

Insurance  
strategy:  
Evolving into a  
digital underwriter

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# New attributes needed to become a Digital Underwriting leader

**"It is not the strongest of the species that survives, nor the most intelligent. It is the one that is most adaptable to change."  
Attributed to Charles Darwin**

There is little doubt that the entire insurance ecosystem is going through a period of tremendous change as the industry becomes more complex, disruptive, and competitive:

- Traditional distribution channels are consolidating while new digital channels and digital players are emerging.
- Insurance products are transitioning from pure risk protection into new risk management services.
- Disruptive technologies and players are creating new competitors and changes to existing customer markets and expectations.
- Analytics and data technologies are creating new opportunities and risks relating to competitive services and adverse selection.

To meet these changes, underwriting needs to evolve. We know from Accenture's Underwriting Survey<sup>1</sup> that 90 percent of carriers are currently

investing in their underwriting function or plan to do so over the next three years, but are these the right investments? New and different traits will be needed in this evolving digital ecosystem, including:

- Solution-oriented products.
- Analytically-enabled services.
- Channel-intimate approaches.
- Market awareness.
- Cost-efficient processing.
- Nimble organizations.
- Technology-enabled underwriting.

It is only by making these investments and continuing to evolve that underwriting organizations will be able to drive the cost-effective, profitable growth that so many carriers are seeking.

# Digital is changing the game

 52% of insurance customers would consider purchasing insurance products from organizations other than insurers; 22% said they would purchase from online service providers (e.g., Amazon, Google)

 61% of insurance carriers have added, or are considering adding, a wide range of non-insurance products to their customer offerings in an effort to develop customer intimacy and ultimately position themselves as lifestyle partners

 84% of insurers feel that digitalization is changing customer expectations and 80% believe that new technologies will radically change traditional practices

 83% agree that digital technologies will transform the way they interact with their customers, and 72% agree it will transform how they use their channels

# Solution-oriented products

One of the fundamental changes that is occurring across financial services is a shift in focus from products to customers' needs for more relevant services and offerings. Underwriters, as the drivers of new products in most companies, need to be responsive to this shift. As underwriting is seeking ways to drive superior profitable growth, the convergence of customer expectations and new digital, mobile, cloud and analytical capabilities is creating new opportunities for competitive differentiation.

Leaders in this space are taking a customer-oriented approach to risk, and are looking for ways to drive customer-centric solutions that increase sales, retention, and premium per policy. They are also looking for ways to change the risk behavior and risk profile of the insured. It is no longer just about underwriting the risk, but improving the risk.

Insurance has traditionally provided products that financially respond to prescribed losses. Among the changes transforming the industry are new sources of data from connected people and things, better analytics tools, and digitally-enabled services. These are causing Digital Underwriting leaders to evolve their thinking from just risk-based products to customer-centric solutions and offerings.

- Climate Corp. provides recommendations to agricultural customers on the most profitable crops to plant, when to plant, and how to tend and harvest them.
- Canal Insurance supplies truck drivers with two-way-facing cameras that reduce claim handling time, but also can alert the driver when he is nodding off.
- John Hancock is collaborating with Vitality, a behavior-based analytics incentive program that drives better health habits.

- State Farm partners with security companies ADT and Lowe's to install smart home-monitoring systems for policyholders.

This change in the view of underwriting products and services can extend to all aspects of the offering design, including how the offering is priced, billed and sold:

- Insurance at the point of sale, such as entertainment, warranty, or travel insurance.
- Usage-based insurance.
- Variable-premium insurance based on the phase of a project, as we are seeing in construction.
- Peer-to-peer models such as Friendsurance in Germany.
- Alternative distribution models such as Kroodle (which uses Facebook) and Hiscox.

From our 2014 Digital Innovation Survey<sup>3</sup> we know that 61 percent of insurers have added, or are considering adding, a wide range of non-insurance products to their customer offerings in an effort to develop customer intimacy and ultimately position themselves as lifestyle partners. And carriers are doing this not just through internal development, but through the increased use of alliances and vendor partners to supplement their services. In the Accenture 2015 Global Risk Management Study<sup>4</sup>, 43 percent of insurers reported a greater risk appetite for alliances and partnerships than they had two years ago.

Underwriting needs to be the driving force behind these product and service changes. Underwriters should be considering the offerings and services that can be created for a customer. Then they need to determine the vendors, processes and, most importantly, the risk management controls to manage, price, and deliver these new services. Done well, they can provide a sustainable source of competitive advantage.

# Analytically-enabled services

In November 2013, an Insurance Journal survey<sup>5</sup> noted that 82 percent of carriers were using predictive models in at least one line of business. This makes sense because, done well, the models can cost effectively improve the consistency and speed of underwriting processing. But being analytically enabled isn't just about the development of actuarial predictive models; it is about bringing an analytic discipline and mindset to the full underwriting process.

To achieve this, Digital Underwriters need to be thinking more broadly about analytics. Four aspects are particularly worthy of consideration:

## 1. Data



There is an explosion of new data sources that can be used by underwriters for risk evaluation or potentially for future predictive models. The goal of Digital Underwriters is to think about the different sources that might aid their risk decision making:

- **Crowd knowledge:**  
Would crowd or employee sentiment be helpful in evaluating a risk?
- **US flood maps are dated:**  
Are there better sources for weather hazard information?
- **The Internet of Things:**  
Would knowledge of maintenance history or service contacts drive risk levels?
- **Government:**  
Would Occupational Safety & Health Administration (OSHA) records, or small business administration complaints help?

There are a host of private and public sources. The key is to think through the risks to a specific industry or line of business and then consider what information might be insightful about them. Carriers can then explore what data sources might be available through existing vendors, third parties, or new relationships. These new data sources can then be examined for their informative or predictive capabilities. New technology and data partnerships can be critical to gain rapid access to the data, tools and talent needed to explore, evaluate and test new analytical insights.

## 2. Experimentation



Once you have identified new sources, you need the talent and infrastructure to be able to rapidly explore and evaluate these new sources. The good news here is that cloud computing and software-as-a-service platforms enable Digital Underwriters to quickly and efficiently set up exploration sites to achieve this.

## 3. End-to-end process



While risk evaluation is critical to the underwriting process, analytics tools can also be used to drive efficiency and effectiveness outcomes in all aspects of the process. Analytics can also be used to support:

- Real-time underwriting.
- The application of risk appetite.
- Complexity-based workflow decision making.
- When to use loss control or premium audits.
- Book management.
- The development of new insight-driven services for customers or producers.

Failure to evolve in this case, can quickly place carriers in danger of adverse selection.

#### 4. Integration

Once insights are gained, value is created by integrating them into the underwriting processes. These processes can include predictive models, but also other areas such as underwriting desktops, or automated workflows and processes. New data visualization tools are especially important to help the underwriter understand and digest the many sources of data. In addition to integration, it is important to have monitoring, review processes and book management disciplines in place to ensure that the predictive models and analytics-enabled processes continue to produce profitable outcomes.

The successful Digital Underwriters will be the ones that can move with speed and agility to constantly discover, evaluate, and most importantly integrate new differentiated analytical insights into their risk evaluation, products, and services. Failure to evolve in this case, can quickly place carriers in danger of adverse selection.



# Channel-intimate approaches

As traditional insurance distribution is disrupted by consolidation, new players, and alternative models to alter the points of sale and service, underwriting needs to respond nimbly, with speed and accuracy. One of the key aspects of channel disruption is the location at which underwriting will occur. While complex risks will continue to be handled by core underwriters, not all underwriting will remain within the carrier's walls.

Wholesalers, online marketplaces, and even some direct point-of-sale options require carriers to support external underwriting and pricing of selected risk profiles. The Digital Underwriter needs to support these alternative channels, but also to have the discipline, controls, and monitoring to ensure that if the pen is outside the walls, decision making – even if automated – continues to be profitable.

Accenture's 2014 Independent Agent Survey<sup>6</sup> confirmed that, after appetite consistency and good claims service, agents are looking for portal-based quoting from their carriers. Again, the successful Digital Underwriter will adapt to the unique needs of the channel while ensuring that the core functions of risk evaluation, product matching, pricing, and overall book management are aligned to the unique needs of the channel. This can include the creation of new risk management practices or processes to set up and monitor ongoing underwriting effectiveness.

# Market awareness

The Digital Underwriter also needs to be market aware. The speed of innovation and change across all industries is increasing with disruptive technologies, new data sources, and analytics. In insurance, Digital Underwriters need to be aware of where their competitors are. If they aren't diligent, improved analytics, automation, or service can quickly lead to adverse selection in the marketplace.

But as much as Digital Underwriters need to understand their immediate competition, they also need to be keenly aware of the dynamics of the industries they support. These same digital technologies, together with other emerging disruptive technologies such as 3D printing, drones and autonomous vehicles, are creating both risks and opportunities.

Uber is a well-known disruptive example that has quickly taken over a portion of the taxi market. We've now seen how a few carriers responded by offering combined personal and commercial coverage, with the first entrants gaining an advantage. But this is just one example of disruption. Airbnb is letting people rent out their homes or apartments for short durations. There are peer-to-peer funding and lending companies, and in Germany there is now a peer-to-peer insurance play, Friendsurance.

The normal industry response is to be conservative and to wait for the risk to play out before offering coverage. But companies that can quickly and nimbly identify the opportunities will be able to gain the rapid growth these are creating.

# Cost-efficient approaches

Accenture's Digital Innovation Survey<sup>3</sup> found that 39 percent of insurers expect to lose some margin as a result of digital technologies. This is in line with increasing pressures we are seeing from commoditization, distribution transition, and increased competition. Being a high-performing Digital Underwriter also requires greater cost effectiveness. Solutions that can be applied, that have proved to reduce costs by more than 30 percent, include:

- End-to-end process improvement, with a specific focus on improving the hit and retention ratios.
- The use of robotics, predictive models, cognitive computing, workflow and rules engines to improve automation and straight-through processing.
- Analysis for the intelligent use of loss control and report ordering.
- Extension of the underwriting and operations processes to producers and customers, to initiate or even complete set transactions on-line.
- Global delivery models using internal / external skilled resources to perform set tasks.
- Improved collaboration technologies to increase speed across the organization, including in underwriting, operations, risk management, premium audit and other functions.
- The use of analytics and knowledge systems to gather and provide information at the point of need, easing the underwriter's data gathering burden.

The other change that comes with this is for more of the underwriting function to be focused on portfolio underwriting, rather than the evaluation of individual risks. As the use of automation, predictive models, and robotics increases, underwriting will need to be able to constantly monitor, evaluate, and adjust segments of risks to ensure profitability.

In addition to their own core operations, Digital Underwriters need to push on the cost effectiveness of their technology, one of their next-highest expenses. They need their IT function to be more responsive to technology change, but also to technology needs. They can encourage IT to consider faster and more agile solutions such as software as a service, cloud-based computing, and analytical services. In short, Digital Underwriters need to push their support services to keep pace and contribute to the bottom line.

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# Nimble organizations

In high performance Digital Underwriting, the functions of underwriting remain as critical as ever, but the structure and organization of those functions, and the specific roles that need to be filled, will change. This will start at the top. In the future, the best underwriting leaders will have different characteristics. In addition to being strong risk and business leaders, they will need to be:

- **Analytically attuned**

They will focus on acquiring, assessing and distributing analytical insights to drive improved decision making, and taking actions that will support profitable growth.

- **Organizationally savvy**

They will have the ability to share knowledge and insights across the enterprise, and bring together other parts of the organization including actuarial, product development, IT and marketing, to respond nimbly to market needs.

- **Solution-oriented**

They will be deeply connected with their customers, understanding what they need in terms of risk protection, risk management, and even other services. They will bring together the channels, services, and solutions required to meet these needs.

- **Operationally sound**

With cost-efficiency being so critical, the strong Digital Underwriter will be equally savvy in continuously evaluating and evolving operational performance.

- **A change leader**

The Digital Underwriter will lead the underwriting function and organization through this change, ensuring the team remains engaged and committed while attracting new strong talent to the organization.

The role of the core underwriter will remain critical. These underwriters will need to be more analytically savvy, as their underwriting judgment will be supplemented with new data sources and insights that will need to be considered. In addition to the core underwriter for complex and changing risks, there is an array of new roles that will be important in the future. Digital Underwriting leaders will grow and maintain their core underwriting talent and skills while developing these new talent areas and roles to handle responsibilities tied to portfolio underwriting – underwriting collections of risk – which are becoming a larger share of the business. These new roles include:

- **Portfolio underwriters:**

To continually evaluate and adjust micro-books of business that are automatically or remotely underwritten.

- **Rules managers:**

To evaluate and continuously improve workflow and risk-based rules for optimal performance.

- **Underwriting scientists:**

To use internal and external data sources, and analytics and behavior analysis, to drive insights and changes into risk selection and risk behavior.

- **Underwriting partner managers:**

To manage underwriting quality and relationships with various external partners and service providers tied to underwriting.

# Technology-enabled underwriting

The Digital Underwriter needs to be enabled by effective technology. The leaders will be nimble and responsive to the market, able to meet its needs with frequent and agile adjustments to their products, services, rules, and pricing. To achieve this, the Digital Underwriter and IT need to become better partners in developing the required platform, infrastructure and development/operational processes.

Investments in underwriting technology to date have not been effective. Accenture's Underwriting Survey<sup>1</sup> found that "approximately half of the underwriters surveyed felt that the technology currently in use within their division was very effective". To be successful, the Digital Underwriter needs to carefully consider and implement six key technologies:

- **An analytics platform**

Analytics is the life blood of underwriting. Critical to its long-term success is the improved ability to gather, prepare, analyze and present internal and external data for the development of predictive models, the evaluation of individual risks, ongoing book management, vendor management, portfolio management, and product management.

- **A flexible policy platform**

The move toward solutions and the accelerating pace of competition have increased the need for product platforms to be more flexible. Outdated rates and products will be unacceptable, as will new products that take more than six months to deploy. For the Digital Underwriter to keep pace, newer policy solution capabilities are required.

- **An underwriting desktop**

In the past, investments in underwriting desktops failed to yield the anticipated results due to a lack of integration and poor process design. Digital Underwriting requires an underwriting workflow and document management solution that can be nimble enough to adjust to different channels and underwriting models, that can work with different operating models, and that can bring together analytics insights and the submission management needed for efficient underwriting processing.

- **Predictive analytics**

This is nothing new in insurance. Predictive analytics has for some time been critical to the automation of homogenous risks. What is changing is the extent of its use. New data sources, new insights and more advanced analytics are enabling these tools to be used on more complex risks, either in their traditional role in automation or, more frequently, in a new role of providing insight and direction for the underwriter to consider.

- **Channel integration**

The specific underwriting needs will vary by channel. But to be successful, underwriting must be able to integrate with different channels for the intake and processing of new business and policy servicing – and equally importantly, for the ongoing risk management of that channel. The specific technology needs will vary by channel.

- **Flexible infrastructure**

The need for better data and analytics, and flexible underwriting, policy and distribution platforms, also requires that the infrastructure to support these solutions be more flexible. The Digital Underwriter needs to work with the IT function to understand whether cloud-based infrastructures can better provide the cost-efficient and flexible infrastructure that underwriting needs.

# Getting started

The insurance landscape is evolving. Distribution channels, competitors, products, services, pricing and risk complexity are all changing. All of this is occurring against a backdrop of stiffer competition and increased cost pressures. In most companies underwriting sits at this convergence point. It helps shape the channels that are used, the products and services that are sold, and ultimately the risks and pricing that are taken.

To achieve profitable growth in this environment, underwriting needs to evolve and help drive the evolution of itself and the company as a whole. It needs to be more nimble, flexible, and responsive to its customers' needs while relentlessly pursuing underwriting profitability through better insights and improved cost efficiency. We have seen leaders in this area able to reduce direct labor costs by more than 30 percent, achieve 2-3 points of loss ratio improvement, and drive significant profitable growth.

The most important step in this evolution is the first one. Underwriting needs to commit to starting this journey, lest it fall farther behind its competitors who are making the change. To become a Digital Underwriter, we propose the development and activation of the following 90-day plan:

## 1. Solutions

Assess your current customer segments and lines of business. Are there internal or external services that you could offer these customers to help better manage risks and drive competitive advantage and growth?

## 2. Channels

Assess your current distribution channels. Are there opportunities to sell at least some of your products in a different way, such as event insurance at the point of sale?

## 3. Analytics

Start a pilot to evaluate external data to support traditional risk solutions.

## 4. Enable

Pilot some quick-win analytics and external solutions to equip your underwriting with better decision making tools.

## 5. Plan

Develop a Digital Underwriter strategy and roadmap to evolve your organization to compete.

To meet the needs of today's customer, and to deliver the profitable growth that shareholders demand, it is essential that underwriters embrace the potential of digital. By investing in their evolution, and becoming Digital Underwriters, they will be able to offer the agility, efficiency and customer-centricity that are the hallmarks of the market leaders.

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## References

1. Voice of the Underwriter. Accenture Commercial Insurance Underwriting Survey, 2013
2. Playing to Win. Accenture Consumer-Driven Innovation Survey, 2013
3. Seizing the Opportunities of Digital Innovation. Accenture Digital Innovation Survey, 2014
4. Paths to Prosperity. Accenture Global Risk Management Survey: Insurance Report, 2015
5. Use of Predictive Models Widespread in P/C Insurance: Survey. Insurance Journal, 7 Nov. 2013 Insert link: <http://www.insurancejournal.com/author/ssclafane/>
6. Evolving to Compete and Win in the Long Term. Accenture Independent Agent Survey, 2014

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