one of the world's leading professional services companies, transforming clients' business, operating and technology models for the digital era. Our unique industry-based, consultative approach helps clients envision, build and run more innovative and efficient business-es. Headquartered in the U.S., Cognizant is ranked 195 on the Fortune 500 and is consistently listed among the most admired companies in the world. Learn how Cognizant helps clients lead with digital at www.cognizant.com or follow us @Cognizant.

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