



# SCOR

The Art & Science of Risk

## UNDERWRITING REIMAGINED™



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## MARKET ENVIRONMENT

The rate of change is accelerating across our business and in industries that impact our business. What has made us successful in the past is not going to be sufficient for us to thrive into the future. This requires that our traditional business model be revitalized to anticipate and respond to the changing needs of our customers. The advances we see in computing power, digital data, artificial intelligence, consumer engagement approaches, precision medicine and genomics are staggering, and this is just the beginning.

The rise of digital platforms has changed the way that consumers interact with business and heightened service expectations. A seamless digital experience that reliably addresses customer needs is now the norm. The distribution approach that has supported our industry for many years will struggle to connect, if they don't adapt, with newer generations looking for efficient transactions and personalized on-demand services.

All of this change places significant stress on organizations to modify thinking and adapt behaviors. We believe that partnerships for shared value present a huge opportunity to increase capabilities. These partnerships cover a broad range and include insurers, reinsurers, data aggregators and distributors supported by marketing, analytics and health and wellness companies that will help accelerate our response to a shifting landscape.

**Innovation is driving transformational change and forcing us to reimagine the future of life insurance underwriting – Underwriting Reimagined!**

# SCOR'S THEMES FOR THE FUTURE OF UNDERWRITING

SCOR believes that the scope and scale of change in the following 3 areas will create unique opportunity to define a new life insurance paradigm in the near future.

## 1

### Data Driven

Data is one of the most valuable resources available to companies today, and the expanse of data is staggering with new layers being added continuously. Some industry experts claim 90% of all digital information today has been captured/created in the past 2 years. At the same time, we see continued increases in computing capabilities and proliferation of predictive modelling using machine learning techniques. This provides the ability to become much 'smarter' in our assessment of risks.

So, what does this mean for the future of underwriting? Underwriting assessments will be predominantly digital and will be increasingly unique to individual risks. These assessments will be transparent and will provide policyholders with proactive health and wellness guidance.

## 2

### Organizational Agility

The introduction of new consumer technology continues to accelerate across many industries. We see significant advances in the biomedical space, precision medicine/health, next generation pharmaceutical, and wearable devices that monitor and collect an ever-expanding universe of information. These developments will enable consumers to take a more proactive view on longevity and health span using life insurance to help achieve these goals – but based on their individual needs.

Our ability as a life insurance industry to react and provide focus to these changes will be a key factor to our relevance into the future. We see companies taking on this challenge using test and learn processes and partnerships to advance capabilities and evolve faster across the board.

## 3

### Socially Responsible

Most companies have already built social responsibility into the framework of their corporate culture and are extending these same ideas to their products and services. In the fast-changing environment of life insurance, companies must proactively shape the definitions of social responsibility for our industry.

Creating products that improve the customer journey and increase access to the financial security of life insurance are keys to connecting with consumers at a more personal level. Enhancing trust through social responsibility will enable better alignment between the insurance company and the consumer – creating a win-win.



## EXPLORATION APPROACH

SCOR's unique position within the life insurance industry creates the opportunity to interact with all key players (life insurance clients and industry-supporting technology firms) to share ideas and build forward-looking solutions to the industry's greatest challenges.



We designed the **Underwriting Reimagined** exploration path with the goal of interviewing life insurance practitioners and thought leaders to gain insight and feedback on the future of underwriting. The process included 4-hour sessions with 12 companies, representing a significant portion of the US life insurance market (including both mature companies and start-ups). The sessions were designed to allow free flowing discussion covering all major elements of underwriting today, and keys to the future.

We thank all participants who gave their time and energy during these sessions and we have prepared this report to share the common themes back to our clients and partners in an effort to help them navigate the future.

# PARTICIPANT FINDINGS

Interviews reveal that our Life Insurance clients generally agree with our hypothesis, particularly around the role of data.

- 1** There is alignment on the premise that the future of underwriting is **data driven**, and many initiatives are in place to realize this future.

These include:

- Incorporation of UW evidence.
- Efforts/plans to collect UW information as data and maintain linkages at the individual level.
- Significant financial investments in automation and predictive modelling.
- Efforts to improve the customer journey through acceleration of the underwriting process.
- Openness to leveraging external partnerships when they provide clear business value.

- 2** There is significant alignment and understanding that **organizational agility** is required in order to progress toward the future state.

These include:

- The importance of innovation.
- The need for organizational change in response to the increased pace of innovation.
- The need to learn and adjust quickly.
- Recognition that external partnerships can foster organizational agility.

- 3** We shared a view of the importance of **social responsibility**, however companies questioned whether they were doing enough on this front, including:

- Transparency of UW decisions.
- Extending the benefits of life insurance to a broader population.
- Educating consumers regarding life insurance benefits and value.
- Finding the right balance between a financial and social focus and how these can work together.

Industry-supporting technology firms see the future state of underwriting very similarly but are more able to embrace change.

- These firms are more agile because (in most cases) they do not face the constraints of legacy systems, ultimate risk bearing or large organizational hierarchy – allowing them to focus on core competencies.
- Some are willing to move towards participating in the risk.
- They are free to design from the ground up to capitalize on digital information.
- From their perspective, the traditional distribution mechanisms are ripe for innovation and change. This contrasts with how insurance companies view their distribution.

## Detailed Findings

The following section consolidates the findings of participating companies into key categories impacting the future of underwriting.



## Legacy Data to Accelerate Learning

- Only a few of the largest companies have linked historical underwriting data to transactional data. This requires significant organizational effort using one or more of the following; new OCR technology, crowd sourcing, and linking legacy systems.
- Today, through digitalization, most participants have capabilities for underwriting systems to talk to the administration systems, thus creating opportunities for expanded analysis. The maturity varies but companies are using this data to assist with automation and acceleration.



## Predictive Modelling

- All participants have data science teams, with some making significant staffing investments (100+ data scientists).
- Predictive modelling is being used to better stratify risks and identify optimal underwriting evidence for an applicant (typically for automation).
- Very few companies we interviewed have developed predictive modelling risk scores and none have changed their traditional class rate structure.
- Most participants acknowledge that a rules-based “safety net” will continue to be required for uncommon scenarios.
- Most participants do not have enough claims experience to tie their predictive models directly to deaths and instead are using their fully underwritten decisions as mortality proxies. Some are using other data sources such as NHANES.
- Most companies limit their model inputs to traditional underwriting information, and thus feel comfortable from an appropriateness and transparency standpoint; however, they are concerned about emerging regulations (e.g., New York Circular Letter) and the lack of clarity around regulatory reach and expectations.

## Automation and Acceleration

- All participants completely embrace automation to achieve underwriting efficiency, which will allow their underwriters to focus on only the most complex or riskiest cases. Most companies are not satisfied with progress on this front.
- There is wide variability in the level of automation within the fully underwritten space from company to company. A relatively low percentage of business is fully automated; however, a few companies have achieved “low-touch” underwriting at much higher percentages.
- Instant digital data such as prescription drug histories, MIB and motor vehicle records are used by all participants. Use of credit-based mortality scores are less universally adopted, and some cited social responsibility and regulatory implications. Most companies do not receive “traditional” evidence (such as lab values) digitally, with the exception of APS.
- All participants are taking steps to implement accelerated programs in order to improve the customer journey and attract new customers.
- Electronic Health Records (EHR) are viewed as the eventual replacement for APS, allowing a much greater automation/acceleration rate; however, opinions vary on the time horizon. Several companies are exploring EHR pilot programs and one is already using them in production. The consensus is a “wait and see” approach.
- All participants have an acceleration program in place for ages 18 to 60 and face amounts of \$1M and below. More recently, some companies have pushed their upper face as high as \$3M.
- While many companies have a rules-based approach to this, the largest have implemented predictive models to drive acceleration thus obtaining **the right evidence for right people**.
- Almost all participants express a lack of adequate staffing to achieve their automation and acceleration ambitions.

## Underwriting Research and Resources

- Participants believe that future underwriters will need data-oriented skill sets in addition to medical knowledge. They will need to understand model outcomes, what drives the outcomes and how automated systems reach decisions.
- Traditional underwriting skills will remain valuable but will be applied primarily to complex or risky cases beyond the scope of automation.
- Staffing experiences differ among participants; about half have a pipeline of new underwriters and half have an issue attracting new underwriters.
- Most participants involve their underwriters in pilots and other research to evaluate the viability of new sources of underwriting evidence and/or acceleration models.

## Health and Wellness/Wearables

- Most participants are interested in health and wellness services, citing that it aligns the company with their policyholders – as both want policyholders to have long, healthy lives.
- At this point, very few are taking concrete actions to establish programs. We see more activity on the new business front. A few participants have dedicated teams and are discussing/planning in-force pilots.
- Most participants have a “wait and see” approach to wearables. Companies see potential in them but are waiting for the science to mature.



## Genetics/Medical Advances

- In the traditional underwriting process companies only use genetic information when provided with the application.
- Almost all companies view genetics as an important future topic and believe it will become mainstream; however, they are very concerned and feel limited given the regulatory environment.
- Very little concrete actions are being taken in this area.







## Distribution

- All participating companies have a strong focus on existing/historical distribution but are very interested in moving closer to the end consumer. Examples include launching DTC offerings and enhancing consumer focused brand.
- Proposing and implementing innovation and change through a traditional distribution is challenging and can slow or limit the progress.
- Almost all participants are exploring a new approach to customer engagement using digital platforms, new offerings for unique risks, and creating a smoother overall customer journey (reduced friction).
- Some companies have introduced/modified agent audit programs in tandem with introduction of accelerated programs.

## Regulatory Changes

- All participants view the regulatory environment as a barrier to organizational agility. Traditional requirements such as application filings continue to limit the industry's ability to test and learn.
- Views on genetics are divided; most participants expect genetic data to be excluded from use in underwriting.
- Participants understand the need for transparency to consumers with model-based underwriting, and that models cannot be implemented as "black boxes" or be discriminatory.

## Role of the Reinsurer

### Scout the Future

Participants expressed a desire for reinsurers to understand where they want to go, key initiatives, and the challenges they are facing. They would like to leverage the reinsurer's broad knowledge of InsurTech ecosystems to help with their challenges.

### Trusted Advisor

As clients change their underwriting processes, they appreciate advice and benchmarking from their reinsurers. Examples include review and design of automated program guidelines, analytical support, feedback on the value of underwriting evidence, how to structure a review program, etc.

### Accelerate Innovation

Data, analytics, and co-development can hasten innovation. Industry-supporting firms believe that reinsurers are well-positioned to help move things forward more quickly.

### Regulatory Influence

Some participants suggest that reinsurers play a larger role in providing industry guidance and direction with regards to regulation.



## MARKET IMPLICATIONS & INSIGHTS

“Rapid advancements in artificial intelligence, data digitization and genetics-fueled precision medicine will require us to develop new partnerships and engage customers proactively about their health and well-being.”

Customer expectations are being socialized across industries, and the driver of this seismic change is digital data. No longer are people willing to settle for a lesser customer experience based on sectors of service. Rather, customers are increasingly demanding a personalized journey that caters to their habits, flexes as their lives change, and provides a meaningful overall experience.

Legacy decisions related to systems and platforms have hindered our ability to respond to shifting customer expectations and instead have incentivized us to double down on the existing business model. We have forestalled the negative financial effects of this approach by focusing on high face amount, high premium policies; thus, managing to squeeze growth from a relatively small pool of individuals but also helping to create a middle market coverage gap in the process.

Over the past 5 years, we have seen our life insurance clients make increased efforts to address this gap. At the same time, clients are starting to bring more focus to prediction and prevention as core values for life insurance. Prediction is currently taking the shape of underwriting models that can improve efficiency and more accurately tune our customer pricing. Prevention is emerging as not only a tool to improve the bottom line, but also as a pathway for engaging our customers and improving their health and well-being.

However, these changes can only fully emerge as we adopt a fundamentally different viewpoint on how we engage and sustain our relationships with customers over time.

For risk bearers, the pathway and velocity of innovation will always be more deliberate. The high stakes involved require diligence and careful consideration. However, we also need to find flexibility within our risk management frameworks to enable the absorption of new ideas and the application of these ideas in practical ways.

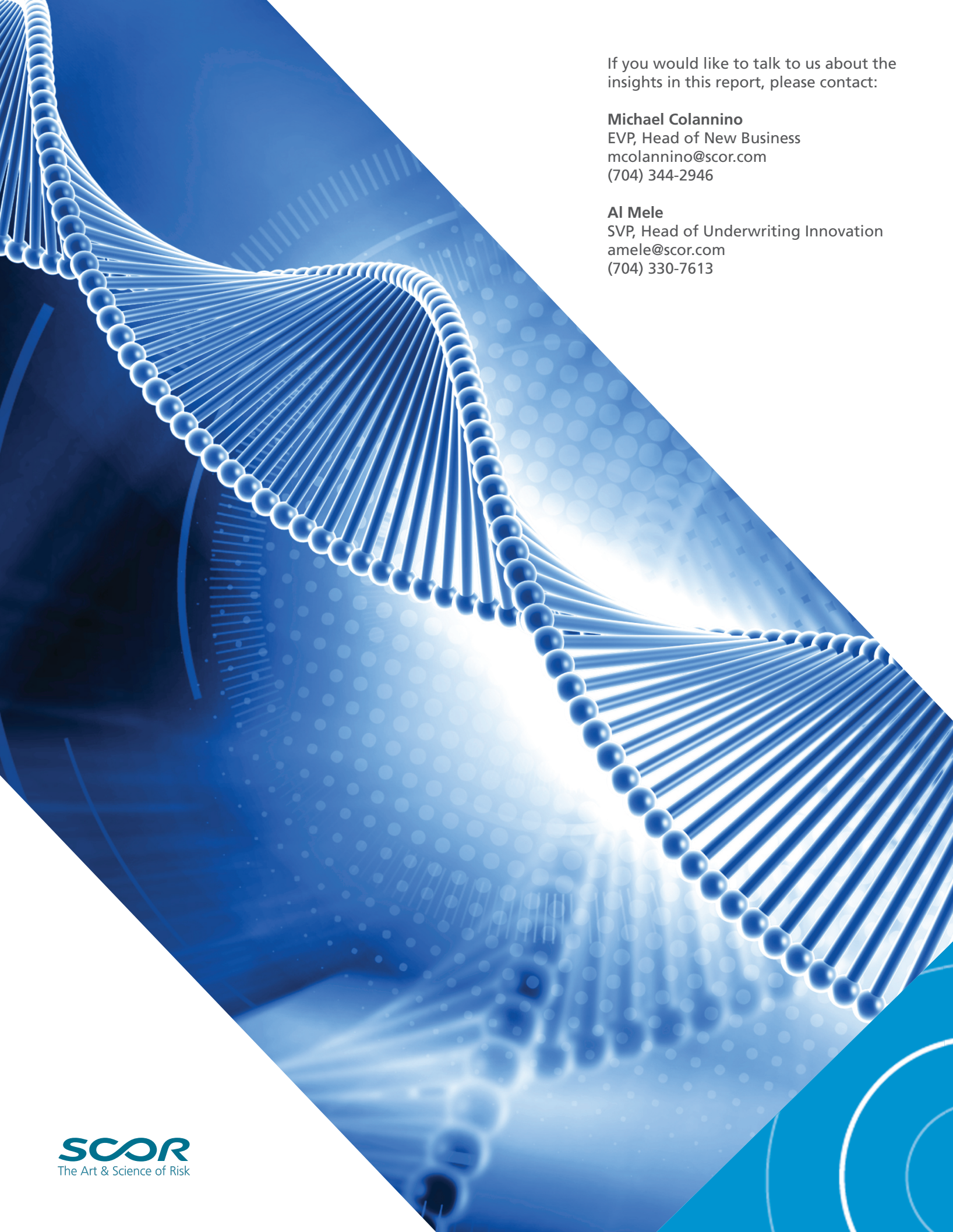
Finally, we are seeing the rapid emergence of new technology with InsurTech applications - new artificial intelligence uses, digitization of data, new consumer engagement approaches, genetics-fueled precision medicine, proactive health and wellness, and a new generation of drugs. This brings with it a need to quickly develop and deploy a partnership mindset. These partnerships, while at times difficult to manage, provide real benefits such as an “outside the industry” viewpoint on problem solving, increased execution capabilities and help drive toward a more agile organization.



## PATH FORWARD

At the forefront of the path forward is the ability to thrive within the pace of change around us. This entails leveraging and building new technologies that allow quick, seamless interpretation of data and provide solutions to our clients' most complex situations.

In this world, partnering becomes essential. And at SCOR, we view our position with clients as a risk partner, solutions partner and innovation partner to be the force that drives us toward a future that is Underwriting Reimagined!



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