

INGENIX®

Advances in Underwriting, #2

Evaluating an Automated Rating System: Five Essentials

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Understanding Automated Rating Systems from the Perspective of Users: Actuaries, Underwriters, and Salespeople

Enterprise-level considerations—such as installation and licensing costs, IT infrastructure requirements, and anticipated ROI—often take precedence when companies evaluate automated rating systems for potential adoption. But all too often, this approach overlooks the needs of actuaries, underwriters, salespeople, and other actual users of the proposed system.

Satisfying the real-world needs of administrators and users should be of paramount importance in the selection process. After all, how efficiently and accurately the job gets done day after day is the true measure of a solution's value to the enterprise. As a result of purchasing an automated rating system, the underwriter's rating and analysis should improve significantly in terms of quality of rate quotes and overall improvement in efficiency and effectiveness of daily operations.

An automated rating system should improve underwriting deliverables by eliminating time-consuming manual collection and recording which will, in turn, improve the quality and turnaround time to internal and external customers. In order for an automated rating system to meet the needs of its intended users, the top five elements of critical importance to actuaries, underwriters, and the sales force must be considered before selection and implementation.

Consideration One: Flexible Functionality for All Lines of Business

A principle goal in purchasing an automated rating system should be to gain a platform that provides consistent usability and manageability—while still offering the flexibility needed to support all types of market segments, rating types, and products. Most importantly, this consistent platform should be easy to use by the underwriters and should ultimately improve their efficiency. Carriers typically provide insurance to more than one market. For example,

markets served by a carrier might include individuals, community-rated small groups, experience-rated small groups, mid-size groups, large groups, and jumbo groups. Consequences of having multiple rating systems include: systems with differing look and feel—leading to mistakes and inconsistencies between systems; difficulty in performing analysis across multiple lines of business; and IT issues with maintaining various systems with unique software issues and multiple user accounts.

An automated rating system should be flexible enough to support all these markets on one platform, incorporating the diverse business rules inherent in each market. At the same time, the system should present a consistent look and feel, based on solid usability principles, across all markets. And behind the scenes, it should provide consistent rating, reporting, and print engines as well. This consistency helps facilitate efficiency, accuracy, and productivity, regardless of which market end users are working with.

In addition to market flexibility, the automated rating system should support all rating types—including prospect or new business quotes as well as renewals of varying duration. For example, the prospect formula encoded in the system needs the flexibility to allow for a sales interface, underwriting review, and actuarial input across multiple plan design options. It should have the ability to print marketing and sales exhibits, and it should produce management reports allowing for both high level and detailed reviews of prospect cases that are still pending, have been sold, or are closed.

To deal with renewals, the system needs all the flexibility required for prospect quotes, plus the ability to gather data on group-level experience. The rating engine should also allow for different formulas, as appropriate, based on the duration of the renewal. For example, the carrier may wish to treat a first-year renewal very differently, due to lack of experience, compared with second-year and subsequent renewals.

In addition to flexibility with regard to different markets, rating types, plan designs, and renewals, the automated rating system should support all products including (but not limited to) medical, drug, dental, vision, life, disability, supplemental accident, and various riders. Each product has its own unique specifications, business rules, and data requirements. The automated rating system should be flexible enough to rate all of these products—capturing their uniqueness and diversity within a single rating engine and presenting information in a single, consistent user interface.

Consideration Two: Simple Integration with Other Platforms

No system is an island in the modern enterprise. Data is almost always shared between systems, and the goal is to replace human labor (and error) insofar as possible with automated information sharing. Ideally, an automated rating system should enable integration with other corporate systems such as sales/CRM, medical underwriting, billing, and data marts.

When creating a prospect or new business quote, for example, salespeople can save a great deal of time—and avoid errors—if the automated rating system can receive information as a direct feed from the sales/CRM system, then send an initial response back to the sales/CRM system electronically. Similarly, if the group or policy needs to be medically underwritten, it's a tremendous advantage to have an automated rating system that can call and receive data from the medical underwriting system—both at the individual member level and at the group or policy level. Once the underwriter and actuary have reviewed the group or policy, and their findings have been communicated to the automated rating system, the system should be able to send rates, plan design and other information back to the sales/CRM system. Once the contract has been signed, the automated rating system or the sales/CRM system should be able to send final rates, census, eligibility and plan design information to the billing or finance department.

Broad integration capabilities also provide significant advantages when preparing a renewal quote. In this case, the automated rating system should be able to receive

group-specific data—including claims, enrollment and plan-specific information—from the client's data mart. If the group or policy needs to be medically underwritten, the system should be able to call up data from a predictive modeling system at both an individual member level and a group or policy level. The automated rating system should be able to prepare multiple iterations of quotes—detailing plan design changes, various funding scenarios and other variables—and send these back to the sales/CRM system. And as with prospect quotes, the automated rating system should be able to send final rates, census, eligibility, and plan design information to the billing or finance department.

Consideration Three: Ease of Maintenance and Security

Ease of administration has a direct affect on the solution's overall productivity, responsiveness, and security.

To accelerate the solution's initial time-to-value—and to respond to ongoing changes in market conditions and customer needs—business users should serve as the system administrators and be able to easily maintain the formulas as well as all business rules and factors.

The formulas themselves should be transparent with no proprietary algorithms or “black boxes.” Moreover, it's extremely useful to have formulas written in a standard format that is intuitive for business users—perhaps similar to Microsoft® Excel, which is easily learned and widely used. An administrator familiar with building models in spreadsheets should not need to learn a new computer language just to create formulas that can easily be expressed in spreadsheets.

The formulas should also include dynamic references between calculations so that as changes are made to calculations within a formula, other calculations automatically update to reflect those changes. When changes in a calculation would break other dependent calculations in the formula, the system should notify the administrator as the change is being made. It should be easy to create new versions of formulas, which will allow for immediate implementation of the new formula without impacting previous quotes that may have already been released. The administrator should be able to

make quick formula changes and test them prior to moving to production—whether incorporating minor changes, using one formula as a basis for another, or overhauling a formula completely. Likewise, business rules should be easy to implement, change, and track.

Factors should be easy to maintain, add, or delete, even by junior-level staff. The system should allow new versions to be created from existing factors and, similar to formulas, these versions will allow for immediate implementation of the new factors, without impacting previous quotes that may have already been released. The rating system should have the capacity to keep a history of prior factors even after they have been retired for auditing and tracking. As with formulas, it's easiest to create and maintain factors based on Excel, and the ability to easily import and export factors to Excel is useful for maintenance and reporting.

For ease of use, the system administrator should be able to easily maintain consistency in the look and feel of the automated rating system—for example, keeping new formulas consistent with user expectations by moving sections and adjusting the order of individual items to correspond with existing, familiar formulas.

Security is also of critical importance, and the administrator should be able to easily enable and maintain the automated rating system's security features in accordance with company policies. The system should offer a simple, straightforward method for creating user groups and assigning access privileges to individual functions—such as the ability to make changes, print rates, view formulas, or selected parts of a formula, and so on—while allowing the administrators' full rights.

Consideration Four: Management Reporting and Monitoring

The whole point of an automated rating system is to provide actionable information quickly and easily. Ideally, the automated rating system doesn't limit that information, but rather provides the ability to report any and all of the data it collects. In order for reports to be useful for any user or customer need, the system should make it easy to select

and output key pieces of information to a report writer that supports a full range of management, customer, underwriting, and actuarial reporting. For example, the system should allow easy data selection and formatting to support a full range of reports covering blocks of business, prospects, renewals, customers, and more. Timely management reporting will allow for the key business units to truly manage their business based on the data contained in these reports.

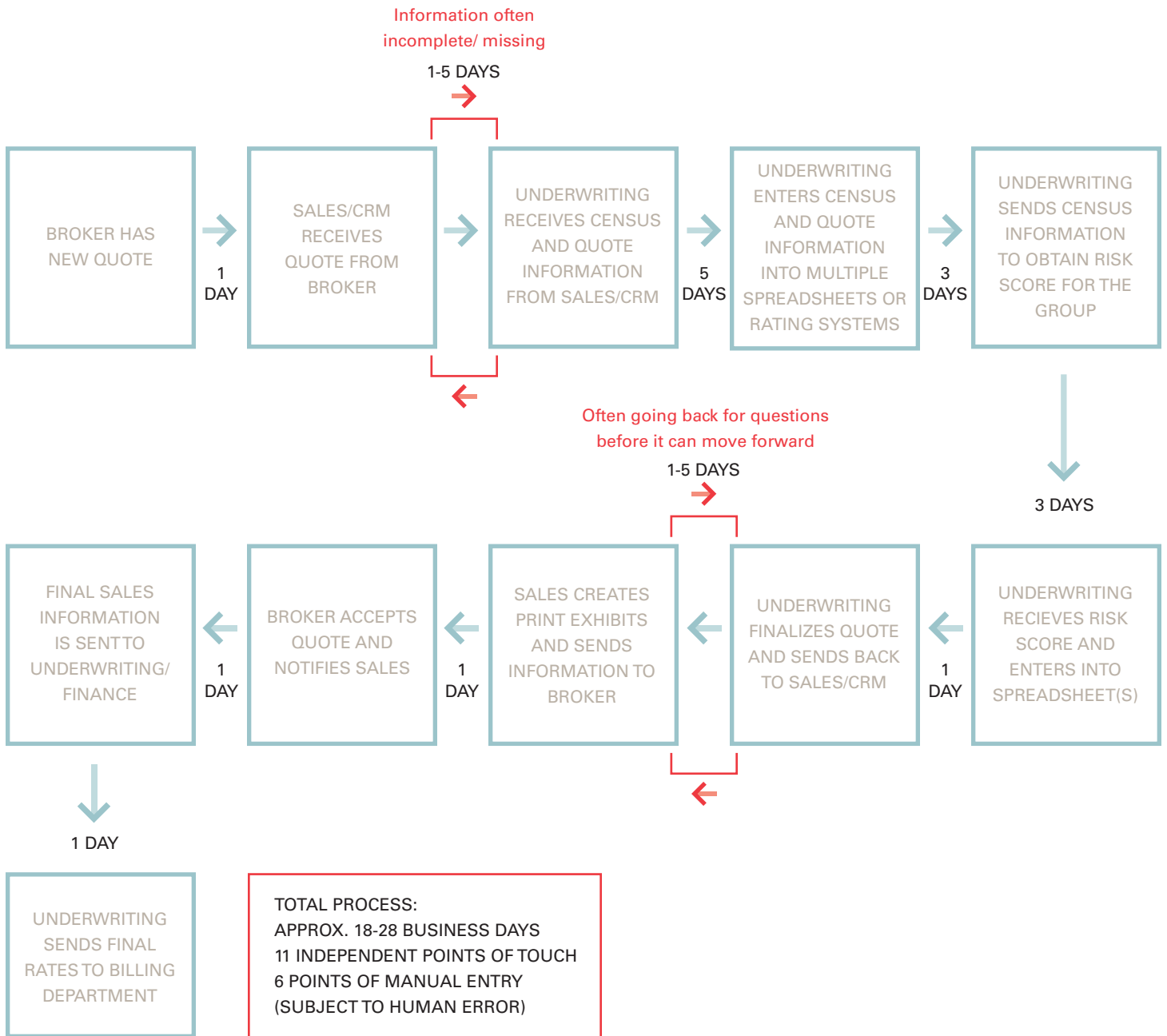
The system should provide monitoring and reporting of end-user activity and administrative actions. This internal reporting allows companies to track how the system is being used, take steps to improve utilization and efficiency, and keep an audit trail of formula modifications and other administrative activities.

Consideration Five: Actuarial Simulation

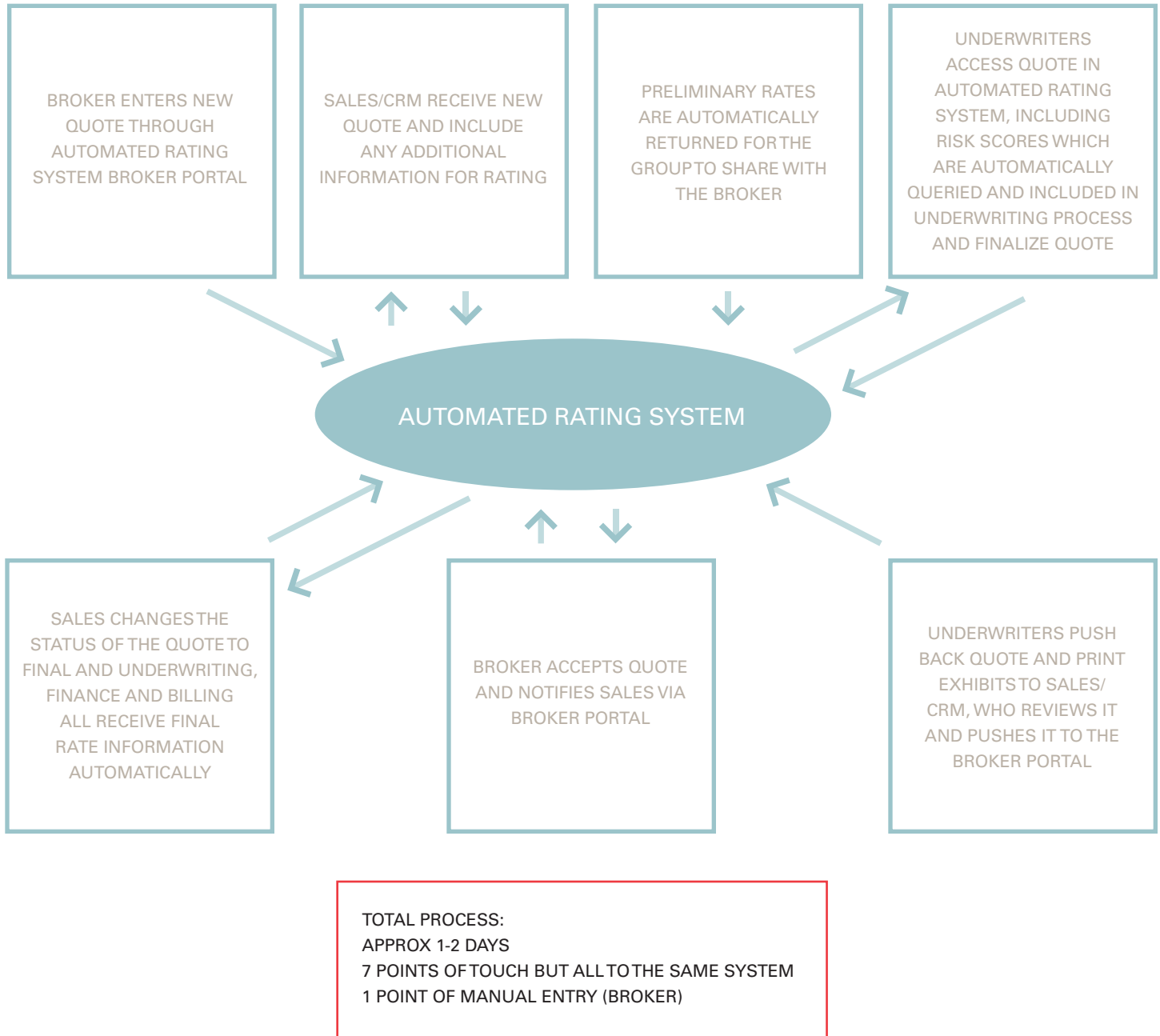
Effective actuarial simulation can provide a quick and objective way to gauge the impact of proposed changes to a formula or factor. Ideally, the automated rating system should offer a "sandbox" environment for actuarial simulation—allowing changes to be modeled outside the production environment, while using the same data that feeds into the production environment to ensure a valid simulation. The sandbox simulation environment allows for accurate sensitivity testing and revenue-neutral testing prior to live implementation of the proposed formula or factor change.

Another type of actuarial simulation that an effective automated rating system should provide is block rating, in both standardized and ad hoc formats. Block rating simulations should allow the actuary to quickly produce revenue and financial projections—whether for one section of the business over one renewal month, the entire business for the full renewal year, or any other combination of parameters. Another useful feature is the ability to renew a whole block at the same time. An underwriter may want to use this capability to obtain the projected increase for a block and then feed that data back into the formula, for example, or to automatically renew and send to sales and marketing a small group block that has no experience rating.

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Conclusion

Like any technology tool, an automated rating system is only useful insofar as it accurately models the complexities of an ever-evolving marketplace and captures the details of each member and group served. Just as important, a system is only as useful as it is easy to use. Administrators and users need a straightforward way to create required formulas, access and manipulate the relevant data, and generate and share actionable information with all the relevant people—or the system's usefulness is limited. Worse, the intended users may choose not to use it at all.

Companies that choose an automated rating system based solely on the basis of licensing costs, IT requirements, or anticipated ROI may be shortchanging users, customers, and the business as a whole. A truly productive system is one that provides flexibility, usability, manageability, security, and utility over the long term. As with any automated system, the most important selection criterion is whether it completely meets the needs of users and customers—both in terms of functionality and ease of use. In order for an investment in technology to be worthwhile, it has to be accepted and used. Anything less, and projected ROI may be nothing but an illusion.

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