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Insurance Practice

How P&C insurers can successfully modernize core systems

Updating technology is essential but perceived as costly and difficult. Here's our guide for property and casualty carriers.

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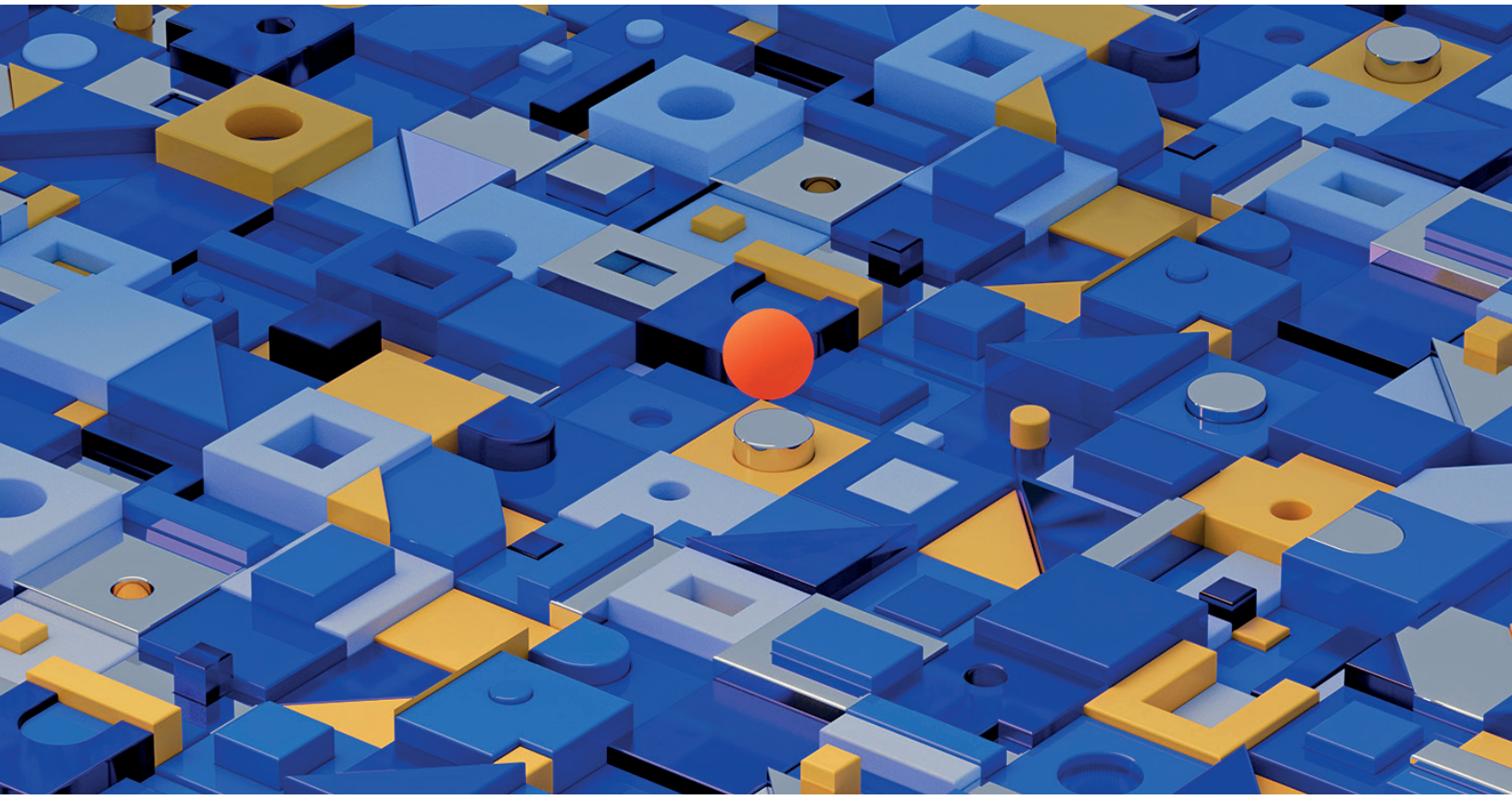

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Modernization is one of the most pressing challenges facing the property and casualty (P&C) insurance industry. In the past decade, core systems built for a slower, paper-driven insurance model have evidently become no longer fit for purpose. They leave carriers struggling with operational inefficiencies, rising IT maintenance costs, and growing pressure to meet customer expectations for real-time responsiveness, such as instant quotes and faster claims payouts. Staying competitive demands adopting cloud-based, scalable solutions to enable automation, real-time data analytics, and greater connectivity with other players in the ecosystem.

Today's modernization decisions are taking place in a fundamentally new environment. First, large-scale software-as-a-service (SaaS) platforms—built on modern architectures designed for cloud operations, continuous updates, and deep integration with carrier ecosystems—are now viable at scale. Second, the convergence of data, gen AI, and cloud compute has created a foundation for insurers to adopt emerging technology more aggressively than ever before, provided the platform is stable and scalable. These shifts mark a clear break from the landscape of a decade ago.

This all makes modernization challenging. While some carriers in the United States have begun heavily investing into transforming existing systems, results have been mixed, with many carriers not fully realizing expected returns. That has left most US insurers at a crossroads—still investing in legacy systems, still evaluating whether to buy or build new ones, and still figuring out how to best select a vendor or effectively build an in-house system. In Europe, most carriers choose systems from vendors because carriers tend to operate at a smaller scale, yet many struggle to make a strong business case for modernization because large-scale replacements are often seen as too costly and complex. That leaves many insurers pursuing incremental strategies such as progressively modernizing, hollowing out legacy systems, and upgrading select components to manage risk and maximize value. And in Japan, leading carriers still using mainframe systems are considering moving toward cloud-based vendor solutions. But aside from the cost and integration implications, insurers are concerned about fulfilling the heavily regulated process requirements of the Japanese market.

Technology modernization is often viewed as an IT-led effort requiring limited involvement from business stakeholders. Yet a willingness to reimagine and redesign business processes is critical to achieving the business cases from successfully transforming core systems. The traditional divide between insurance business and IT leadership is no longer tenable. Success requires shared ownership, joint prioritization, and an operating model in which business and technology leaders propel transformation together.

This article provides new perspectives on issues regarding vendor selection and building, buying, and upgrading core P&C insurance systems. It also examines key decision criteria and proposes a structured approach to modernization that maximizes the realization of business value. With the right approach, carriers can unlock the full potential of their modernization objectives: improved operational efficiency, reduced IT costs, enhanced customer experiences, and strengthened ecosystem connectivity.

Build or buy? Six dimensions of core platform transformation

Deciding whether to build custom solutions in-house, purchase commercial off-the-shelf (COTS) platforms, or upgrade existing systems is a complex choice. While once a balanced debate, the center of gravity is shifting on this issue—fewer carriers are pursuing full custom builds, and more are exploring ways to extend legacy systems with modern wrappers or to leverage SaaS platforms. In the United States, roughly half of the leading P&C carriers opt to buy and configure systems, while half decide to build. In Europe, most established carriers have heavily customized COTS platforms and must decide whether to update them.

Each approach has pros and cons. Carriers pursuing proprietary builds have greater control, tailored capabilities, and easier adaptation for future

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innovations. However, while carriers prioritize folding legacy products, businesses processes, and operations into the new stack, they tend to struggle with long timelines, limited scalability, and escalating costs. And they especially underestimate the full cost of long-term maintenance and continuous innovation. Building projects often lock in innovation at go-live, and when overruns occur, underdocumentation and cuts to training leave organizations unable to evolve the platform.

Carriers opting for COTS platforms gain faster implementation, upgraded timelines, and greater innovation capabilities, enabled by a constant change model in which the vendor drives ongoing platform evolution. However, they often have issues capturing the full potential of new systems. While most carriers now recognize modern packages can meet their needs through configuration without heavy customization, many packages still introduce significant product complexity and bespoke processes. As a result, even COTS implementation can require an extended timeline to overcome integration challenges and adjust to increasingly complex application architecture.

A detailed assessment across six key dimensions can help carriers make an informed decision about whether to build a new platform, buy a COTS solution, or upgrade an existing one. While these dimensions are most relevant for carriers weighing a greenfield build-versus-buy decision, they may also guide carriers considering whether to upgrade an existing vendor platform. The critical dimensions are as follows:

1. *Platform functionality and capabilities*. If a carrier's business model requires specialized functionality, significant customization, or complex integration of legacy books, the carrier could consider building a system. For those willing to adapt business processes and prioritize time to market, cost-efficiency, and vendor-driven innovation, COTS may work best—especially as the platforms are continuing to make strides in enhancing their configurability and better addressing unique product needs. And for those insurers pursuing a major upgrade, the critical question is whether it will meaningfully improve business flexibility, automation, or scalability. In all cases, the priority should be whether the platform can support future growth and product expansion without locking the business into brittle workarounds.

2. *Workflow customization and digital experience*. Carriers could consider building if they have highly specialized workflows (for example, property-rating models for complex risks or deep integration with proprietary data sources) and require a customized digital experience for agents and customers. Buying will provide a system with built-in customer and agent portals and ready-made workflows (such as straight-through processing) for policy issuance and servicing. Other considerations include the level of process automation required and the degree of flexibility in workflow modifications. For carriers upgrading within a COTS ecosystem, the question is whether the new release improves speed, automation, or the user experience enough to justify the cost and disruption of upgrading.

3. *Data governance, security, and control*. Carriers could consider building if they prioritize tailored governance, full control over proprietary data models, and customized security protocols. Buying is better for insurers seeking modular, scalable solutions with prebuilt advanced-analytical capabilities (such as automated claims triage, risk modeling, and loss forecasting) and that can accept vendor-managed security updates. Carriers could assess whether vendor-led innovation aligns with their IT strategy or if maintaining control over proprietary models is critical, although modern COTS platforms increasingly offer configurable data governance and robust security features. Carriers already on a vendor platform could consider whether upgrading delivers meaningful improvements in analytics, data portability, and risk controls.

4. *Time to market and cost*. Building a system requires a higher initial investment, and the extensive development and integration required means implementation may take five to ten years. COTS platforms typically offer lower up-front costs and implementation within three to five years by leveraging low-code configuration and minimal customization to accelerate deployment. But even within the same vendor environment, a major upgrade can require extensive testing, reconfiguration, and business change. Other considerations are total cost of ownership, long-term scalability, and cost predictability as business grows, as well as whether a new model (which often scales with policy volume) aligns with a carrier's growth ambitions or if a custom build offers better cost control over time.

5. *Organizational capabilities and innovation leverage*. Carriers could consider building if they have strong internal talent, technical depth, and delivery capabilities. Those lacking deep engineering resources or that prefer to rely on vendor-driven innovation could consider COTS systems instead. Even insurers with strong IT teams may struggle to match the pace of innovation delivered by leading vendors, who invest heavily in R&D and issue frequent upgrades. As SaaS increasingly spans applications, platforms, and data infrastructure in a unified offering, carriers could assess whether a vendor's architecture supports this convergence and allows for extensibility over time. Ultimately, it comes down to whether carriers can sustain a build approach internally or if it's more efficient to partner with a vendor. For those already on a COTS platform, any decision to upgrade could factor into the insurer's readiness to absorb and operationalize the improvements, given even the best new features will not drive value if the business is not prepared to adopt them.

6. *Risks during migration and in the target state*. Building provides greater control over security, compliance, and regulatory risks; minimizes vendor lock-in; and can be the right choice for carriers with the capabilities and capacity to manage migration risks and long-term system upkeep. Insurers could consider buying if they want a proven, lower-risk solution with industry validation; have a need to reduce the complexity of migration; and are comfortable with vendor-managed security, compliance, and regulatory updates. Carriers could also consider the scale and complexity of compliance requirements, potential operational impact of migration, and the long-term trade-off between vendor reliability and internal risk-management capacity. For existing COTS users, major upgrades carry risk, especially if the platform is heavily customized or the integration landscape is complex. Carriers could evaluate the operational and business impact of the upgrade process and weigh it against the cost of maintaining outdated systems and delaying transformation.

Vendor selection: Finding the right strategic partner

Buying a modern core system can be faster and more cost-effective than other options. However, with dozens of vendors in the market, selecting the right one becomes a strategic challenge. Common pitfalls include picking vendors without proven scalability, underestimating integration challenges and complexity, and having only limited visibility into external platform product road maps or relying on weak support networks (such as limited

technical support offerings or inadequate training). Carriers must look beyond current features and evaluate whether the vendor has the financial health, operational discipline, and ecosystem depth to sustain continuous innovation. For insurers upgrading within a COTS ecosystem, choosing when and how to upgrade and confirming the vendor's long-term alignment with your business model and architecture requires the same diligence as initial vendor selection. There are six criteria to consider when choosing the vendor that is most suitable for a carrier's individual needs (exhibit).

The vendor or upgrade selection process is a strategic decision—not just a technology procurement exercise—informed by a detailed assessment of the available information from the vendor. Best-in-class vendors offer the following:

1. *Scalability and growth readiness*. A best-in-class platform is widely adopted by leading carriers, is backed by case studies and client references, and can seamlessly scale to support increasing business volumes, geographic expansion, and multiline business needs. It should offer built-in compliance for state-by-state regulations and flexible configuration capabilities to support multiline and multi-jurisdiction operations. Critically, carriers could assess whether the vendor has sufficient free cash flow to fund ongoing R&D, ensuring the platform continues to evolve and doesn't stagnate over time. Additionally, the platform could showcase infrastructure flexibility with an API-first design and a microservice architecture.

Exhibit

To inform vendor selection, carriers should thoroughly assess vendor information in six key areas.

Scalability and growth readiness	Flexibility and system integration	Credibility and market presence	Collaboration and product influence	Functionality and feature adaptability	Third-party service network and coverage
• **Client portfolio** (eg, case studies) • **R&D plan** (eg, historical and projected R&D expenditures) • **Multiline and multi-jurisdiction support** (eg, built-in compliance for state-by-state regulations) • **Infrastructure flexibility** (eg, API and microservice architecture)	• **API details** (eg, number and types of APIs, API response time, system uptime) • **Information on prebuilt connectors** for industry-standard systems • **List of partners** in vendor's app marketplace (eg, third-party applications, insurtech partners, developer tools)	• **Number and profiles of leading carriers** using the platform • **References from other clients** with similar business models or challenges (eg, same legacy systems, multiple business lines) • **Operational performance track records** (eg, number of incidents of the highest severity)	• **Product upgrade process** and carrier role in the process (eg, user groups, advisory boards) • **Feedback collection mechanisms** • **Development road map** (eg, timelines and milestones)	• **Demos of core features** (eg, product configurations, self-service capabilities, automated compliance check) • **Speed to add new "out of the box" features** • **Available no-code or low-code customization options**	• **List of preintegrated third-party services** (eg, number of service providers, types of services) • **Network geography coverage** • **Metrics** for historical performance and response times

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2. *Flexibility and system integration*. A highly flexible platform provides targeted solutions for specific value chain steps (for example, only for underwriting or claims management) and integrates seamlessly with other in-house or third-party systems. It could have a wide range of documented APIs with quick response time and high system uptime, as well as prebuilt connectors for industry-standard systems to reduce the need for extensive custom development. Advanced platforms also typically have a robust partner network in their app marketplace to enable access to complementary solutions. An active ecosystem with diverse feeder channels into the platform—such as third-party applications, insurtech partners, and developer tools—helps keep the platform fresh and relevant.

3. *Credibility and market presence*. A trusted vendor should have a proven ability to spur industry innovation. Specifically, vendors with substantial market presence among leading carriers—especially among those with similar business models or challenges, such as with the same legacy systems, with multiple business lines, or in complex regulatory environments—tend to have proven solutions tested against sophistication and scale. In addition to innovation, carriers could scrutinize vendors' operational track record (for example, the number of highest-severity incidents or the ability to restore service under regulatory frameworks such as the European Union's Digital Operational Resilience Act) to ensure reliable performance. This also indicates a vendor's ability to influence and shape a platform's capabilities with emerging technologies, such as gen AI.

4. *Collaboration and product influence*. A collaborative vendor actively engages with its carriers to enhance existing products and develop new features and updates. They involve carriers in the product upgrade process through vehicles such as user groups, advisory boards, and feedback collection mechanisms via online portals and dedicated account managers. Collaborative vendors are also transparent about their development road map, with clear timelines and milestones.

5. *Functionality and feature adaptability*. A versatile platform offers a broad and sophisticated range of features addressing diverse use cases, with advanced core functionalities such as dynamic product configurations, customer self-service capabilities, and automated compliance check. Best-in-class vendors regularly expand a platform's features with "out of the box" solutions and provide no- or low-code customization. A platform could also be adaptable to future requirements, especially the support of advanced technologies.

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6. *Third-party service network and coverage*. A strong vendor has a robust network of third-party service providers for implementation and operational support—typically evidenced by the number and depth of relationships with system integration partners—covering all geographies a carrier operates in and providing local support and expertise. More importantly, these third-party partners could have a record of service reliability backed by consistent adherence to service-level agreements, as well as strong historical performance metrics.

Practical steps to get started

System modernization is often approached as a technology initiative, but its success hinges just as much on business leadership. At its core, modernization is a business transformation, requiring process reimagination to realize the system's full strategic and operational value. We are now at a demarcation point where business and IT leadership can no longer operate on parallel tracks—modern transformation demands an integrated, agile operating model in which business and technology jointly own outcomes. Strong engagement and alignment between business and technology leaders is critical to ensure an organization works toward a shared agenda. In our experience, leaders could follow the following steps to begin the modernization journey:

— *Define and align business and technology objectives up front*. Before evaluating solutions, align internally on the desired business outcomes and modernization priorities. Common objectives include improving operational efficiency, accelerating time to market, enhancing digital customer experiences, and reducing long-term IT costs.

— *Conduct a structured build-versus-buy or upgrade assessment*. Use a clear framework to evaluate business needs, product complexity, and technology priorities across key dimensions such as functionality, cost, speed, scalability, and risk. This ensures the decision is objective. Consider future-readiness in how the system needs to evolve to support changing product offerings, digital distribution, and ecosystem integration.

— *Assess internal readiness and capability gaps*. Evaluate the internal capacity to execute a large-scale transformation, including available talent, capabilities, existing infrastructure, integration complexity, and leadership alignment. Knowing your constraints can help plan for the right support, whether it is through vendors, internal upskilling, or hiring.

— *Run a disciplined vendor selection or upgrade evaluation process*. Go beyond feature lists and assess long-term viability, integration flexibility, ecosystem partnerships, and vendor–client collaboration. For existing platform users, assess whether the proposed upgrade meaningfully advances capabilities, resolves pain points, and aligns with business goals without introducing undue implementation risk.

— *Prioritize and sequence initiatives*. Manage transformation complexity and deliver value incrementally with a structured road map. The initial phase could focus on quick wins that align with business priorities, delivering early success to build momentum and refine processes. Subsequent phases could tackle high-priority initiatives, considering dependencies, risks, and resource availability.

— *Establish strong project governance*. Set up strong governance at the outset—such as decisions rights and escalation paths—to avoid delays, manage scope, and keep teams focused on delivering value rather than just hitting milestones. Modernization is a multiyear journey that requires tight governance at the outset to manage collaboration between business and technology teams.

— *Implement change management and drive adoption*. Minimize resistance and maximize value from the transformation through initiatives

such as clearly communicating the vision (such as through a company newsletter, town hall, or employee Q&A session), ensuring leadership alignment and ongoing support, undertaking targeted training programs, and maintaining structured feedback channels to address concerns and refine transformation processes.

System modernization is a transformative journey requiring careful planning, strong governance, and close collaboration between business and technology. Success starts with a structured approach to evaluating those options, selecting the right solutions or vendors, and establishing an effective operating model that ensures accountability and efficient decision-making. Effective change management—such as through user training and stakeholder alignment—is equally important and often overlooked. With a clear road map and the right execution model, carriers can maximize the value of their core systems and position themselves for sustainable long-term growth.

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