RATING SOLUTIONS FOR INSURANCE AGENTS

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Abstract

The insurance industry is experiencing significant advancements in product management, driven by the need to expand market presence, differentiate offerings, and efficiently navigate regulatory landscapes. Leading firms are integrating innovative products like behavior-based policies and services, utilizing multivariate rating algorithms, and increasingly relying on predictive analytics for strategic pricing decisions. This evolution is highlighted by the growing adoption of external rating engines, which externalize rates, rules, and logic from traditional policy administration systems, thus facilitating rapid market entry and reducing reliance on IT departments for updates. These changes are enhancing insurers' abilities to manage complex data inputs and operationalize flexible, accurate premium calculations using advanced rating algorithms. The rating engines not only support basic functionalities but also advanced mathematical computations, which are crucial as insurers integrate more sophisticated predictive models into their processes. Moreover, the industry is witnessing a shift towards using standalone rating engines that offer extensive configurability and integration capabilities. These technologies are crucial for maintaining competitive advantage in a market that increasingly values quick adaptation and efficiency. Insurers are encouraged to select rating engines that align with their specific needs, taking into account their operational scale, the diversity of their product lines, and technological infrastructure. Overall, these technological advancements are transforming the insurance landscape, making it imperative for insurers to continually adapt to remain relevant and efficient in a dynamically evolving market. This paper delves into this.

Keywords: Product innovation, rating systems, predictive analytics, Ratings algorithms, Strategy, Regulatory compliance

I.   INTRODUCTION

The insurance industry is witnessing substantial advancements in product management. Insurers are focused on expanding their market presence, differentiating their offerings, and navigating regulatory challenges with increased efficiency. Leading firms are introducing innovative products, such as behavior-based policies and those with integrated services, into their portfolios. The adoption of multivariate rating algorithms is on the rise, and predictive analytics are becoming critical tools for product managers to provide strategic pricing guidance. Smaller insurers are concentrating on efficient rate management and achieving rapid market entry through quick updates to rates and algorithms. Across the industry, companies are broadening their distribution channels and enhancing online rating capabilities for agents, with many extending these services to policyholders. The mergers and acquisitions landscape remains active, with numerous organizations seeking strategic acquisitions.

These trends underscore the benefits of utilizing external rating engines. These engines primarily externalize the rates, rules, and logic associated with products from the policy administration system, facilitating faster market entry. Legacy policy administration systems often lack the

flexibility to support innovative products due to embedded rating logic, making product modifications complex and time-consuming. This also complicates integration with systems such as comparative raters, third-party data vendors, rules engines, web quoting tools, predictive modeling tools, and internal databases. Reliance on IT departments for product and rate changes, which require specialized skills, can further delay updates. Insurers operating multiple policy administration systems may face challenges such as inaccuracies, duplicate entries, and data redundancy when implementing rating changes across various systems. Those offering web-based quoting may experience high quote volumes, potentially impacting policy administration system performance if the website interacts with it directly. External rating engines enable insurers to develop rating algorithms once and deploy them across multiple applications—such as web quoting, comparative raters, or policy administration systems—thereby enhancing productivity, accelerating market entry, and improving overall operational efficiency. [1]

II.   CALCULATING PREMIUM

At the core of rating packages lie sophisticated calculators designed to intake essential risk data and compute rates based on a diverse array of inputs. The process of determining a premium for a specific account involves several critical elements. First, rating rules incorporate the business logic required to apply rating algorithms, which can include details such as the assignment of drivers to vehicles and the implementation of premium rules like minimum premiums or rounding procedures. Next, underwriting rules embody the logic pertaining to risk appetite and selection characteristics, typically applied before rate calculation to ascertain the appropriate rating tier for a risk or to determine the correct rating company for a specific policy.

Additionally, rate tables are indispensable, providing the numerical inputs essential for premium calculations. These tables encompass base rates, fees, and rating factors that reflect various risk attributes, including territorial modifiers, construction types, and alarm credits. They also account for product-specific terms such as selected deductibles, coverage limits, and additional endorsements. The rating algorithm, another pivotal component, dictates the combination of rates and rules to compute the final premium. This algorithm offers precise instructions on the inclusion of variables, the application of mathematical functions, rounding procedures, and the sequential order of calculations. Subroutines are frequently utilized within rating algorithms, especially for products featuring multiple coverage types. Although there is a degree of standardization across the industry, most carriers customize their algorithms to align with their unique product offerings and risk appetites. Standalone rating engines externalize these computational processes from the policy administration systems, enhancing operational flexibility and expediting market responsiveness.

III.   INSURER CONSIDERATIONS FOR RATING ENGINES

Selecting the right rating engine is crucial for insurers, given that there is no universal solution that fits all needs. When choosing a rating engine, insurers must consider their unique business lines, geographic coverage, staff capabilities, architectural needs, business objectives, and financial resources, alongside their risk appetite. This evaluation helps shape a tailored list of potential vendors. Vendors vary, with some better suited to large insurers with advanced IT departments, while others are ideal for smaller teams preferring significant vendor support.

Insurers should focus on four main areas in their selection process: first, assessing the available advanced tools and functionalities that suit their specific business needs; second, examining the technology's architecture, configuration tools, and overall environment through proof-of-concept

trials to gauge capabilities; third, evaluating the vendor's stability, expertise, and commitment to their solutions; and fourth, considering the vendor's implementation support and long-term service, as these relationships can last over a decade. These steps are critical in ensuring that the chosen rating engine aligns with the insurer's operational demands and strategic goals.[2]

3.1 Rating Engines Functionality

A rating engine is critical for managing the daily operations of insurers, ensuring they meet current requirements and accommodate future growth. At the heart of a rating engine is its product architecture, which provides a robust foundation for developing new insurance products. This architecture often allows for the easy duplication of product and rating rules across various jurisdictions, using a tree format to share common features seamlessly. Some systems enhance clarity by using color coding to indicate deviations from standard models, whereas others employ spreadsheet formats for simplicity, though this may present challenges for insurers with broad, multi-state operations.

Moreover, advanced rating engines include tools that streamline updates for business users, such as wizards that assist in parameter adjustments, and feature comprehensive product dictionaries. These dictionaries are crucial as they offer detailed, reusable definitions of insurance products, covering everything from rates and underwriting rules to integration details and form management, facilitating quick adaptations for new offerings or modifications. This functionality underscores the importance of selecting a rating engine that not only supports an insurer's current operational strategy but also its long-term innovation trajectory.

3.2 Rating Engines Rules and Algorithms

The foundation of a rating engine lies in its ability to manage rules and algorithms effectively. Precision in algorithms directly translates to accurate risk pricing. As insurers increasingly adopt predictive models, it becomes essential for algorithms to support these advanced models. Initially, rating engines designed for single policy administration systems offered basic mathematical capabilities. In contrast, standalone rating engines are typically equipped with advanced mathematical functions, including square roots and logarithmic expressions. Ensuring that the engine can perform rounding with precise granularity at any stage of the expression is equally critical.

3.3 Table Maintenance and Analytical tools

Effective management of rate tables is crucial for insurers, and these tables should be kept distinct from algorithms. Most rating engines facilitate the import and export of rate tables via spreadsheets, though it's vital to evaluate how they handle complex, multidimensional data. Advanced engines provide comprehensive tools for rate analysis, including impact and displacement analyses to assess rate change effects and affected policyholders. They also enable comparisons between current and proposed rates, and feature business intelligence tools for deeper analytical insights. However, not all systems offer these advanced capabilities, so insurers need to select solutions that match their specific analytical requirements

3.4 Machine Learning and AI

Modern rating engines often include price optimization tools and advanced AI functionalities, especially in regions where these practices are allowed. These engines are capable of integrating predictive models and varied data sources to improve the precision of ratings, underwriting protocols, and pricing strategies. Actuaries and pricing analysts are increasingly relying on advanced analytics, machine learning, and AI to guide their decision-making. Some engines come

equipped with these capabilities, while others might require setting up a data science pipeline to leverage these technologies effectively in real-time. Additionally, the inclusion of fraud analytics in the quoting process is growing, particularly in fraud-sensitive markets. Many systems facilitate integration with external fraud detection tools, or are developing proprietary solutions, enhancing the ability to detect and prevent fraud early in the process, thereby boosting the integrity and efficiency of pricing strategies.

3.5 Vendor Considerations for Differentiation

Vendors are significantly enhancing standalone rating solutions with advanced analytics and more robust configuration tools, complemented by increasingly standard APIs and RESTful web services. These developments offer benefits to insurers but also intensify competition among vendors. To differentiate themselves, vendors should broaden their functionality, particularly in AI and analytics, and enhance usability for both novice and seasoned users and managers. Moreover, creating flexible configuration environments that enable insurers to independently manage updates is crucial, as these tools are highly valued. Additionally, streamlining and reducing the cost of implementation processes will serve as vital competitive differentiators.

IV.   MULTIPLE RATINGS

In the insurance industry, pricing sensitivity among buyers is heightening as economic pressures intensify. Despite certain types of insurance being mandatory, there is a growing demand from buyers to explore various options before making purchase decisions. A recent study highlighted that the primary concern for small business buyers is price, and their major dissatisfaction stems from a lack of available comparison quotes. This has led agents to frequently source multiple quotes, even for lower-premium policies, a process that proves time-consuming and challenging while trying to maintain profit margins.

Historically, agents have utilized comparative raters—software tools that enable the input of data once to receive multiple quotes from various insurers—for personal lines like auto insurance, where standardization simplifies comparison. However, for commercial lines, the diversity in terms and conditions, such as limits, deductibles, and specific coverages, complicates the comparison of rates. Despite these challenges, the market is evolving with new entrants focusing on commercial lines and some established raters expanding their offerings to include these as well. Further complicating the landscape is the emergence of new platforms and exchanges, which, unlike traditional comparative raters, offer a broader range of services and provide retail agents with multiple quotes as well as extensive workflow and marketing tools. These platforms facilitate the entire quoting and binding process, provide data insights into success ratios and turnaround times, and feature tools for proposal creation and market finding. Such capabilities are critical as they allow agents to access markets previously beyond their reach and improve operational efficiencies.

The distinction between traditional comparative raters and these new platforms lies in their functionality. Platforms and Managing General Agents (MGAs) offer more than just rate calculation; they assist extensively in the binding process and enable agents to establish new connections with insurers, enhancing their service offerings and market reach. With insurers showing increased interest in working with MGAs due to these expanded capabilities, the dynamic within the insurance quoting and binding landscape continues to evolve, reflecting a significant shift towards more integrated and comprehensive solutions that address the growing complexities of the insurance market.

V.   HOW THIS TYPE OF PRODUCT IS IMPORTANT TO INSURERS

In the past five years, while premiums have risen significantly, underwriting expenses have held steady as a percentage of those premiums. This period has seen insurers intensify their efforts to curb costs, a push amplified by the pandemic, although detailed data from 2020 is still forthcoming. Insurers are focused on optimizing their expense ratios either by increasing revenue without proportionate cost increases or by reducing existing costs. Simplifying the business placement process is a strategic priority, with studies indicating that making it 25% easier to write business could potentially increase business volume by 25%. Agency portals and AMS connectivity remain critical as insurers streamline new business procedures. Future reports suggest a growing reliance on comparative raters for commercial lines to ease transactions and boost efficiency. Despite concerns over potential commoditization, many in the industry view the adoption of these technologies as a necessary move toward greater automation in commercial lines.[3]

5.1 Extent of coverage

When evaluating participation in a comparative rater or platform/exchange, insurers must consider several key components. Ensuring that the solution supports the insurer's lines of business, geographies, and agents is essential. The solution must accommodate the lines of business the insurer writes, whether personal, commercial, or workers' compensation. Some solutions support only personal lines, others only commercial, and a few cover both. Additionally, the solution must have coverage in the insurer's operational geographies. Some solutions offer nationwide coverage, while others are more limited. For new entities with restricted coverage, insurers should review their expansion plans and potentially influence geographical growth.

5.2 Work Optimization

Platforms and exchanges are significantly enhancing sales support for agents by providing tools that go beyond basic rate calculations. These tools include appetite guides, which help agents quickly identify insurers interested in their prospects, saving time and effort. Some solutions allow insurers to set underwriting guidelines to filter out undesirable business or attract desired business actively. Appetite guides based on cloud-stored business data enable insurers to customize their decision-making processes and attract suitable agents.

Another valuable feature is integrated proposals, which allow agents to create comprehensive, branded proposals that include details from all competing insurers. This simplifies the process of presenting multiple options to buyers and can include premium change summaries to compare current quotes with previous policies. Additionally, consumer portals and collaboration tools enable agents to offer a branded online experience, allowing buyers to enter or edit their data, thus saving time. These tools can also be used in digital marketing campaigns.

5.3 Reporting and Analytics

These platforms typically provide standard reports for both agents and insureds that can be exported to Excel for detailed analysis. While customization is possible by adjusting parameters, true ad hoc reporting capabilities are often limited. Agent-focused reports usually measure metrics such as turnaround times, close ratios by producer, geographic location, or insurer, as well as commission calculations and other pipeline management tools. Insurers gain insights from analytics on competitive pricing, rating profiles, and agent performance, which can enhance overall success rates. Additionally, newer solutions integrate AI and analytics to aid agents in identifying upselling opportunities and pinpointing top lead sources. Some systems also come pre-

integrated with Google Analytics, offering deeper insights into the effectiveness of specific marketing strategies.

5.4 Technology
These cloud-based solutions are tailored for service delivery rather than as standalone software. Many integrate directly with insurers' rating systems for real-time updates, while others are adapting to use open APIs for seamless integration with Agency Management Systems (AMS) and other insurer systems. This enables quicker and more efficient integration processes. Additionally, these tools serve as integration facilitators, having already established connections with various comparative raters and platforms. They manage a wide array of data, including credit scores and fire protection classes, crucial for rating purposes. It's vital to assess how these providers access and use this data, and their pricing for data usage. Some solutions also offer functionalities to simplify data entry and eliminate redundant manual input.

VI.   SUMMARY
The demand for multiple options from end buyers is increasing, along with the costs for agents to provide these options. Comparative raters are expanding their capabilities to include commercial lines, and new solution providers, platforms, and exchanges are emerging to offer additional ways to obtain multiple quotes while streamlining the process. Insurer participation is crucial for these solutions to provide accurate rates, as comparative raters and platform/exchanges benefit from a network effect where insurer adoption attracts more agents, and agent adoption attracts more insurers. With more options available, insurers need to carefully consider which solutions to participate in and how to maintain these relationships.[4]

While insurers may have previously viewed comparative raters as a necessary evil, relegating quotations to a pure price decision, the use of these solutions continues to grow. Insurers who choose not to participate may struggle to access the personal and small commercial marketplace in the future. The question remains whether commercial comparative raters will prevail or if platforms and exchanges will gain traction. Platforms and exchanges offer several advantages over comparative raters, including more tools and features to help agents manage their quoting process, such as appetite guides, proposal generators, workflow reminders, and the ability to build new relationships with insurance companies.

Insurers interested in comparative raters or exchanges/platforms should consider various criteria beyond the basic decision points of participation cost and coverage extent. They should assess the value of additional data provided, such as insights into pricing compared to competitors, and evaluate the vendor's likelihood of achieving a sustainable network effect and how quickly they can do so. Insurers should also consider the cost and mechanism for rating maintenance, with direct integration through APIs being the most accurate, although some insurers may be reluctant to provide system access. Evaluating the frequency of updates to rates, algorithms, and appetites can provide further insights into this decision.

While comparative raters typically charge an annual or monthly subscription fee, exchanges usually operate on a transaction-based model, with both agents and insurers paying a small percentage of the premium when a policy is written. This ensures that agents only pay for the service if it delivers value. Some companies, like Bold Penguin, function as true exchanges, allowing agents to place business through the platform and even make money. Ultimately, the model that will prevail remains uncertain. Traditional comparative raters have the advantage of an established network effect, but as exchanges grow their networks, their advantage may diminish.

We believe insurers will continue to use both products, with exchanges having a slight edge in commercial lines.

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