

Overcoming the Top 5 Challenges to Achieving Underwriting Excellence

A White Paper by
Guidewire Software



Is Underwriting Excellence the Same as Underwriting Discipline?

Throughout the P&C insurance industry's long history, and across its different lines of business and geographies, a consensus of experts has singled out underwriting excellence as the lynchpin of profitability. Perhaps its most legendary commentator, Warren Buffett, summarizes his own strategy for success at underwriting and pricing discipline: "consistently pricing to make a profit, not to match our most optimistic competitor."

A McKinsey & Company study quantified the wisdom of this point of view with an analysis of large U.S. P&C carriers. The study evaluated the correlation of Return on Equity (ROE) over a fifteen year period with three different measures: underwriting performance, investment margins, and premium surplus. The study found that underwriting performance was very highly correlated with ROE, while investment margins and surplus were negligibly related. The study also found that of those carriers in the bottom two quintiles of underwriting performance in the 1980's and early 1990's, 3 out of 4 had been acquired or went out of business, while top quintile carriers during that period remained industry leaders into the present. Today, there is virtual consensus that no carrier can earn its cost of capital over the long-term through investment performance alone, i.e. without achieving an underwriting profit. So Warren Buffett's criticism of the industry for "almost invariably operating at an underwriting loss" is well-taken, but what is the solution?

One traditional prescription is to equate "excellence" with "discipline" and place the focus on clearly communicated appetite, strictly enforced risk evaluation criteria and pricing authority, honest loss reserving, and an unwavering focus on long-term profitability. A well-established perspective in the industry holds that the burden of maintaining this discipline falls squarely on the shoulders of a carrier's executive leadership.

Yet while discipline and competent leadership are indeed vital ingredients, achieving underwriting excellence is more than a matter of executive fiat or sheer management willpower. Underwriting and policy processing operations are both too complex and too high-volume to be monitored at a case-by-case level; and the more precisely tailored the management guideline, the more difficult it is to apply it uniformly in every context. As circumstances change, management cannot rely on human insight alone: analytical tools to determine the correct guidelines (e.g., appetite, risk criteria, pricing parameters) and execution tools to communicate and establish those guidelines to the rank-and-file are needed.

An emphasis on underwriting discipline alone overlooks other significant opportunities to find value in underwriting and policy processing operations.

Improving Value in Underwriting and Policy Processing Operations

There are many levers to enhance the contribution of underwriting and policy processing operations:

- Increase the volume of business through captive or independent agents by reducing the frictional costs of sales collaboration
- Reduce the expense ratio through automation of standard policy processing, replacing batch-processing where possible with real-time transactions
- Enhance underwriting productivity through automation of data gathering, facilitating routine tasks (such as inquiries and correspondence generation), workflow management, and rule-based decision-making
- Optimize pricing and cross-sell opportunities based on more granular risk segmentation and lifecycle analysis at both policy and account levels
- Enforce underwriting discipline at the account level by providing an account view and clustering policies with similar renewal cycles within the same time period so that holistic underwriting decisions can be made
- Accelerate development and deployment of new products and/or new packages
- Increase agent loyalty by re-allocating underwriters' time from internal administrative tasks to timely relationship building interactions.
- Reduce agent and policyholder servicing costs through self-service interfaces

Each of these opportunity areas extends beyond the rubric of “underwriting discipline” alone. The broader goal is to push underwriting performance on two axes simultaneously: efficiency and accuracy.

For any individual person, efficiency and accuracy are in tension – the less scrutiny applied to each underwriting situation, the faster the processing, but the greater the risk of mispricing or accepting a poor risk. Through the transformation of the underwriting working environment and its processes, agents, underwriters, and their support staff can be pushed to a new frontier in which the same amount of the scarce resource – human underwriting effort – achieves both a higher volume of business and greater accuracy in risk decisioning.

Public data shows that top quintile P&C carriers deliver more than 25 percentage points greater ROE than their bottom quintile cohorts. Studies such as McKinsey's have shown that the primary differentiation is underwriting excellence, built on this continuous transformation. In the next section, we discuss technology as a key enabler of that transformation.

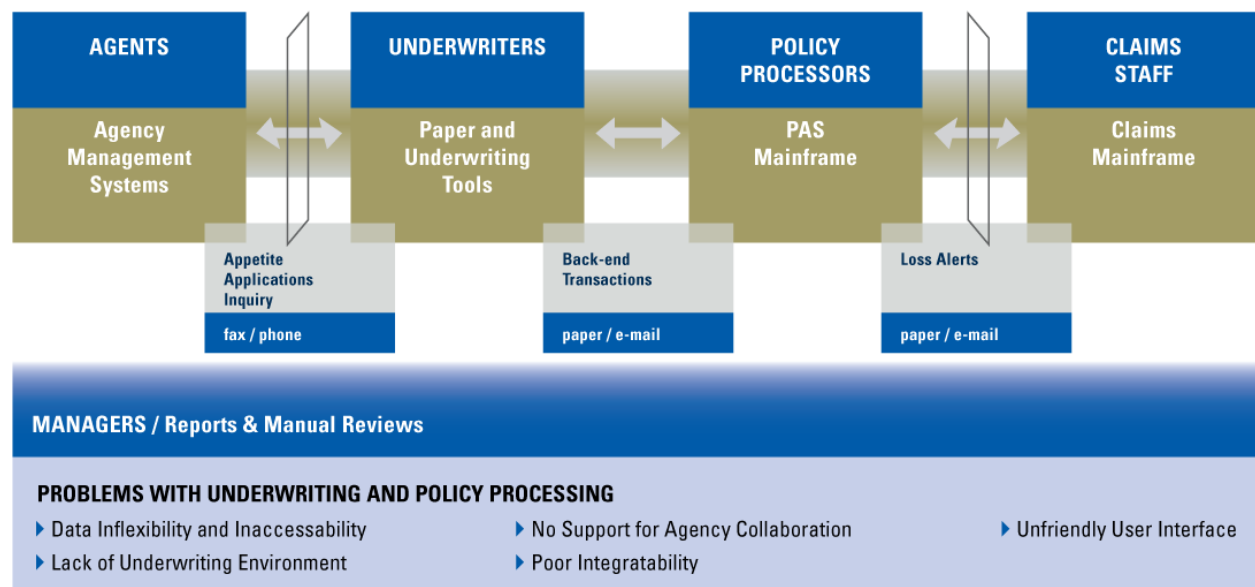
Five Challenges to Improving Value: Legacy System Shortcomings Rooted in Dated Technology

Let's face it: Legacy policy administration systems are an enabler and albatross.

The policy administration system (PAS) is an insurance carrier's most important system. Core policy data constantly flows into and out of the PAS, which sits at the heart of risk evaluation and processing of new business, renewals, and endorsements. Numerous internal and external parties including claims, billing, actuarial, customer service, finance and state bureaus constantly query the system to support their key activities. Underwriters and policy processors spend eight hours a day in the system to rate, bind, and maintain policies.

Yet by its very centrality in many of the critical functions of the carrier's business, the legacy PAS is also the most intractable and structural obstacle to achieving underwriting excellence. Optimized to serve as transaction engines and systems-of-record for policies, these systems generally achieved reliability and fast performance, but at the cost of minimal support for decision-making and communication essential to the underwriting process. Also, typically written in COBOL and implemented in the 1980's or early 1990's, legacy policy administration systems lag today's technology by at least a generation.

UNDERWRITING AND POLICY PROCESSING TODAY



Challenge #1: Data Inflexibility and Inaccessibility

The legacy PAS has a rigid data model and hard-coded business logic. Extending the system to capture additional data, address other LOBs, or support new geographies is extremely difficult. Underwriting rules are hard-coded as black-box system procedures, rendering them inaccessible for improvement. Flat and inflexible data structures impede reporting and render it highly challenging to observe simple patterns – such as household policy ownership or agency performance.

Challenge #2: No Support for Agency Collaboration

The legacy PAS was built to rate and book policies not to generate new business. It lacks an easy way for agents to submit and manage their business; it does not communicate with agency management systems, where agents keep account data. And it offers the underwriter no support in monitoring and optimizing his/her portfolio of agent relationships.

Challenge #3: Unfriendly User Interface

Because it was designed to minimize data storage, the legacy PAS has an arcane interface that takes new employees months to learn. Consequently, underwriters and processors spend far too much effort and time to perform basic processing steps. Many transactions have to run in overnight batch processes, greatly elongating the required time to change, renew, and maintain policies.

Challenge #4: Lack of Underwriting Environment

The legacy PAS is not an underwriting system and offers scant support for the underwriter's core tasks of risk evaluation and developing relationships with agents or policyholders. In many operations, especially in commercial lines, underwriters rely heavily on paper for account information, risk data, correspondence, and policy documents. This great quantity of data resides in unstructured form, inaccessible to rule-based decision-making or concurrent access by groups working in parallel processes. Many underwriters will describe their legacy policy administration environment as more impediment than enabler of the tasks they conduct dozens of times a day. This is especially true of supervisory staff, who typically must rely on manual methods to monitor and manage the distribution of work and individual underwriting performance.

Challenge #5: Poor Integratability

Integrating to a legacy PAS system is either arduous or impossible. Data and business logic are undocumented, well-defined interfaces non-existent, and functionality enmeshed in rigid procedural blocks of code. Consequently, data is dispersed over disparate system environments and users are compelled to rekey the same information.

Bottom Line Impact of Limitations

These shortcomings impose a heavy tax on the underwriting operations they support. First, potential business lost to competitors because of inadequate ease-of-use by agents and consumers. Second, excess expenses arising from inefficient policy processing and failure to automate routine decisions. Third, the "underwriting leakage" that results from inconsistent application of eligibility and underwriting criteria. Fourth, many carriers are blocked from pursuit of attractive business in other geographies, in other lines of business, or with different coverage or pricing attributes. And finally, the IT expense of maintenance, integration, and support of inflexible legacy systems increases overall operational costs – not necessarily in hard measures like processing-cost-per-transaction, but in the project-related and opportunity costs required to make system changes to adapt to business and regulatory needs.

Aggregating industry data and expert opinion, Guidewire estimates that PAS-related constraints are the root cause of at least 5 points of combined ratio underperformance for the great majority of P&C carriers. The composition of this "performance tax" varies by line of business – for instance, personal lines

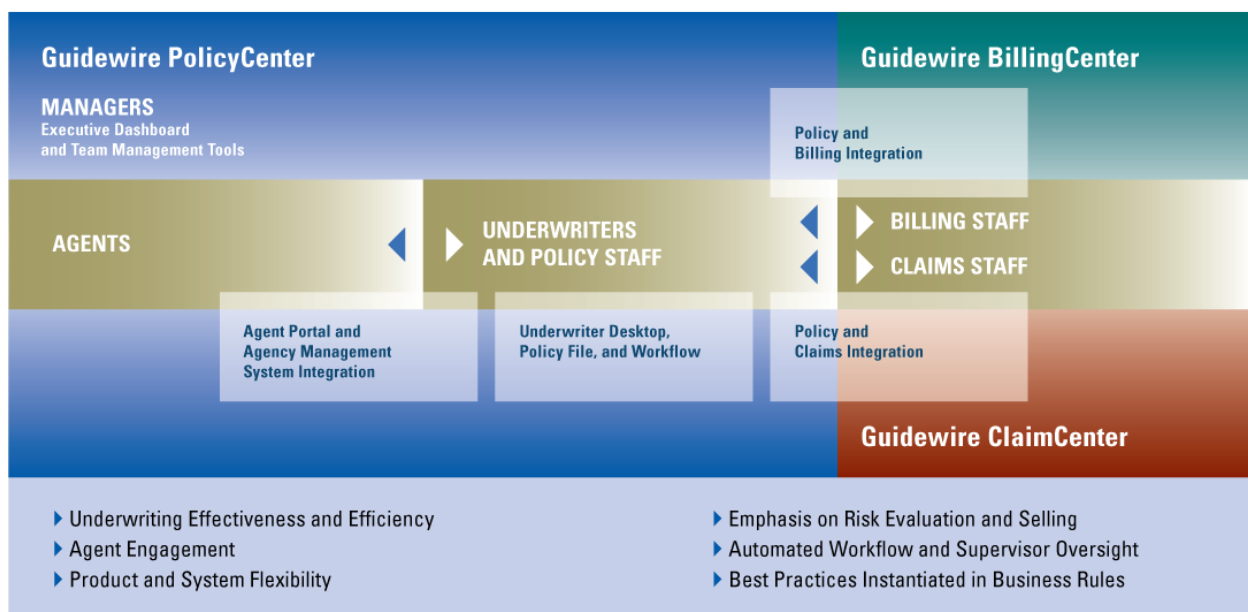
operations suffer more from inadequate transaction automation, while lack of agent support imposes a heavier cost on commercial lines – but the same themes apply across the industry. According to the Insurance Information Institute, eliminating the performance tax is the key to closing the 6.5 percentage point gap in return on equity (ROE) versus other U.S. business sectors experienced by the P&C industry over the past 15 years. But if legacy system shortcomings cost carriers and policyholders money, they also point us toward a solution – by showing us the attributes of the next generation of policy administration systems.

These attributes provide the context for introducing Guidewire's next-generation policy administration offering: Guidewire PolicyCenter[®]. PolicyCenter is an all-lines, 100% web-based underwriting and policy administration system. Written entirely in Java, PolicyCenter is built on the same proven technology platform that has enabled Guidewire ClaimCenter[®] to become the broadly acknowledged leading claims management system in the P&C industry today.

Three Themes for the Next Generation of Policy Administration

As surely as they displaced the filing cabinets and desk calculators that preceded them, legacy policy administration systems will be displaced by the next generation of technology: intuitive, web-based, rule-driven, integrated and accessible to constituents beyond the four walls of the underwriting organization.

GUIDEWIRE UNDERWRITING AND POLICY PROCESSING



Guidewire PolicyCenter Exemplifies the Next Generation: Differentiated from Legacy Policy Systems by Three Key Themes

Theme #1: Underwriting Effectiveness and Efficiency

The optimized underwriting process achieves precisely the right division of labor between automation and human judgment. Where a decision can be made on systematic grounds based on structured data (such as a SIC, credit score, property value, or total loss experience), business rules evaluate and execute decisions with far greater precision and speed than people. Where underwriting decisions cannot be made so programmatically – rarely the case in personal lines, more often the case in small business, and the great majority of the time in large commercial lines – then human judgment must come into play. Doing equal justice to the “automated” and “human judgment” dimensions of underwriting therefore

requires both a comprehensive business rules framework – capable of representing the required automation logic in all its complexity – and an empowering information and workflow environment in which human underwriters can do their thinking, evaluating, and communicating.

PolicyCenter's business rules engine is tailored to the task of automating the underwriting and policy processing environment. PolicyCenter business rules allow carriers to design and optimize the “shop floor” of the underwriting factory – defining rules for assignment, prequalification and risk evaluation, data gathering and validation, pricing, risk reservation, notification timing, and so forth. Supported by comprehensive data about agents, accounts, policies, and the underwriting staff itself, PolicyCenter can effectively execute the great majority of decisions without the involvement of humans.

Supporting the human half of the equation, in turn, requires unifying the underwriting and policy administration domains. Replacing the paper files and ad hoc task management of most underwriting environments, PolicyCenter provides underwriters with a workspace built upon and augmenting the policy repository. This workspace empowers the underwriter to find agent, account, policy, claim, and billing, and other underwriting information through intuitive navigation of an electronic account and policy file; at the same time, it provides a workflow environment coordinating the activities of agent, policy processor, loss control team, and even policyholder. Combining this environment with imaging and document management solutions, PolicyCenter offers complete freedom from physical location to conduct all aspects of the underwriting and policy processing lifecycle.

Hence, PolicyCenter is a policy administration system that actually empowers and accelerates underwriting work, rather than merely storing the results of it.

Theme #2: Agent Engagement

In most lines of business, agents are the primary point of contact with policyholders, and as such, they tend both to receive policyholders' most current information and to field their requests and inquiries. Despite their vital role in the underwriting process, agents – whether captive or independent -- are poorly represented in the functional scope of legacy policy administration systems. This is especially true during the quoting and application phases, which typically constitute 80% of the total work an agent will invest in an account relationship over its lifetime.

Even though many insurance products are virtually commodities, industry experience has shown that price is far from the most decisive factor for agents in deciding where to place their business. The inherent competition at the new business phase – between an agent and his/her competitors, and between carriers competing to underwrite a particular account – rewards the carrier that can provide agents instant information about appetite, eligibility, pricing, and ultimately, acceptability. Business gravitates to where “ease-of-doing-business” is maximized.

Yet in many underwriting operations, agents essentially work in a parallel universe from underwriters. Focused on their own agency management systems, agents communicate with underwriters in a highly inefficient, paper-intensive, and error prone way. The process of submitting, verifying, and iterating on key data is inhibited by the lack of workflow and the redundancy of data in producer and underwriting systems. And even those carriers who have extended a web-based interface agent find that independent agents are loath to rekey information in a carrier's proprietary format – especially if that interface does not provide “one stop shopping” for managing other transactions (such as endorsements and cancellations) and inquiring into claims and billing status.

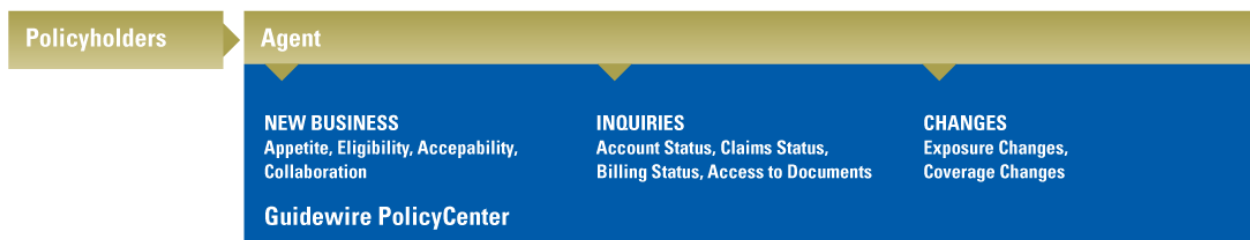
POLICYCENTER STREAMLINES NEW BUSINESS



PolicyCenter engages the agent on his/her own terms in several key respects. First, by orchestrating the quoting and submission process to provide contextual feedback on appetite, eligibility, and acceptability of each account, thereby minimizing the risk of excess data entry. Second, by providing agents tools for inquiring into account, policy, claims, and billing status, as well as a generation of key documents such as proposal letters, DEC pages, and certificates of insurance. Third, by allowing agents to submit changes to in force policies. And finally, by communicating status and open items through a combination of activities and e-mail notification.

Effectively, PolicyCenter maximizes engagement and ease-of-doing business by bringing the agent directly into the underwriting fold. Though a comprehensive set of system permissions limits agents to a smaller set of functions and data than underwriters, agents can achieve the great majority of their work through efficient self-service. Indeed, only when an underwriter needs to make a specific judgment does the agent even need to wait for his/her involvement. Combined with the underwriting automation described earlier, PolicyCenter's producer engagement enables a "no-touch / low-touch" underwriting model that drives cost and cycle time out of the process – a value proposition for both carriers and agents.

AGENT ENGAGEMENT OVERVIEW



Theme #3: Product and System Flexibility

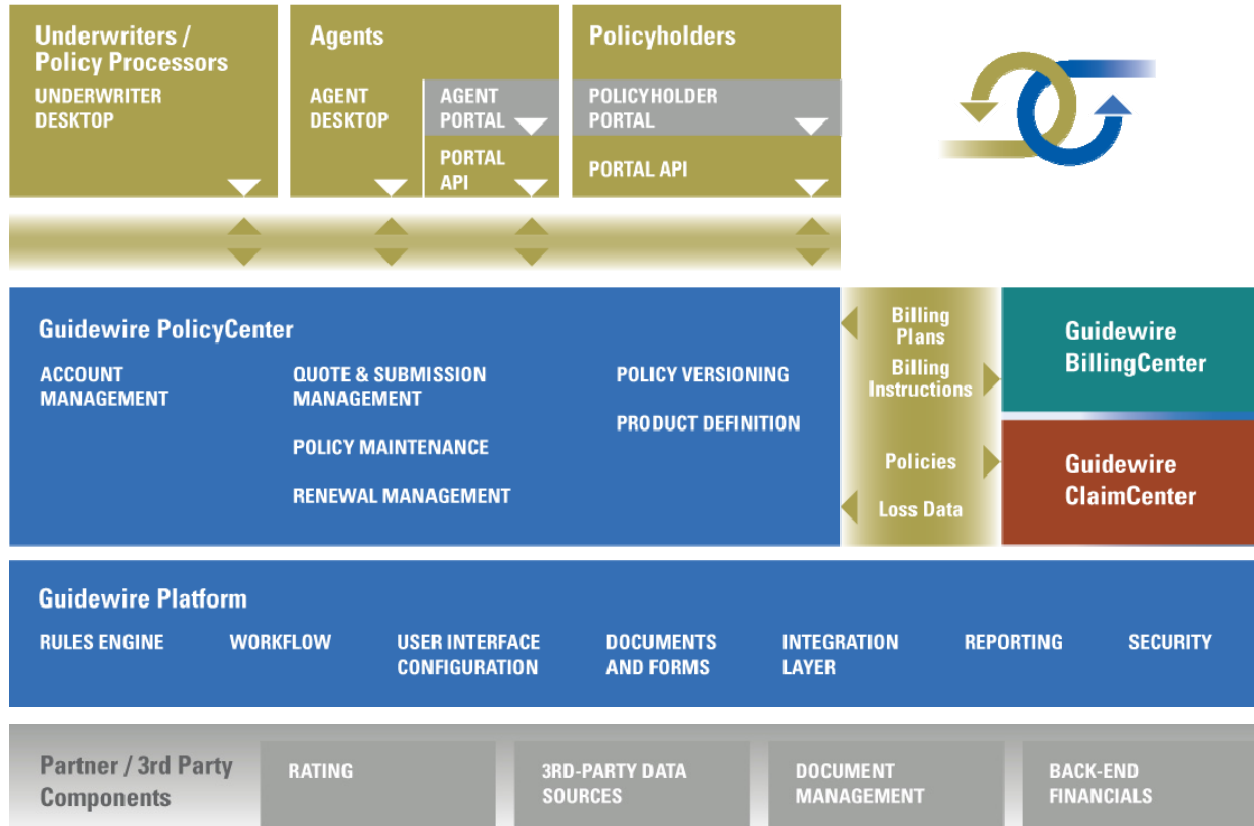
The next-generation policy administration system facilitates rather than obstructs business agility. As business units identify opportunities to modify and create new products, expand into new geographies, or innovate new value propositions to policyholders, the policy system must adapt to support the new ideas or they will die on the vine.

Adaptation has many aspects. As a foundation, new business initiatives entail capturing new kinds of information and restructuring data relationships – such as establishing household-level views or supporting multi-level hierarchies of agent partners or defining a limit and coverage structure. On top of the data, business logic will have to be extended to cover new scenarios and new areas of required automation. Also, business innovation almost invariably imposes new integration requirements on existing systems. Whether to extract data from a new source, leverage a new analytical engine, establish new transaction types for claims and billing systems, or to automate transmission of data to a regulatory body or service provider, disparate systems must be integrated.

Tremendous advances in software technology over the past 10 years have enabled fundamentally more adaptable systems than those of the legacy era. PolicyCenter leverages the best of these innovations at the heart of its technology platform. First, its data model is completely transparent and extensible, allowing organizations to define and capture exactly the information they need at every stage of the underwriting process. Second, by pulling the product model “out” of the core system code, PolicyCenter eliminates the root cause of inflexibility in legacy policy environments. PolicyCenter’s insurance product model supporting each line of business is completely extensible, allowing for complete freedom in defining product offering structures, exposure units, optional and mandatory forms, and coverage and limit structures. Third, and again without changing core system code, PolicyCenter’s business rules engine empowers the rapid definition of business logic – underwriting criteria, work assignment, data validation conditions, and so forth – needed to support the business change. Fourth, by making the user interface completely configurable, underwriting organizations can constantly iterate on improvements to the user experience. And finally, PolicyCenter provides a wide array of integration mechanisms – including web service calls, asynchronous message services, and real-time adapters – to support integration with systems of every vintage.

PolicyCenter’s most exciting potential is to enable a virtuous cycle of experimentation and execution in everything the underwriting organization does. Optimized for flexibility, PolicyCenter extends the frontier of collaboration between IT and business organizations. The underwriting and actuarial organizations can innovate new products and approaches, and IT organizations can rapidly adapt the core underwriting and policy system environment to support the innovation.

POLICYCENTER: SCHEMATIC VIEW



Getting From Here to There: Four Keys to Successful Implementation

Even acknowledging the huge potential benefits described in the previous sections of this paper, many insurance veterans will balk at challenges of implementing a new policy administration system. Large-scale IT projects have a mixed record across all industries; a survey of 13,000 IT projects by The Standish Group reports two-thirds of major projects failing, nearly half suffering cost overruns, and over 4 out of 5 projects being delivered late. Given their complexity, policy administration systems likely have an even worse record. Fearing bad experiences with cost, risk, and disruption of a core system replacement project, some organizations have resigned themselves to their status quo.

Thus, along with rethinking the traditional functional role of policy administration, Guidewire has striven to transform the traditional paradigm of system implementation. Since 2003, Guidewire has delivered an unparalleled level of customer success, with on-time projects overturning the conventional wisdom in multiple respects. Achieving this unparalleled track record in quickly bringing more than 45 new P&C core system implementations live has required innovation both in technology and in implementation methodology.

Key #1: Configuration, Not Customization

Guidewire systems are designed for extreme configurability, not for customization through core programming. While PolicyCenter comes with complete functionality and comprehensive base insurance content, virtually every dimension of the system – such as the user interface, data model, business logic, product definition, role/permission structure – can be tailored closely to a carrier's unique needs without changes to core system code. This not only dramatically reduces the challenge and technical scope of an implementation; it also enables continuous iteration on the fulfillment of business requirements.

Key #2: Continuous Functional Enhancement through Upgrades

The same architecture which supports configurability enables system upgrades that preserve the changes made by each Guidewire customer. Guidewire can thus deliver a continuous stream of functional enhancements to its system through upgrades which take much less effort, time, and risk than the layers of custom development characteristic of legacy environments. Guidewire regularly gathers feedback from a growing customer base to optimize the design and prioritization of forthcoming product enhancements, which can be leveraged across all customers.

Key #3: Lean, Efficient Implementation Teams

In contrast to the “cast of thousands” traditionally required for core system implementations, Guidewire deploys very small teams (typically under 10 consultants, even for the largest of customers) following a focused, proven Guidewire methodology. This methodology uses a quantitative estimating model to organize projects into a series of functional and technical “sprints”: roughly month-long drives, set with clear deliverables that fulfill a well defined subset of the requirements. The small team allows for efficient

communication and agile adaptation to new learning, and the Guidewire team is evaluated purely on project success and customer satisfaction — never on consulting revenue — which further aligns the goals of Guidewire with its customers. Guidewire customers consistently report that this implementation approach exemplifies the customer partnership often touted, but infrequently achieved, by technology vendors.

Key #4: Customer Empowerment through Knowledge Transfer

The emphasis on side-by-side collaboration between Guidewire and the customer team maximizes knowledge transfer. While Guidewire continues to provide technical support, the implementation methodology strives for complete customer self-sufficiency. Training and comprehensive documentation enables the customer team to learn how to configure and integrate to PolicyCenter nearly as well as Guidewire consultants themselves, enabling continuous enhancements of the system well after the initial go live.

Taken as a whole, these differences substantially favor the Total Cost of Ownership for PolicyCenter versus custom development and competitive offerings. Policy system projects are necessarily large in scale and transformative in their impact on business processes. Supported by the right technology, however, Guidewire's implementation teams are showing they do not need to entail massive development work, huge organizational disruption, or prohibitive cost to deliver underwriting excellence to your organization.

About Guidewire

Guidewire Software is a leading global provider of technology solutions to property and casualty and workers' compensation insurers. Guidewire delivers proven software to run core insurance operations, including billing, underwriting, policy administration, and claim management. The Guidewire Insurance Suite™ consists of Guidewire ClaimCenter®, Guidewire PolicyCenter®, and Guidewire BillingCenter®, which provide a modern, web-based platform for all lines of business. Guidewire is headquartered in San Mateo, California, USA, with offices in London, Munich, Paris, Sydney, Toronto, and Tokyo. For more information, please visit www.guidewire.com.

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