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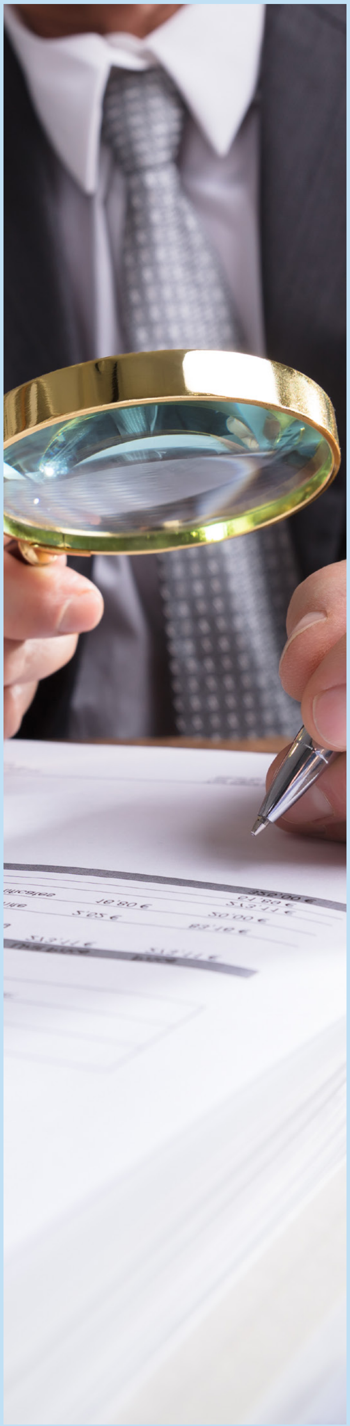

THE CHANGING RESPONSIBILITIES OF CUSTOMERS AS UNDERWRITING PRACTICES EVOLVE

Abstract

Underwriting practices across different lines of insurance are progressively attempting to assess risks optimally. Armed with technology-enabled, multi-dimensional resources, underwriters are creating smaller risk pools with focused and specific risk criteria. This shift is logical and preferred when risk transfer costs are proportionate to associated risk factors. Moreover, it will also improve discipline towards risks in the long run. In principle, insurance customers should be happy about this changeover.

However, now there is higher responsibility on the customers. To benefit from this value-producing shift, customers need to be more informed, alert, and knowledgeable than before. They may also be required to reskill themselves in tune with the shifting market practices or be ready to lose price and convenience sensitiveness.

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How underwriting works: A look under the hood

The uncertainty of the future makes the risk puzzle complicated. One can only predict the future with a certain degree of accuracy, even if supported by a scientific approach based on historical data and experiences. These predictions are needed, in theory, to assess associated risks, quantify them, classify them, and transfer them at an appropriate price. Similar risks are grouped and priced together. If something doesn't fall directly under any of the identified risk classes, underwriters identify the closest risk class and then make adjustments to quantify and price it. This is a well-known approach among insurers for risk assessment, classification, and quantification.

In this traditional underwriting process, the importance of an individual risk is limited to the point it finds a place in a specific risk class. Once it is classified, even keeping boundary conditions apart, the distinct characteristics of a particular risk become secondary. Therefore, all risks falling under a risk class are more or less the same, with some allowed deviation.

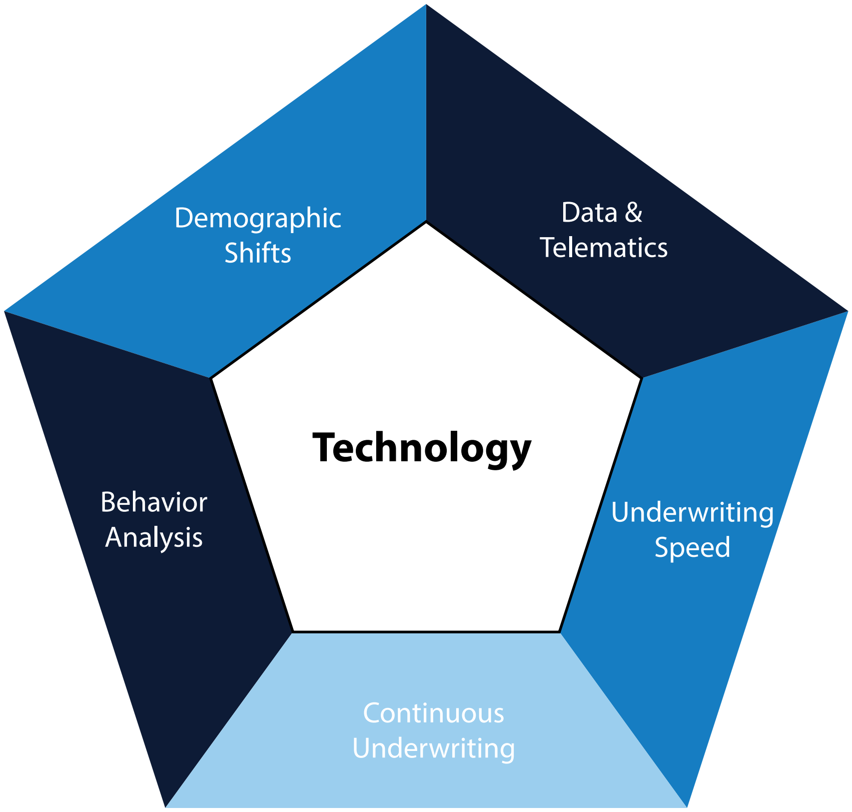
For example, let's say an underwriting company may have five risk classes R1 to R5 (see Table 1). The underwriters will try to map each of the accepted risks in any of these five risk classes with allowed adjustments. The table below shows a potential risk distribution with relative riskiness and risk class price. So, for all the one hundred risks under 'Risk Class R3,' the amount payable is $160 for each unit of risk, even if each of these has a different degree of riskiness in particular.

Table 1: Risk classification

Risk Class	R1	R2	R3	R4	R5
Relative Riskiness	0.211	0.268	0.455	0.642	0.91
Relative Price/Unit of Risk	$88	$112	$160	$268	$380
No. of Risks	27	68	100	83	22

Shifting sands - 6 factors changing underwriting practices

For almost two to three decades until the year 2010, the underwriting practices were almost traditional with very minimal changes. Thereafter, underwriting disruption started with the convergence of six change agents over the last few years.



- **Demographic Shifts** – Millennials and generation-Z are a different breed of consumers with different preferences in terms of product, pricing, convenience, and interaction - they want digital interfaces, 24x7 availability, and instant decisions.
- **Data & Telematics** – Staggering volumes of public and private data, easily accessible at affordable costs, is making risk assessment more accurate. Besides, real-time data sharing models and processes like telematics have also matured and are economically viable for commercial purposes.
- **Underwriting Speed** – There is a constant ask from the market to complete underwriting in almost zero time. Customers are no longer ready to wait for weeks and months to get underwriting decisions. This requirement has led to instant issue products, which use algorithm-based rules and complete underwriting in no time with minor exceptions.
- **Continuous Underwriting** – The old school thought of risk assessment at the time of risk acceptance, is no longer appreciated. There is a focus on evaluating risk variables continuously to make risk-related justified pricing available at all billing intervals throughout the coverage of risk.
- **Behavior Analysis** – Risk factors are not always static, and behavior plays a significant role in customers' attitude towards risk, buying process, and risk perception. Including this relatively new element in underwriting gives a new perspective and makes risk assessment potentially more specific and accurate.
- **Technology** – Technology advancements such as machine learning, predictive analytics, artificial intelligence, wearables, cloud computing, and blockchain have transformed underwriting. Technology has simplified processes, enhanced computing capabilities, improved user experience, created trust, and opened new opportunities and alternatives in the market.

Driven and enabled by these factors, underwriters are attempting to evaluate each risk individually and continuously while delivering on the new age customer demands.

Impact analysis: How material are these shifts?

How do these shifts impact the customer? Let's take a pricing example to understand this. Using the same set of assumptions, we calculated risk prices with the traditional approach as well as the new risk-based pricing approach (see Table 2). We have assumed a 15% increase in admin costs when new underwriting practices are implemented in the short to medium run.

Under the traditional approach the premium/risk is $180 for all the one hundred risks falling under this 'Risk Class R3'. Applying new underwriting practices within the boundaries of above listed six change agents, we can segregate these one hundred risks into three smaller risk classes. This gives us three different price points of $128.17, $181.50 and $261.50 for these mini risk classes, making the pricing more accurate for the consumer. Here, we have assumed a 15% increase in admin costs, when new underwriting practices are implemented, at least in the short to medium run. Whether we create three or twenty such mini risk classes, this new approach of risk-based pricing is beneficial both to the underwriters and consumers.

Table 2: Impact of different approaches on risk pricing

Items	Traditional Approach	New 'Risk Based Pricing' Approach		
Risk Class	R3	R31	R32	R33
No. of Risks Covered	100	30	50	20
No. of Loss Events	10	2	5	3
Average Loss Amount	$1,600.00	$1,600.00	$1,600.00	$1,600.00
Total Loss Amount	$16,000.00	$3,200.00	$8,000.00	$4,800.00
Admin Cost	$1,000.00	$300.00	$500.00	$200.00
Profit Amount	$1,000.00	$300.00	$500.00	$200.00
Total Target Premium	$18,000.00	$3,800.00	$9,000.00	$5,200.00
Premium/Risk	$180.00	$126.67	$180.00	$260.00
Additional Cost/Risk		$1.50	$1.50	$1.50
Adjusted Premium/Risk		$128.17	$181.50	$261.50

Practical concerns – nothing is perfect

Implementing 'risk-based pricing' is not only complicated but requires active participation from almost all stakeholders in the ecosystem. While lucrative for some groups of people, customers with bad risks will have to pay higher premiums and may not be interested in such products. As long as products based on traditional underwriting are available, a complete transition to risk-based pricing is not possible.

Furthermore, the customer's risk perception, knowledge, and information symmetry play a crucial role in the decision to move to new products with 'risk-based pricing'. If bad risk customers continue with the old underwriting approach while good risk customers move to the new 'risk-based pricing' approach, eventually the pricing for 'bad risks' will increase as they will not get compensated by the 'good risk' customers. For example, even if 50% customers in the 'Risk Class R32' move to products based on the traditional underwriting approach due to a cheaper rate, there remains a negative gap of 8.53% (calculated separately with the same set of assumption) between the required and actual premiums. Many customers, unsure about their risk profile would like to stick with a lower guaranteed cost for coverage.

Such theoretical analogy is limited by behavioral biases and information asymmetry. For instance, customers who do not know of such products, or are unaware of their risk profile, or have concerns related to data and privacy issues will maintain the status quo.

Overall, the new underwriting approach is more specific and accurate but at the cost of many practical problems. Moreover, these issues cannot be resolved by insurers alone in a time-bound manner and require participation from all stakeholders.

Benefiting from risk-based pricing – A guide for insurance customers

In the new, digitally-driven underwriting landscape, customers need new skills to take advantage of the available opportunities, and without which they will exponentially lose bargaining power (product, price, place, promotion, and convenience) in the new market economy. The new insurance customer must:

1. **Know the alternatives** – Stay updated on the available options in the market and scan and compare alternatives.
2. **Be open to change** – Market dynamics are constantly changing, and customers should evaluate available options with an open mind and adopt them if reasonable.
3. **Take more responsibility** – Many new changes in the underwriting practices require mandatory participation from customers. For example, continuous underwriting can only happen when the customer is ready to share the required details continuously.
4. **Develop a tendency to manage risks** – New underwriting practices indirectly motivate customers to manage their risks prudently by offering rewards and incentives. In the long run this can potentially improve the customers' attitude and behavior toward risk management.

Conclusion

A new and improved framework of risk assessment and selection has entered the digital marketplace promising significantly enhanced benefits. It has customized underwriting while fulfilling its core objective and offered more convenience to all stakeholders. However, the new features and benefits are not available by default, and customers need to play an active role in this new era of underwriting to avail them. The need of the hour is for responsive and responsible customers who are increasingly conscious of risk management and who prudently transfer risks at a reasonable price.

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