**Table of Contents**

Executive Overview ........................................ 1
Introduction .................................................. 1
Rules, Rules, Everywhere .................................. 1
The Baseline: Keep It Simple ............................. 1
A Decision Framework ...................................... 3
Conclusion .................................................... 5

About Oracle Insurance ...................................... 5
Executive Overview

Business rules are ubiquitous to the insurance enterprise, serving an essential role in expediting processes and ensuring compliance. The advent of modern IT infrastructures—which feature componentized, best-of-breed solutions—has led to a proliferation of rules throughout the systems that manage the policy lifecycle. While the creation of automated rules improves process efficiency, managing burgeoning sets of rules creates new challenges and complexity for insurers.

This strategy brief provides a decision framework that helps property and casualty (P&C) / general insurers determine the best ways to manage business rules, enabling them to achieve new clarity, improve operational efficiency and enable true business agility.

Introduction

Today, many P&C/general insurance carriers are looking for best practices to help them manage business rules efficiently and best support their unique workflows. In many instances, the best location for a specific business rule is clear—for example, if a rule governs how a document should be formatted, it’s appropriate for the rule to reside within the document automation system. For other rules, the answer is not as obvious and can vary depending on an insurer’s unique needs and environment.

Should rules governing information collected during the policy application process reside in the rating/underwriting system, the customer relationship management (CRM) system, or in a policy automation solution? Or should this process be governed by a decision support system, or some combination of all of these options? These are the typical challenges of rules governance. Effective navigation of such gray areas is essential to ensure consistency, avoid unnecessary complexity and optimize the power of business rules.

Rules, Rules, Everywhere

Within the modern insurance enterprise, business rules govern processes and drive workflow across every phase of the customer lifecycle, from marketing to client acquisition through claims management. Rules can present or constrain information, initiate an action, or create new information from existing information. Today, as insurers integrate their systems more tightly to support straight-through processing and other operational efficiencies, they also find themselves creating and managing an increasingly complex and interconnected web of business rules that includes rules in CRM, quoting, underwriting, policy administration, billing, document automation, and claims systems.

The Baseline: Keep It Simple

As sets of business rules grow, insurers need to be certain that their rules continue to work for them rather than constraining the very processes they were intended to automate. They can start by getting back to basics.

The purpose of business rules is to bring consistency and efficiency to the insurance enterprise. These two principles should be the starting point for developing a rule and determining where to place it. The following “Golden Rules” provide a solid foundation for business rule creation and management:
Automate whenever possible. Automation via business rules drives speed, agility and consistency—which are essential in a highly-regulated industry. For any line of business in which there is significant volume, such as personal auto or home, rules automation is a good investment.

Build a rule once and share it—when appropriate. Reflecting the proliferation of Web services and the “build-it-once, use-it-many-times” approach to IT infrastructure, this concept optimizes efficiency by avoiding the need to “re-invent the wheel” and promotes consistency across the enterprise.

Avoid duplication across systems. Unnecessary duplication of rules across systems that share data creates a new level of IT complexity and expends unnecessary resources in creating and maintaining the rules in multiple locations.

When potential conflicts emerge, rules should reside in the location/system that best supports the tenets of speed, straight-through processing, simplicity and compliance. Business rule automation should clear impediments to efficiency and not add new levels of complexity or contention.

The table below identifies the location and type of rules that generally reside in various systems. Insurers should not take this as a guide of where to put their rules, but rather as an outline of where rules typically reside. In order to decide the optimal place for business rules within their own companies, insurers should refer to the decision framework outlined below.

<table>
<thead>
<tr>
<th>CRM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Escalation (special reviews, permissions, etc. due to exceptions)</td>
</tr>
<tr>
<td>Workflow (e.g. customer follow-up directions for agents)</td>
</tr>
<tr>
<td>Data Validation (ensuring that a phone number has 10 digits and a U.S. social security number has nine digits, etc.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RATING &amp; UNDERWRITING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculating Premium</td>
</tr>
<tr>
<td>Eligibility Determination</td>
</tr>
<tr>
<td>Quoting and Pricing*</td>
</tr>
<tr>
<td>Tier Determination</td>
</tr>
<tr>
<td>Third-Party Involvement (e.g. rules that determine when a background check should be run in response to an applicant’s disclosure of a criminal conviction)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PRODUCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Modeling (all the rules associated with modeling an insurance products including reusable and inheritance rules)</td>
</tr>
<tr>
<td>Product Catalog (all of the rules associated with serving up the product catalog tailored to an individual, their circumstances and location)</td>
</tr>
<tr>
<td>Product Validation Rules</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>POLICY ADMINISTRATION SYSTEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Binding</td>
</tr>
<tr>
<td>Endorsement</td>
</tr>
<tr>
<td>Renewals</td>
</tr>
<tr>
<td>Policy Holder Status Change (e.g. purchase of a new house or new car)</td>
</tr>
<tr>
<td>Compliance Requirements</td>
</tr>
<tr>
<td>Form/Documentation Requirements</td>
</tr>
<tr>
<td>Pay Plan/Pay Schedule**</td>
</tr>
<tr>
<td>Policy Cancellation and Reinstatement</td>
</tr>
</tbody>
</table>

2 | RULES FOR RULES: BRINGING ORDER AND EFFICIENCY TO THE MODERN INSURANCE ENTERPRISE
BILLING

Billing Date/Bill Delivery Mode (e.g. mail, electronic delivery, etc.)
Accounting Associated with Billing (e.g. converting unearned premiums to earned premiums)
Play Plan/Pay Schedule**
Customer Delinquency Identification

ENTERPRISE DOCUMENT AUTOMATION

Metadata Management
Document Format
Data Population
Form Inclusion
Subform Determination (e.g. leveraging subform rules for individual state requirements, allowing an insurer to insert tailored clauses as opposed to creating and managing 50 separate forms)
Information Validation (e.g. identification of missing or incorrect information on a document)

CLAIMS MANAGEMENT

Benefits/Payment Calculation
Fraud Detection (if no policy automation tool is present)
Claims Adjudication
Subrogation (if no policy automation tool is present)
Claims Escalation

Table 1: Types of rules and where they typically reside.
* These rules are usually placed in a policy administration system. However, Oracle recommends the use of a single, stand-alone rating engine especially if multiple policy administration systems are present in an enterprise
** Rules should be placed in the system in which they are easiest to manage. Depending on the systems in place at an insurer, they could reside in the policy administration or the billing system.

A Decision Framework

Many systems in the insurance enterprise share data, such as quoting and underwriting, policy administration and billing, and policy administration and document automation. Rules could logically reside in any of these systems, so insurers need to look deeper to determine where the rule would best support process efficiency and compliance. The framework that follows explores these conflicts and provides a model that can guide insurers to the best location for a specific rule when shared data is in play.

» Does the rule relate directly to the core purpose of a specific system or is it inherent in the functionality of that system? When a conflict arises, insurers should identify the core system or process with which the rule is most closely aligned. For example, a rule governing when to produce a customer bill could potentially fall within the CRM system, the billing system, the document automation solution, or the policy administration system. In most cases, the billing system has the primary responsibility for generating that document, so the rules governing billing frequency might be best suited for the billing system. The billing system would then pass the information needed on to the document automation system for formatting and delivery. Rules regarding who should receive the bill and at what address, however, might be best placed in the policy administration system, which serves as the master for such information.

» How easy/difficult is it to create a rule in a particular system? In most legacy systems, information must be hard coded into the system, making it difficult to create and change. In such cases, an insurer might choose to create business rules in one of its more modern systems so that it can be easily changed as needed. When
multiple systems share information and there is an option to place a rule in a more modern system, such as Oracle Insurance Insbridge Enterprise Rating, or in a policy automation tool, such as Oracle Policy Automation, those options are preferred. For example, imagine that an insurer is trying to determine the best location for rules that govern premium caps. Should these rules reside in the rating engine, which calculates the premium, or in the policy administration system? If an insurer has a modern, enterprise-wide policy administration system, it might be best to place the rules there. If the insurer has a rigid, legacy policy administration system but a more modern rating engine, then it might be best served by creating the rule in the rating engine.

» Where will the rule promote the greatest efficiency? All systems being equal, a rule should go in the location in which it promotes the greatest efficiency and in the system where the data related to it primarily resides. Consider the question of where to place rules governing the capture of document metadata for indexing. While it might appear that this rule should reside in the policy administration system, it may actually be better placed in the document automation solution. If created in the policy administration system, rules governing metadata capture add unnecessary complexity and overhead to this core system, which has other primary responsibilities.

» Will the rule change often or is it a create-it-once and forget it scenario? When an insurer has a modern, rules-based IT infrastructure, rules that change often should be located in a system where the individuals who have responsibility for the rule (and associated data) can quickly and easily access them. The other option is to place the rule in a centralized policy automation tool. If an insurer has an older system that involves hard coding, the best option in many situations would be to leverage the policy automation tool, which enables rapid and agile rule creation and can deliver the rule to multiple systems.

» Does the rule relate to information that requires end-user interaction? These instances typically involve data collected during the application, quoting and claims processes. For example, a customer making a policy application responds that he has a DUI conviction on his record. The CRM system needs to instantly prompt the agent or customer with follow up questions, such as the date of the conviction. While this information is also important to the rating engine, this rule is best handled on the front-end system where it can be executed rapidly and efficiently.

» Is the same rule used in multiple systems? Many insurance enterprises maintain rules in multiple systems, all of which may need to leverage many of the same rules. In these cases, a policy automation tool can provide a convenient hub for ensuring consistency of the rules across all systems, as well as enabling an insurer to effectively manage them from a central location. In another example, an insurer might have rules regarding customers in the CRM system, the client-facing Web application, and the policy administration system. Leveraging the build-it-once-and-deploy-it-often approach, the insurer might consider locating these rules in the policy automation tool to promote greater efficiency and reduce the chance of error.

» Are the rules very complex? If the rules are very complex, the insurer needs a tool that can implement these types of rules easily. A policy automation tools, such as Oracle Policy Automation, can help insurers navigate complexity by providing the ability to create rules using native language, automatically mapping all decision paths and enabling users to quickly test their rules before deploying. This capability can help to expedite the creation and management of complex rules, such as those governing subrogation and fraud. Similarly, a policy automation solution could also be used to deliver expanded decision support capability to augment an aging legacy CRM solution.

» How high is the volume of transactions? Centralized rule repositories can sometimes take a performance hit due to bus architecture calls. When performance and scalability are paramount, the rule should reside in the application that can execute the fastest with the least impact on performance. For example, a rating engine (such as Oracle Insurance Insbridge Enterprise Rating) is designed to rate policy risk – a very specific, high-speed task that must scale with the business. As transaction volumes grow, the rules engine must be able to keep up. A centralized policy automation tool may not be able to match the speed of calculations that a rating engine (or other core system) can achieve.

» Does the process require a complex decision report or a lengthy audit trail related to the rule? Insurers continually seek ways to streamline compliance. A modern policy automation solution can support this objective by enabling automated decision reports and audit trails related to the application of specific rules, such as rules governing the creation of cancellation notices.
Conclusion

Business rules are everywhere throughout the enterprise, but just because business rules are everywhere doesn’t mean you should treat them the same. As rules continue to proliferate, insurers need to be certain that their rules continue to work for them as opposed to constraining the very processes they were intended to automate. The fundamental purpose of automated business rules is to ensure consistency and advance efficiency across the organization. It’s about getting better control over business decisions for better business performance. Insurers should keep these tenets at the forefront as they make decisions about where to create and maintain their business rules. Business rules automation can delivers tremendous value across the insurance enterprise so careful consideration will yield powerful and lasting benefits.

About Oracle Insurance

Oracle provides the modern, rules-driven flexibility insurers need to support Digital Insurance transformation. With Oracle’s comprehensive set of solutions, insurance companies can innovate to keep pace with changing demands, simplify their IT, gain operational efficiencies, lower operational costs and enable growth by modernizing and consolidating legacy systems.

For more information on Oracle Insurance, please visit oracle.com/insurance, contact us by e-mail at insurance_ww@oracle.com or call 1.800.735.6620 to speak to an Oracle representative.
Integrated Cloud Applications & Platform Services

Copyright © 2016, Oracle and/or its affiliates. All rights reserved. This document is provided for information purposes only, and the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document, and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

Rules for Rules: Bringing Order and Efficiency to the Modern Insurance Enterprise
February 2016