Guy Carpenter
Global Innovation Capabilities & Insurtech Trends

Foreword

Dear Valued Client:

The increasingly complex and rapidly evolving insurtech landscape presents both challenges and opportunities for insurers and reinsurers. Developments in all facets of insurance technology are impacting industry participants across the entire risk-capital chain.

Guy Carpenter, committed to a forward-looking approach, is accelerating our delivery of innovative solutions to help clients capitalize on these industry trends, driving opportunities for profitable growth. We are focused on fostering knowledge around new digital capabilities that allow our clients to adapt, evolve and grow in new ways to meet the future of the industry head on.

Guy Carpenter has developed a briefing on emerging innovation and technological trends that maps the potential value and opportunity each creates for our clients. This easy to read document highlights 16 areas of potential industry change. For each, we outline the concept, strategic rationale, notable participants and our opinion on how it could impact the industry.

We invite you to review the attached document and encourage you to reach out to your Guy Carpenter representative to explore the risks and opportunities created by these technological trends.

Your Guy Carpenter representative will be able to connect you with leaders and innovators within Guy Carpenter and more broadly in the insurtech space. We encourage you to take advantage of this information and we look forward to discussing how we can customize our strategic advice to help you grow, profitably.

Best regards,

Peter C. Hearn

Peter Hearn
President and CEO of Guy Carpenter & Company, LLC.

Contents

Guy Carpenter's
Global Innovation Capabilities

Approach to technological innovation

Guy Carpenter is continuing to ensure that we maximize the value we bring to our clients by further developing our global innovation capabilities

Our goal is threefold:

Engage our clients and prospects in a structured innovation discussion with emphasis on fostering knowledge and developing growth in digitally and technologically driven lines
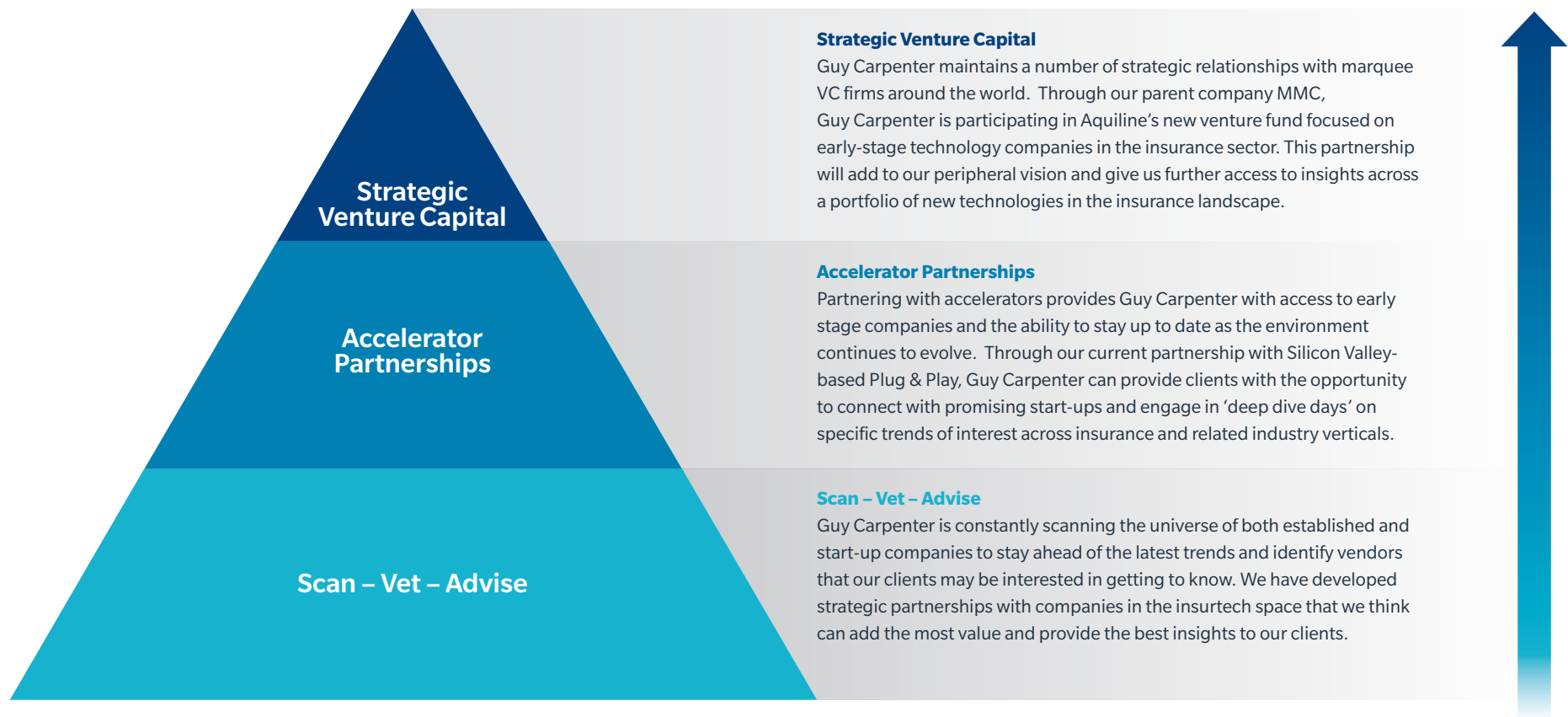
Explore and continue developing our network of third-party partners that allows us to deliver strategic advice and execution regarding technology and business transformations

Identify and facilitate the development of new risk transfer analytics, products and markets made possible by advances in technology

Value and opportunity

To meet the challenge of technological innovation, we are executing a multi-pronged strategy

Strategic Venture Capital

Guy Carpenter maintains a number of strategic relationships with marquee VC firms around the world. Through our parent company MMC, Guy Carpenter is participating in Aquiline's new venture fund focused on early-stage technology companies in the insurance sector. This partnership will add to our peripheral vision and give us further access to insights across a portfolio of new technologies in the insurance landscape.

Accelerator Partnerships

Partnering with accelerators provides Guy Carpenter with access to early stage companies and the ability to stay up to date as the environment continues to evolve. Through our current partnership with Silicon Valley-based Plug & Play, Guy Carpenter can provide clients with the opportunity to connect with promising start-ups and engage in 'deep dive days' on specific trends of interest across insurance and related industry verticals.

Scan – Vet – Advise

Guy Carpenter is constantly scanning the universe of both established and start-up companies to stay ahead of the latest trends and identify vendors that our clients may be interested in getting to know. We have developed strategic partnerships with companies in the insurtech space that we think can add the most value and provide the best insights to our clients.

Strategic Venture Capital

Accelerator Partnerships

Scan – Vet – Advise

Trends compendium

In an effort to help orient our clients, we have prepared a compendium outlining the key technological trends that we see impacting the industry

This document maps the potential **value** and **opportunity** of 16 significant trends by covering the following:

The concept and why it is important → **A few notable participants** → **A view on how it could impact the industry**

Insurtech
Opportunity for the Future of the Industry

Predictive analytics

What is it?

- Predictive analytics is a form of advanced analytics that is used to make predictions about unknown future events.

- Uses numerous techniques, including data mining, statistics, modeling, machine learning and artificial intelligence to analyze current data and predict future outcomes.

- Uncovers patterns found in historical and transactional data to identify opportunities and risks.

- Provides a predictive score (risk factor / probability) that can be integrated into a carrier's underwriting, claims or marketing process to improve results.

Why is it of interest?

- Insurers of all sizes are and will likely continue to place a high priority on predictive analytics, with many carriers hiring data scientists to build predictive models.

- Portfolio analytics is the backbone of every insurance company, driving bottom line profitability.

- Could impact marketing, rate making and claims by facilitating data-driven decisions and highlighting opportunities for expense efficiencies.

Who is doing it?

GUIDEWIRE

Weather Analytics

insurity

verisk Analytics

VALEN ANALYTICS An Insurity Company

MAJESCO

Analyze Re

Guy Carpenter view of potential impact

- Primary insurance uses for predictive analytics revolve around underwriting (particularly pricing) and selection of risk (protection against adverse selection and improved reserve adequacy).

- Other secondary uses include evaluation of fraud potential, claims triage, litigation potential and targeted marketing.

- Policy Administration System providers will continue exploring how to integrate predictive analytics into their core platforms.

- Could ultimately cause a shift from larger homogenous group pricing to more granular pricing as telematics / Internet of Things (IoT) provide increasingly enormous amounts of data.

Artificial intelligence ("AI") / machine learning

What is it?

- AI enables computer software to exhibit human-like mental capabilities in part through pattern recognition, including learning, reasoning, problem solving and decision making.

- AI covers a wide range of sub-fields, including machine learning (provides computers with the ability to learn without being explicitly programmed) and cognitive computing (hardware / software that assists with decision making by mimicking the human thought process), both of which have wide-ranging applications in insurance.

- AI allows computers to become increasingly proficient at tasks previously performed by humans, such as image and voice recognition, or by analyzing unstructured data sets in more sophisticated ways.

Why is it of interest?

- The technology has the potential to enhance automation, reduce risk and expense levels, increase productivity and facilitate better and faster decision making.

- It enables the offering of services at a level of sophistication, customization and scale never previously possible.

- Some early applications of the technology include robo-advisory, correlations within unstructured data sets and policy wording analysis.

Who is doing it?

DeepMind

IBM Watson

TYCHE

riskgenius

IPSOFT

AVIVA

Lemonade

Guy Carpenter view of potential impact

- All forms of AI are still in their infancy, and the market will increase significantly as models develop.

- Benefits could include improved back-office productivity, increased conversion and retention and claims efficiency, including decreased leakage and simplified claims processing.

- Leaders in the space have developed cognitive underwriting platforms, enabling the sourcing of continuous data from multiple places, allowing an equivalent application of knowledge by all underwriters.

- It is expected that the technology will also impact insurers indirectly through its widespread use in various fields such as medicine and transportation.

Big data

What is it?

- Large volume of data that can be structured or unstructured, self-provided information, published reports, collected facts, statistics or logs of all Internet searches that overwhelm businesses daily.

- Usually described using the three "Vs" definition, as data that brings challenges in:

  - Volume (size)

  - Velocity (speed)

  - Variety (formats)

Why is it of interest?

Big data provides companies with:

- Timely insights from vast amounts of content.

- Real-time monitoring and forecasting of events that impact business performance / operations, behavior and / or brand affinity.

- Identification of significant information that can improve decision making.

- Ability to develop the next generation of products and services.

- Improved risk management.

- Information to more accurately price risks.

Who is doing it?

facebook

amazon web services

Google

{ CARPE DATA

twitter

LexisNexis

ISO

Guy Carpenter view of potential impact

- The competitive advantage that big data brings means that insurers choosing not to leverage available data could end up in the unsustainable positions of mispricing or only insuring the higher risks.

- Future insurance premiums could more precisely reflect the risks of an individual, as they are tailored to an individual's profile.

- Streamlined underwriting and claims processes that will draw data from a variety of sources – internal and publicly available.

- Insurers will be able to take a pro-active role to reduce risk.

- Data is not just big, but also new – reliability remains to be seen.

Cloud computing

What is it?

- A network of servers hosted in a remote data center and accessed via the Internet to store, manage and process data, rather than a local server or personal computer.

- **Private cloud** – Hosted for a single entity, could be on premise and self-hosted or hosted by a third party.

- **Public cloud** – Managed in data centers by service providers (Amazon, Microsoft, etc.).
  - Software as a Service (SaaS)
  - Infrastructure as a Service (IaaS)
  - Platform as a Service (PaaS)

Why is it of interest?

Performance Gains

- Cloud services enable customers to innovate and operate at a faster pace.

Security

- Experience and scale enable cloud service providers to deliver more robust security.

Cost savings

- Lower initial (licensing) costs.
- Reduced IT staff and capital costs.
- Upgrade expenses are reduced.

Who is doing it?

IBM

amazon web services

Microsoft Azure

AT&T

verizon✓

ORACLE

rackspace

Guy Carpenter view of potential impact

- Insurer adoption of cloud computing will continue to grow given the wide range of potential benefits to:

  - Reduce total costs of IT ownership and operation.
  - Shorten time to implement new IT applications.
  - Unify customer data presently located in disparate systems.
  - Support integration of third-party service providers / agency management systems.
  - Capture and apply more granular underwriting information.
  - Provide greater flexibility to adopt pay-as-you-go insurer solutions.

Sensors, telematics, wearables

What is it?

- IoT sensors in the retail personal lines space, incorporating telematics (auto), wearables (smart clothing, life / accident / health), smart homes, smart phones and smart appliances.

- The sensors collect real-time data that can be used to improve the consumer experience both immediately and over time.

- Sensors are either purchased directly or given away alongside a primary product.

- Some estimates show the wearable technology market alone could be worth $34bn by 2020 (Forbes).

Why is it of interest?

- Initially used as a marketing tool (carriers would offer a discount in exchange for installing a telematics device), insurance companies are using telematics 2.0 to analyze driving behavior to encourage safer driving and offer further discounts and partnership rewards.

- Smart home sensors are being increasingly deployed by insurance companies to prevent losses (e.g. flood) and enhance security.

- Wearable technology sensors are used by life / health insurers to promote healthy living, as well as by K&R underwriters to track insureds.

Who is doing it?

OCTO

Zendrive

ORION
FLEET INTELLIGENCE

PROGRESSIVE®

nest

HIVE

roost.

Unipol
GRUPPO

Guy Carpenter view of potential impact

- Smart sensors will permeate all aspects of life, collecting increasing amounts of real-time data that can be used for commercial purposes, including marketing and risk pricing.

- Telematics portfolios may show profitability and expand from use for young drivers to drivers of all ages.

- Homeowners' insurers will generate value from smart home sensors via the monitoring and mitigation of risk.

- Regulation and privacy concerns will play a key part in the ability to use personal data to sell ever more bespoke products (e.g. General Data Protection Regulation (GDPR) in Europe).
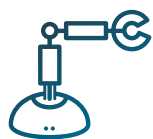
Smart factories and workers comp behaviors

What is it?

- Smart factories adopt cyber-physical systems to monitor physical processes, creating virtual copies of the physical world (i.e. "Digital Twins") and making decentralized decisions.

- Utilizing IoT sensors, cyber-physical systems communicate and cooperate with each other and with humans in real time.

- Smart factories enable humans and machines to work side-by-side to maximize efficiency and safety within the workplace.

Why is it of interest?

- Increasing competition, rising claims costs and heightened regulatory pressures have caused the workers comp industry to reach a tipping point that pushes companies to continually improve operational performance, enhance risk assessment, prevent loss and conquer critical issues around profitability.

- The presence of sensors built into factory uniforms and safety equipment, including hard hats, lifting belts and other forms of posture vests could improve employee safety habits, as employees become more cognizant of the ability of these devices to monitor their actions.

Who is doing it?

IBM Watson

GLASS

AIG

humancondition
SAFETY

triax

Guy Carpenter view of potential impact

- With the continued increase in connectivity across all platforms, manufacturing operations will become increasingly efficient and safe.

- This should drive significant time and cost savings for insurers looking to create a viable workers comp ecosystem.

- To facilitate this, insurers must seamlessly integrate with these sensors and capture and derive meaning from the resulting data.

- Cost of creating such ecosystems can be borne fully by the employer, by the insurer or on a shared basis, as all would benefit from the virtuous circle.

Autonomous vehicles

What is it?

- An autonomous car (also known as driverless car, self-driving car, robotic car) is a vehicle that is capable of sensing its environment and navigating without human input.

- Autonomous vehicles use a variety of technologies, including GPS, maps, laser, radar and cameras to detect the ever-changing variables that surround it.

- Estimates range of when self-driving cars will be common for personal use, some pointing to as early as 2021.

Why is it of interest?

- There is a baseline expectation of increasing safety from autonomous cars, as driver error is the most common cause of accident.

  - Drivers are increasingly distracted with cell phones, in-car entertainment systems and heavier traffic volume.

  - Traffic fatalities are increasing at their fastest pace in 50 years in the United States.

- Driverless vehicles will likely have a positive impact on overall congestion.

Who is doing it?

Guy Carpenter view of potential impact

- Auto manufacturers (traditional and new entrants) will offer vehicles with more complex levels of self-driving capabilities.

- A new mobility ecosystem could emerge, impacting the carrier business model, as the at-fault party may move from the driver to the manufacturer.

  - In the United States, personal auto has historically often been a profitable line, which may offset or supplement other less profitable personal lines.

  - It remains to be seen how a change in personal auto will impact overall carrier profitability.

- A decrease in the frequency of events is expected. However, potentially not in the severity of loss events as these cars would have more expensive technology built in.

  - Changes to vehicle repair and maintenance cost would be expected.

- New customer categories and the creation of new insurance products may surface.

  - Cyber coverage for autonomous cars is top-of-mind for many manufacturers.

- Potential second-order implications in other industries, including retail and hospitality (e.g. decreased need for large parking lots at malls, stadiums, etc.).

- Potential for temporary spike in claims frequency as early adopters of driverless vehicles share the roads with human drivers.

Internet of Things ("IoT")

What is it?

- The Internet of Things ("IoT") is a network of devices that collect, monitor and share data through the Internet.

- These connected, "smart" devices include everything from automobiles, home security systems, wearable health technologies, kitchen appliances and energy and transport infrastructure.

- The data, collected from sensors embedded in the products, is captured in a cloud and monitored and modeled. It serves as a digital representation of the physical products and its parts.

Why is it of interest?

- The data and connectivity is of interest to insurance companies for two reasons:

  – Continuous data provided by the smart devices can be used for real-time risk analysis and bespoke, deterministic underwriting.

  – The connectivity and monitoring of devices promotes risk mitigation, decreasing frequency and severity of losses.

- Gartner, a U.S. IT research firm, estimates by the end of 2016 there will be 6.4bn connected devices globally. By 2020, that number is forecast to reach 20.8bn.

Who is doing it?

IBM Watson

GE

domotz

sentiance

safehub

Guy Carpenter view of potential impact

- As the cost of sensors, microchips and storage / cloud hardware and software decrease, and as global online connectivity and computer processing expands, the number of IoT devices is expected to increase rapidly.

- As IoT sensors analyze risk in real time, capital and reinsurance can be adjusted in real time to reflect this.

- The dramatic increase in the amount of data collected will require more data scientists to be added to the (re)insurers' pay-rolls.

- IoT sensors monitor risk and, through the data collected, increase the mitigation of risk – potentially reducing the insurable interest in mature markets.

- Reliance on these IoT sensors changes the nature of risk, requiring new or increased types of risk transfer.

- It is likely that the sensors themselves (detecting water temperature, humidity, vibrations) become a commodity, further highlighting the importance of the data. Potential early-mover advantage to building a large data set.

Drones / visual intelligence

What is it?

- Drones, or unmanned aerial vehicles (UAVs), are aircraft that can navigate autonomously without human control, and are increasingly being used for commercial purposes.

- UAVs are fitted with cameras and other sophisticated imagery equipment that enable the capture of visual intelligence, often in dangerous or remote areas.

- The imagery is collated and analyzed using new and superior techniques to provide increasingly fast and accurate post-event damage maps and portfolio analysis.

- In the United States in 2016, ~600,000 commercial drones were sold according to the FAA. By 2020, some estimates show $127bn of economic activity will be undertaken by drones, according to PwC.

Why is it of interest?

- Two opportunities in (re)insurance:
  - The use of visual intelligence for pre-underwriting and rapid claims and catastrophe response.
  - The selling of commercial drone insurance as a new, rapidly (and compulsory in many areas of the world) growing class of business for the aviation insurance market.

- FAA Reg Part 107 (June 2016) opened the U.S. drone market, allowing individuals to fly drones for commercial purposes.

- Forecasts guided by the FAA estimate the global drone insurance market to be as much as $2.0bn of GWP by 2020.

- A number of (re)insurance entities are piloting schemes in this field.

Who is doing it?

GEOSPATIAL INSIGHT

DigitalGlobe

Airware

CAPE ANALYTICS

BetterView

AIRBUS

PRECISIONHAWK

Guy Carpenter view of potential impact

- The commercial use of drones will continue to increase, and with it the size of the drone insurance market.

- Drone-sourced visual intelligence will become increasingly common for both pre-underwriting and for claims and catastrophe assessment.

- The commercial UAV market will continue to develop, allowing 24/7 access to imagery from all aerial sources.

- Combining visual intelligence with superior analytical techniques will enable fast and accurate exposure assessment post-event.

- There is a current and continuing trend for smart, sophisticated industry money acquiring existing businesses in this space, a trend we only expect to increase (Macdonald, Dettwiler and Associates $3.6bn acquisition of Digital Globe in February 2017).

Peer-to-peer insurance

What is it?

- As with other industries such as lending and music sharing, advances in technology are facilitating peer-to-peer "P2P" insurance platforms.

- Today's P2P insurance entities are structured as either intermediaries or carriers. Both aim to lower the cost of insurance for consumers by pooling small groups of policyholders together online and leveraging their buying power.

- Policyholders pay a portion of their premiums into a notional pool. This pool covers minor losses and if a smaller-than-expected amount of claims are filed over the course of a year, the remaining funds are returned to the group in the form of cash dividends, lower renewal pricing or social good / donation.

- Social media and mobile platforms play a large role in forming the group and in distribution.

- At its basics, P2P is not a new concept. However, social media and mobile distribution are a departure from the past.

Why is it of interest?

- From the insurance carrier perspective, the P2P model has three major benefits:

  – Lower cost of policy acquisition – social media versus traditional marketing.

  – Increased customer retention – motivated to renew with existing group and benefit from improved pricing.

  – Improved risk selection – members will anti-select poor risks to enhance the pool's performance.

- A Swiss Re study of European mutuals found that loss ratios were better in micro-mutuals (those with 1,000 to 5,000 members). In contrast, the expense bases lacked economies of scale, therefore the combined ratios were no better (or often worse).

Who is doing it?

friendsurance
friends with benefits

insPeer

Tribe

BOUGHT BY MANY

PEERCOVER

inshared

so-sure

Guy Carpenter view of potential impact

- The P2P model is still nascent, although intermediaries such as Friendsurance and Bought by Many have been aggressively trying to grow their customer bases.

- Lack of diversification is a major problem in small pools, particularly in homogeneous geographies.

- P2P will need to operate under a new set of regulations, which the industry has not received guidance on yet, and will need to be watched very closely.

- Lemonade, a digital insurance carrier, has received significant media coverage following its launch in NY in September 2016. The business operates as a B-Corp and encourages pool profit to be paid as a charitable good. It has recently expanded to California.

- However, there is a question over the benefit and relevance of the P2P model in insurance. For instance, Lemonade has dropped the P2P moniker from its business description.

The sharing economy

What is it?

- The sharing economy (otherwise referred to as the gig economy) is a form of collaborative consumption built on a foundation of technology.

- Such technology platforms are built on recognizing and minimizing economic inefficiencies, including:

  – An excess of privately owned cars but a lack of public transportation offerings (Uber).

  – Ownership of underutilized vacation homes or spare rooms (Airbnb).

- This marketplace is growing rapidly and is forecast to continue to do so. Oliver Wyman estimated it at $26bn in 2015, growing to more than $300bn in 2025.

Why is it of interest?

- Existing underwriting frameworks may not be adequate for sharing economy policies.

- The insurable interest with regard to an asset changes from one of ownership to usage.

- Regulators have struggled to adapt existing regulation to sharing platforms. In general, under the current regulatory environment, the sharing economy is "sandwiched" between less regulated private ownership and highly regulated public commerce.

Who is doing it?

Guy Carpenter view of potential impact

- The sharing economy continues to grow at an exponential rate, supported by the insurance industry.

- Regulation will have to keep pace with consumer trends as new and innovative solutions are found to facilitate the changing marketplace.

- New (re)insurance products and distribution models will be built to service the sharing economy. Companies such as Slice (home / car-sharing) and Bunker (freelance workforce) proliferate.

Usage-based / on-demand insurance

What is it?

- "On-demand insurance" or "usage-based insurance" (UBI), provides coverage for shorter duration risk periods, based on usage rather than on a calendar basis.

- Allied Market Research forecasts that the global market for UBI could reach $123bn of GWP by 2022, with a CAGR of 36% during the forecast period 2016-2022.

- The model allows insurance cover to be switched on and off in line with usage. This allows greater convenience and smaller overall quanta of premium.

- Enhanced technology platforms allow the efficient administration of more frequent short-term policies.

Why is it of interest?

- Research suggests millennials in particular consider usage-based products to be more relevant and easier to understand than traditional long-term policies.

- While the absolute size of premium for any one policy will be necessarily smaller compared to one of a year's duration, the risk price (i.e. price per hour of coverage) will be greater, incorporating a convenience premium.

- Carriers need to be cognizant of potential adverse selection given that premium is only paid for the time in which the asset is at risk (e.g. Joe insures his camera on each vacation he takes, but it somehow "breaks" on every trip...).

Who is doing it?

SURE.

trōv

Slice

Cuvva

metromile

Guy Carpenter view of potential impact

- Existing actuarial models are less equipped to offer short-term covers. Specifically designed products need to be developed between incumbents and new market entrants.

- Some cross-over with the sharing economy – partnerships are being built between UBI entities and sharing economy platforms to offer UBI cover on an affinity basis.

- With micro-duration insurance, customers should benefit from more customized coverage and accurate premiums reflecting the individual's risk profile at a particular point in time. This will help expand insurability to individuals who may have struggled to get cover in traditional models.

- However, it remains to be seen if this market will succeed, determined by demand from consumers and enough premiums generated for insurers to participate.
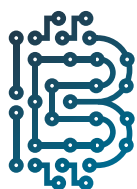
Blockchain /
smart contracts

What is it?

- Blockchain is a type of decentralized distributed ledger system that enables transactions to be quickly validated and securely maintained through cryptography, computational power and network users.

- The blockchain provides an immutable record and audit trail of transactions that are replicated on computers throughout the network, eliminating a potential single point of failure.

- One of the most immediately relevant applications of a blockchain technology is smart contracts. These are contracts captured in code that self-execute when the conditions therein are met, triggering a corresponding action.

- Blockchain is one of a number of potential technologies utilizing decentralized distributed ledgers. Others include Ethereum and Hyperledger.

Why is it of interest?

- Smart contracts remove the need for direct human involvement and, in theory, could help automate various procedures.

- Such contracts could also make contractual insurance relationships more efficient and economical with fewer opportunities for error, delay, fraud or dispute.

- By mutualizing infrastructure and creating a common record of truth, firms could significantly improve operational efficiency.

- As all transactions on a blockchain are immutable, identities are secure and data is trustworthy. Insurance fraud would be more easily detected and minimized.

- A number of industry-wide consortia have been set up to experiment with blockchain technologies (R3, B3i, The Institutes).

Who is doing it?

The Institutes™

B3i

AIG®

NIVAURA

r3.

symbiont

Guy Carpenter view of potential impact

- At present, there are very few proven blockchain use cases and, aside from smart contracts, none in the insurance sector.

- Many insurance firms are piloting blockchain / smart contract proof of concepts (POCs) to determine potential application. Market participants cannot implement this technology by themselves; it will need to be adopted by the industry to have a meaningful impact.

- Industry consortia are running POCs in the placement of reinsurance. This could mark a paradigm shift in the reinsurance industry.

- Given its parametric structure, participants and consortia have been looking at the ILS market as a potential early use case for smart contracts.

Digital sales, marketing and engagement tools

What is it?

- New and existing companies providing technology focused on enhancing the relationship between risk carrier and insured.

- Solutions to improve and potentially outsource existing front-office functions for both intermediaries and insurance carriers.

- Companies also focused on data enrichment utilizing new and existing data sources to augment the underwriting process and improve fraud prevention.

- Many platforms use Application Programming Interface (API) portals to integrate with existing broker management, policy administration and other third-party systems.

Why is it of interest?

- Efficient technology platforms drive more targeted customer selection and greater, more profitable revenue volumes.

- New platforms are better able to deliver more for less, reducing acquisition costs, while maintaining or improving premium volumes and profitability.

- The enrichment of data offers underwriters better tools to select and price risk, again increasing volumes of desirable business and profitability.

Who is doing it?

dovetail

Vertafore®

zipari

EBIX

CYtora

sureify

Guy Carpenter view of potential impact

- Front-end insurance and broking platforms will become increasingly efficient and cost-effective in the accumulation and pricing of premium.

- Optimal service modules can be plugged into existing platforms, allowing the easy integration and management of outsourced strategies.

- Data enrichment systems will augment the underwriting process, ultimately helping the technical price of risk to be known.

- Virtual risk management companies could be created, utilizing the best platforms for each module of the value chain.

Direct to consumer intermediation (virtual agents)

What is it?

- Concierge insurance services, storing all insurance policies in a single place, typically a mobile application, creating a virtual agent.

- AI technologies can be used to analyze client risk profiles and advise on the amount and type of coverages required ("robo-advisory").

- Robo-advisors have been present in the wealth management space for a number of years, however they are currently still failing to reach a critical mass of users / AUM to be profitable.

Why is it of interest?

- Targets the lack of customer engagement inherent in existing insurance company models.

- Convenience of buying and having all policies in one place will appeal to millennials, as early adopters.

- Automation of renewals and policy updates provide continual opportunities for premium.

- Robo-advisors have the potential to significantly enhance retail distribution.

Who is doing it?

Lemonade™

Knip

Sherpa

surely

KASKO

Cover

brolly

Guy Carpenter view of potential impact

- Requires a change in the zeitgeist as consumers switch to mobile-heavy purchasing all in one place.

- A natural extension is for the platform to utilize machine learning algorithms to identify gaps in coverage or excessive coverage and to subsequently offer insurance (e.g. robo-advisor).

- Ultimately could involve the sale of a single policy covering all elements of an insured's risk profile. As the profile changes, coverage also changes.

- Business will require heavy regulation as an intermediary.

- The insurance industry will need to be cognizant of new ways in which consumers wish to buy retail insurance and build that into their distribution model.

Policy and claims management

What is it?

- Technologies targeted at the more efficient management of policy documentation, as well as automation and enhancement of the claims process.

- Policy administration solutions provide next generation back-office software platforms that augment or replace dated legacy systems.

- Claims solutions focus on reducing the first notification of loss ("FNOL") timeline, alongside automation of payment processes and modernizing legacy work-flow processes.

Why is it of interest?

- Improvement through automation and artificial intelligence of the policy management and claims process has significant implications for insurance companies.

- Enhanced policy management drives administration efficiencies through reduced process management and increased client satisfaction, which should enhance client retention.

- Increased reliance on computers and models drives a change in the nature of risk, with understanding and monitoring of the models (to ensure they work correctly) increasing in importance.

Who is doing it?

Guy Carpenter view of potential impact

- As platforms and solutions progress, the implications of this improvement in efficiency are likely to manifest in reductions of back-office workforces and improved expense margins and loss ratios.

- Cognitive claims handling (e.g. IBM Watson), proposes the complete handling of even complex claims by a machine or chatbot in the future.

- Inserting increased automation within the claims process alongside enhanced FNOL, etc. will reduce claims handling costs and again improve client satisfaction.

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GUY CARPENTER