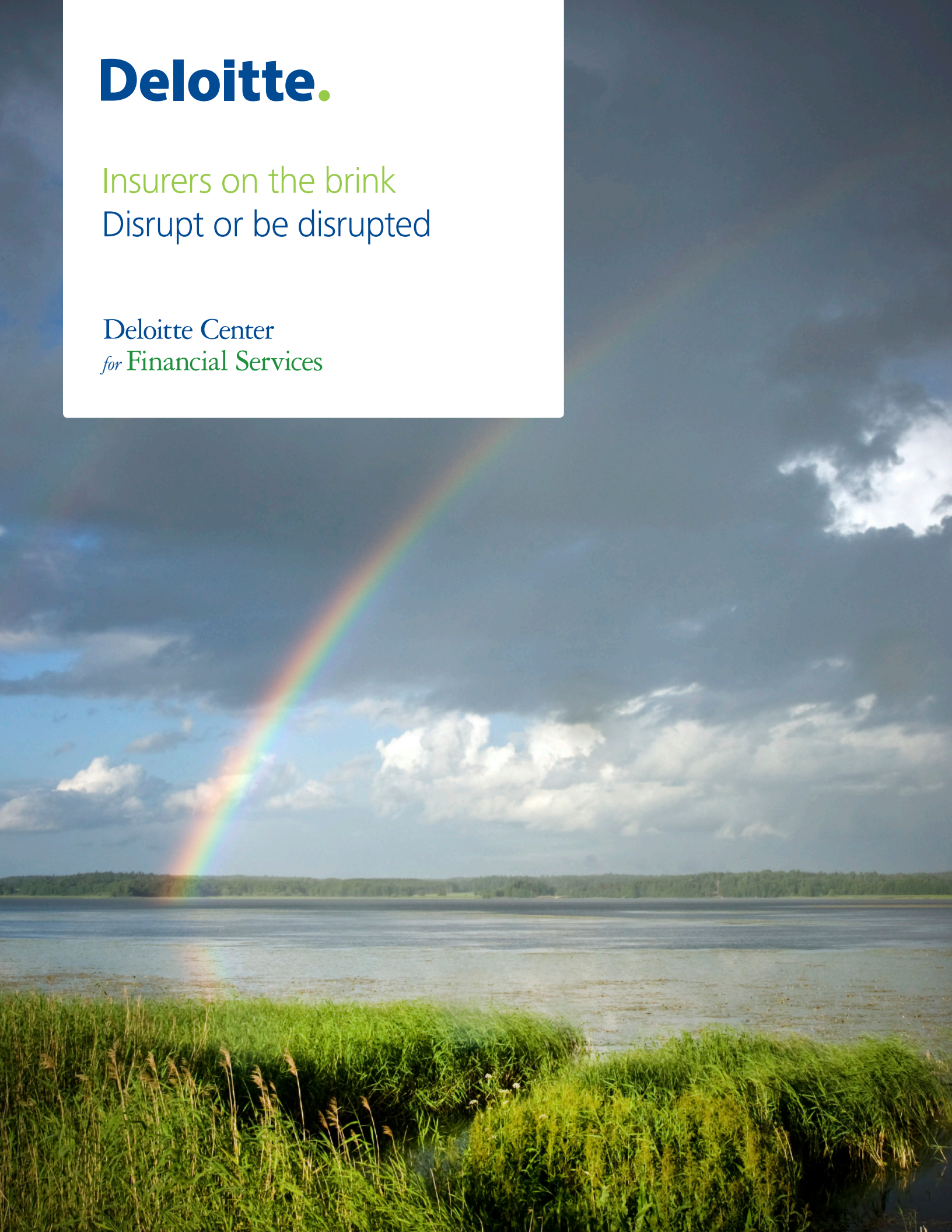










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Insurers on the brink
Disrupt or be disrupted

Deloitte Center
for Financial Services

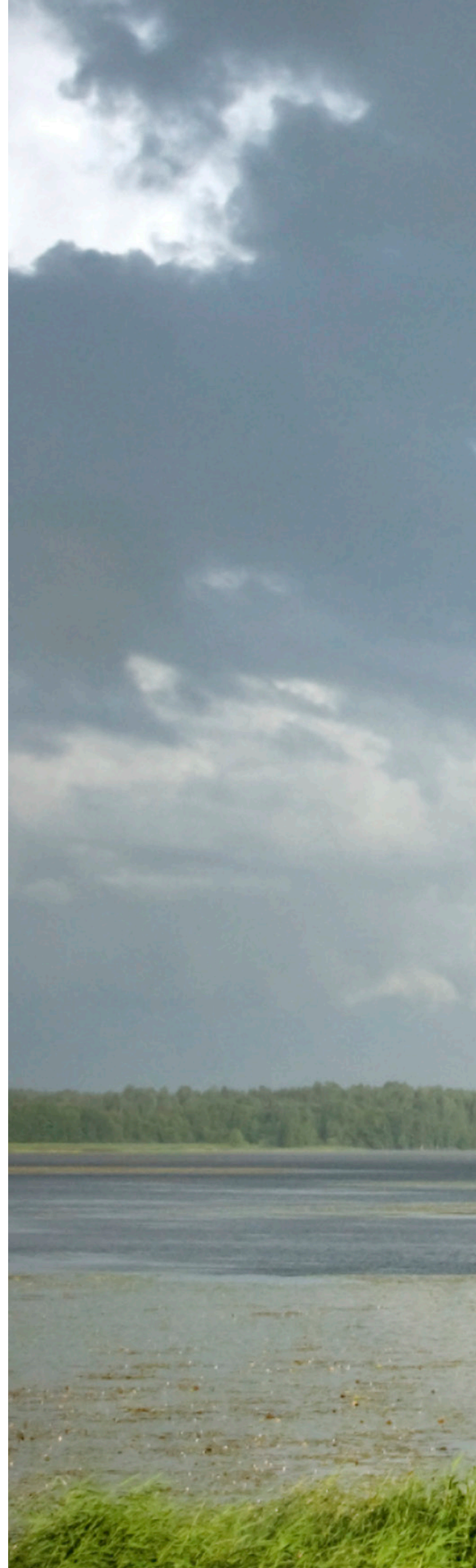


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Foreword



Dear colleagues,

This report is meant to serve as a call to arms. Insurers need to be far more proactive and creative in responding to disruptive threats emanating not just from within the insurance market, but spurred by new realities in the economy and society at large. Most carriers are likely aware of these forces of change, and some have started taking steps to deal with them. However, we believe the industry in general has lacked the sense of urgency necessary to effectively mitigate and capitalize on these bigger-picture issues, especially given the accelerating pace of change in technology, demographics, and consumer preferences.

Contributing to this reluctance to take swifter action, as we see it, is that many insurers may still be relying upon a series of orthodoxies that historically have served as entry barriers, insulating their traditional ways of doing business and allowing them to make do with relatively modest changes in their products, operations, and distribution systems. However, a number of disruptive developments—driven largely by changing consumer experiences and expectations in an increasingly digital world—are undermining the effectiveness of long-standing business models and leaving insurers vulnerable to those introducing new ways of leveraging information and spreading risk, while creating unconventional sources of competition.

In such an environment, insurers will not only need to move more quickly to negate the emerging strategic risks threatening to erode their market position or even displace them entirely. They also should be considering how to turn these threats into opportunities for innovation and growth.

This report is based on the first-hand experience and insights of many of Deloitte's leading practitioners, supplemented with research and analysis by the Deloitte Center for Financial Services. We hope you find it thought provoking as you contemplate your company's strategic priorities. Please share your feedback or questions with us. We would welcome the opportunity to discuss our findings directly with you and your team.

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What are insurers up against?

Many insurance companies are facing existential challenges to the foundation of their value proposition. Among them are rising customer expectations for personalized products and services in an increasingly connected world, macro-shifts in the economy and culture that threaten to dismantle their traditional business models, and new categories of exposures that offer both growth opportunities and inherent bottom-line risks.

The pace of change will likely accelerate over the next few years, fueled in large part by technological transformations such as the Internet of Things (IoT), blockchain-based infrastructure options, and mobility applications, as well as general open-mindedness on the part of regulators and consumers toward new sources of coverage and emerging methods of sharing risk.

In this volatile environment, many insurers may be facing disruption by more proactive and innovative competitors from both inside and outside the industry if they don't take charge of their own destiny and disrupt themselves first. Yet this is likely to be easier said than done, in large part because insurers have not historically been quick to adopt major changes in the way they do business. Carriers often take years to initiate and implement transformation programs, but the speed of disruption these days is much faster than an insurance company's typical strategic cycle.

To protect their franchise and find pathways to bolster growth over the long term, many insurers will have to reinvent themselves in fundamental ways. He who hesitates may indeed be lost, given the increasing velocity of consumer adoption when it comes to new products and new ways of doing business.

We believe the industry's hesitance to take bolder, faster steps toward transformation may be the result of reliance on a series of what we call "orthodoxies"—core presumptions about the strength and uniqueness of an insurer's traditional value proposition and business models. Many insurers have treated these orthodoxies

as entry barriers effectively insulating them from being disrupted in a significant way by internal or external upstarts. They include the belief that:

- Consumer familiarity with established insurers precludes wide-scale disruption by newcomers to the business.
- Insurance is often a complex, opaque, and even misunderstood product, which gives the industry's seasoned agent and broker sales force a considerable edge over would-be alternative distribution challengers.
- Insurers have effectively cornered the market on the data, models, and analytical talent to underwrite and price exposures as well as facilitate risk management.
- Since the premise of risk pooling is fundamental to the business of insurance, the massive capital reserves assembled by insurers cannot be easily replicated by new players.

These orthodoxies are in jeopardy of being rendered moot by a wide array of disruptive forces. They include enhanced connectivity creating new types, sources, and owners of data; evolving risk-transfer options drawing new sources of capital and competition; emerging financial technology (fintech) alternatives upending insurer operating systems and capabilities; as well as challenges to traditional ways of living and doing business raised by the sharing economy.

The bottom line is that insurers cannot afford to wait on the sidelines as disruptive trends in technology, the economy, and society threaten to negate the orthodoxies under which the industry has operated. If insurers don't move more quickly and decisively to reshape the rapidly evolving ecosystem on their own terms, others will likely dictate those terms for them.

In this report, we'll discuss each of the four orthodoxies, elaborate on the risk of disruption, consider how insurers might effectively disrupt themselves, and forecast how these market dynamics may play out over the next five years or so.



Familiarity won't insulate insurers from new competition

Reputational shortcomings, demographic shifts leave carriers vulnerable to disruption.

The first orthodoxy being undermined is the belief that consumer trust in established carriers with proven track records precludes wide-scale disruption by newcomers to the business. On the contrary, incumbents can no longer count on attracting and retaining customers on the basis of having long histories, high brand recognition, and extensive agent networks. Reputational challenges, weak connections with next-generation prospects, and game-changing technological innovations are combining to render such a presumption moot, leaving legacy carriers vulnerable to emerging alternative market players.

Personal lines insurers in particular are vulnerable to disruption. Skeptics should pay close attention to the experience of those from the commercial insurance side of the business, where despite major brand recognition and regulatory validation, between 25 and 35 percent of the US market has moved into alternative risk-transfer mechanisms.¹ Many large policyholders and groups of insureds have bypassed the primary insurance market and set up their own risk-assumption facilities, including captives and risk-retention groups. That translates to lost premium revenue of between \$60 billion and \$84 billion for legacy insurers.²

A similar mass migration could take place in both personal lines and the small-business segment if carriers don't respond proactively to the disruptive potential of emerging risk-transfer alternatives.

The risk of disruption

The insurance industry has generally not ranked high among consumers when it comes to its reputation. This may create opportunities for new types of customer-driven providers—particularly those fueled by popular technologies such as social platforms. One poll found that in 2014, insurers registered a positive rating of only 36 percent, compared to 79 percent for the more cutting-edge and user-friendly technology industry.³

A big part of the problem may be the industry's difficulties in establishing long-term, interactive, trusting relationships with their customers, especially among younger buyers. A 2014 study by Gallup examining Millennial "engagement" with insurers—based on the factors prompting such buyers to choose and remain with their main company—found those in this generation least likely to be "fully engaged" with carriers, as well as the most likely to be "actively disengaged."⁴ Gallup reported that while older family members exert a lot of influence over early coverage choices of Millennials, younger buyers are frequently far from satisfied with their customer experience. Since they are generally more technology savvy, as well as more likely to purchase goods and services over the Internet, the vast majority should therefore be expected to shop online for alternative insurance choices. We believe they are also more likely to be early adopters of emerging insurance business models, products, and technologies going forward.

Given these conditions, it's easy to imagine emerging peer-to-peer insurance groups becoming ubiquitous, with mobile apps allowing consumers to simply enter the exposure they want to insure and gain access to a list of facilities that fill the bill, or perhaps offer an opportunity to initiate a self-insurance group of their own. Many people associate web-based product and service providers with ease of use, lower cost, and good customer experience—qualities not usually attributed to standard insurance transactions. As online, crowdfunding disruptors multiply and take on a wider array of risks, more traditional insurers will be increasingly challenged to reassert their value in order to compete against (or perhaps partner with) these new types of mutual arrangements.



Blockchain technology, which created a new type of public ledger for crypto-currencies, could perhaps facilitate and accelerate development of alternative risk-transfer start-ups by providing a secure, widely accessible, less costly infrastructure for insurance transactions and a host of related applications. In the meantime, we have seen that regulators have generally been keeping an open mind about the potential for new types of insurance providers to offer coverage in ways that are more convenient and less costly for consumers.

One new entrant looking to capitalize on a lack of trust in traditional carriers is Lemonade, a peer-to-peer online insurance company planning to launch this year.⁵ By attracting like-minded insureds from affinity groups or among those who may be friends or family members, as well as by offering greater transparency on claims and providing premium refunds in good loss years, Lemonade hopes to capitalize on the bond of trust this new form of mutualization might provide.⁶

What should insurers be doing to disrupt themselves?

The presumption that consumer familiarity and comfort level with legacy insurance carriers will prevent wide-scale disruption is no longer valid given the trends and strategic risks insurers face. The industry therefore needs to take steps to close the “trust gap” with their customers (see Figure 1). At a minimum, insurers should be more proactive to fortify their default position as the providers of choice for insurance consumers, who are becoming more likely to take their business elsewhere if new types of competition come up with a better customer experience.

To heighten their appeal and increase their value to increasingly tech-savvy and web-connected buyers, insurers should establish more real-time, interactive relationships with customers to support a policyholder’s

evolving lifestyle needs. Too often today, many property-casualty carriers merely process claims as they arise and routinely seek policy renewals each year, while life insurance and annuity providers usually only follow up policy sales with routine bills and statements. Instead, carriers may be able to enhance their engagement with buyers and preclude displacement by serving as each policyholder’s personal risk manager—offering ongoing holistic advice, products, and services for a wider variety of risks. Such an expanded role could be facilitated via wearables and other mobile applications to provide telematic feedback and customized solutions that help customers limit their exposures and live safer, healthier lives, whether they’re in their vehicle, at home, at work, or running their business.

Carriers also should lay the groundwork for increased trust and sales through improved educational efforts, because consumers often don’t understand how insurance products work or the value they can provide. For example, the latest “Pulse Points” survey by the Insurance Information Institute found that large majorities of property-casualty consumers in general don’t even know how their deductibles work or what exposures are excluded from their standard homeowner policies.⁷

Figure 1: How to close the “trust gap” with consumers

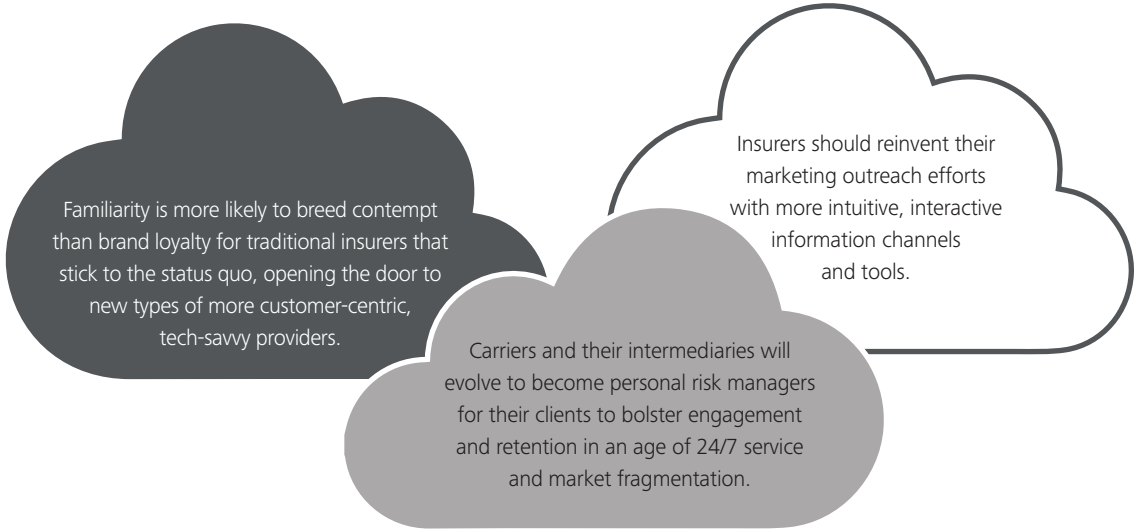


The challenge is similar when it comes to annuities, where ignorance is not bliss for either carriers or consumers. A survey by the Deloitte Center for Financial Services found that among those without annuities, only 11 percent of respondents said they understood the product well, as was the case with fewer than one-in-five who had actually bought one.⁸ It's difficult to gain trust, let alone earn referrals from clients who don't even understand the insurance products they purchase.

Initiatives to improve consumer awareness could make a big difference in closing the trust gap and boosting sales. For example, among those without annuities surveyed by the Deloitte Center for Financial Services, over one-in-four said they would be more likely to consider a purchase if

they had a better understanding of the product.⁹ Accomplishing all this will likely entail more intuitive, interactive, online (especially mobile) information tools, enhanced use of social media platforms, and more real-life, narrative-based marketing initiatives to create demand by clearly tying the value of particular products (such as annuities) to specific life-cycle challenges (such as retirement planning) while making their policies much easier for a layperson to understand. The question is whether such initiatives will be launched by legacy carriers or by more tech-friendly disruptors.

Our insurance forecast



Familiarity is more likely to breed contempt than brand loyalty for traditional insurers that stick to the status quo, opening the door to new types of more customer-centric, tech-savvy providers.

Carriers and their intermediaries will evolve to become personal risk managers for their clients to bolster engagement and retention in an age of 24/7 service and market fragmentation.

Insurers should reinvent their marketing outreach efforts with more intuitive, interactive information channels and tools.



New platforms shake up the distribution system

The second orthodoxy we challenge is the presumption that because insurance is often a complex, opaque, and misunderstood product, the expertise and sales skills of the industry's agent-based distribution system precludes widespread disruption by new types of providers.

Evolving technological platforms are helping to turn that conventional wisdom on its head and threaten to render intermediaries irrelevant for many insurance transactions as consumers have a host of new online shopping and purchase options at their disposal.

Traditional agents and brokers are at risk of being disintermediated and carrier business models that depend on them are being threatened as more insurance products are commoditized, underwriting and pricing systems are increasingly automated, and a critical mass of consumers arrange coverage on their own terms. Knowledge democratization is a key factor, as greater web (particularly mobile) access to information, combined with increasingly sophisticated distribution portals, allow consumers to shop for and buy commoditized products (such as airline tickets) and more complex goods (such as automobiles) online without an intermediary. Insurance could be the next frontier for such disruptors.

Securing customer loyalty is likely to be far more challenging as insurer ownership of client relationships is undermined by new types of go-betweens or direct-to-consumer distribution.¹⁰ One example is small-business owners, as 61 percent of respondents to a Deloitte Center for Financial Services survey said they receive no service from their agents beyond shopping for coverage, making them ripe for disintermediation.¹¹

The risk of disruption

Distribution is primed for disruption, given the high costs of approaching prospects and handling clients through an agent and broker network. On the property and casualty (P&C) insurance side, carriers paid out \$52.5 billion in net commissions and brokerage fees in 2014, accounting for 10 percent of the industry's net written premiums—and that's without figuring in contingent commissions based on the volume and quality of business that intermediaries bring to companies.¹² On the life, annuity, and health insurance side, about 8 percent of premiums are spent on commissions, totaling some \$52 billion.¹³ Those frictional costs represent quite a large opportunity for less human-capital-intensive players.

One such disruptor—aggregator websites, which allow consumers to compare prices from many carriers—is far from new to the scene. InsWeb, for example, has been around for over 20 years. However, these sites are proliferating, including aggregators establishing relationships with well-known noninsurance brands to reach consumers—such as Walmart, which is working with autoinsurance.com.¹⁴

The momentum behind aggregators experienced a bump in the road recently with the announcement that Google would shut down its auto insurance web service, Google Compare, as of March 23, 2016. However, we continue to believe aggregators are likely to pose a growing threat of disintermediation and disruption over time. Consumers have become accustomed to shopping for a wide variety of products and services over the Web, and insurance is unlikely to be an exception.

Web aggregators, direct sellers, social brokers challenge traditional agents.

Indeed, more sophisticated aggregator sites are likely to be developed, allowing consumers to make better informed buying decisions without intermediaries by offering a value analysis of underlying coverage rather than just price quotes. One early example is Fluo, a French company that assesses various policies according to coverage factors such as insured perils.¹⁵

This trend could accelerate if direct insurance sales can be facilitated by robo-advisers modeled after the automated investment management services that are looming larger in the retirement-planning space. Small business online prospects surveyed by the Deloitte Center for Financial Services cited the need for guidance as a key reason to stick with agents, but robo-advisers could perhaps fill that void.¹⁶ Insurers also need to contend with the rise of “social brokers,” a new type of intermediary that creates affinity groups with similar risk profiles, then negotiates discounted coverage with one or more carriers on their behalf¹⁷ (see Figure 2). One example is London-based Bought By Many (BBM), “a members-only service that helps you find insurance for the things in your life that are out of the ordinary.”¹⁸ The site says it can save members an average of 18.6 percent compared to coverage they could buy on their own, because of their collective bargaining power over participating insurers.

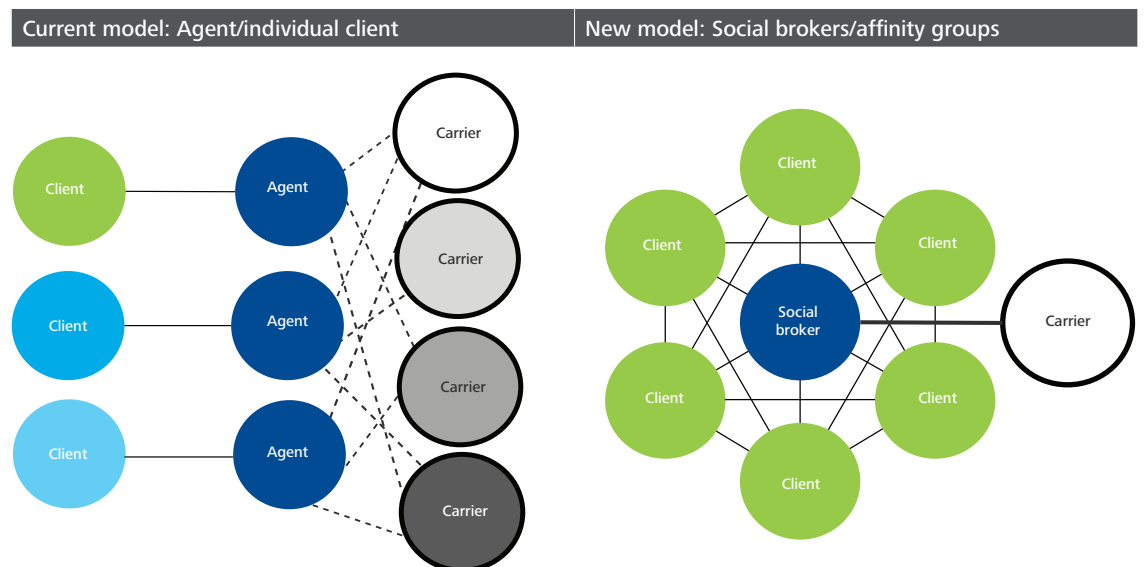
What should insurers be doing to disrupt themselves?

While emerging distribution options could threaten the viability of insurers that are overly dependent on agents and brokers, they also represent opportunities to drive growth by reaching and servicing customers in new ways.

More insurers are starting to market directly to consumers with enhanced technology capabilities. Massachusetts Mutual Life launched Haven Life in May 2015 to sell medically underwritten term insurance online in about 20 minutes, as opposed to the standard four-to-six weeks through traditional channels. Progressive Direct has been selling P&C coverage over the Web for quite some time, employing a distribution system parallel to their agency force for consumers who prefer to shop for themselves online. Such hybrid systems are primed for expansion as carriers look to reach prospects over multiple platforms.

Direct sales are far less frequent on the more complex commercial insurance side at the moment, but could offer significant upside potential for carriers that crack the code, weaning more small-business buyers from their agents. Hiscox has been selling professional liability and other coverages direct to small businesses over the Web for a few years now. Berkshire Hathaway announced it

Figure 2: Social brokers changing the paradigm





will sell workers' compensation coverage directly online to small businesses, to be followed by web sales of business-owners' liability and other policies.¹⁹ Look for such direct sales experimentation to accelerate and broaden over the remainder of this decade.

More insurers are also likely to expand their digital distribution footprints through strategic fintech investments.²⁰ ACE Group recently took a stake in CoverHound, an aggregator that not only offers quotes on auto and homeowners insurance, but also services the policies they sell. CoverHound said it expected to expand into commercial lines to sell small business insurance this year.

Carriers could also enhance their robo-adviser capabilities with investments in rapidly evolving cognitive technologies, including human-computer interface tools such as gestural computing (algorithms interpreting human gestures), affective computing (recognizing and simulating human emotions), as well as augmented reality (duplicating real-world environments in a computer program).²¹ This could help make consumers more comfortable working with virtual advisers, and ease the transition to automated insurance advisory systems for a growing number of policyholders. Marketing products through third-party price and value comparison websites is another option for insurers looking to leverage

alternative distribution systems—not only to avoid being displaced by more web-savvy competitors, but to target early online adopters while acquiring valuable direct sales experience. They could also create more customized, niche products to serve the multitude of affinity groups being assembled by social brokers.

However, to lessen dependence on traditional agents and brokers, mainstream carriers may also have to simplify their products for direct or group distribution. Over the years, particularly on the life insurance and annuity side of the business, agents have frequently encouraged insurers to add additional features to differentiate their products, which have become increasingly complex as a result.

While this development may benefit agents, who can help consumers by explaining the various bells and whistles of a given product, it has also added a layer of difficulty to the transaction. This sets the stage for a dual distribution strategy, with more customized, complex products being sold through agents, while a streamlined product set is marketed online or through group sellers.

Our insurance forecast

The number of agents will gradually decline as direct sales grow in personal and small commercial lines, and as automated advisory services expand for simple life and annuity coverage, prompting survivors to focus on affluent customers with more complex risk-management portfolios.

Many carriers will look to have it both ways—testing the waters of new online distribution systems, while bolstering the value and services offered by their agents to retain more complex accounts that don't lend themselves to self-service.

Insurers will partner with new types of distributors and aggregators to learn more about alternative distribution outlets and offset the risk of dislocation.



Insurers no longer have a monopoly on assessing, pricing, and limiting risk

The third orthodoxy being neutralized by disruptive trends is the notion that insurers—individually or collectively—still have unique access to and expertise in the data and analytical capabilities required to underwrite and price most risks. Given the rapid expansion in the amount and types of information becoming available via telematics and other IoT technologies, as well as ongoing advances in the ability to monetize what’s collected through artificial intelligence (AI), innovative carriers as well as data-rich competitors from outside the industry may be poised to spark transformations in a number of insurance markets.

Insurers have historically enjoyed fairly exclusive access to risk-related data, but have generally yet to master the advanced analytics to most effectively monetize such information for predictive modeling and underwriting purposes. As a result, the industry as a whole may have missed an opportunity to exploit its position to create long-lasting economic value and competitive advantage.

Indeed, the industry’s reliance on fairly generic, static, and often indirect forms of data has resulted in a lack of innovation and differentiation in pricing and product development. That could change as insurers plug into the expanding IoT data stream, in which more and more devices, properties, systems, and even people are being connected and monitored over the Web.²² Underwriting should increasingly be based on causal rather than correlative data, enabling more accurate loss predictions, less arbitrary pricing decisions, and more effective loss control suggestions.

Auto insurance has been the first frontier for insurers taking the lead on IoT. A number of major carriers have already jumped on the telematics bandwagon, while others are busy devising a new strategy to compete with usage-based insurance (UBI) programs. Not too far down the road, UBI is likely to become the rule rather than the exception as vehicles are increasingly operated by all their new autonomous safety technologies.

However, the threat of connectivity-related disruptions isn’t limited to auto risks. The broader IoT movement is also creating “smart” homes and businesses, providing owners and third parties (including insurers) with the opportunity to watch over and direct elements of insured residential and commercial properties remotely.

Before too long, IoT may enable carriers to become primarily the ensurers of safety and productive use of properties, rather than just the insurers of damages should a loss occur. If IoT sensors detect the imminent failure of a \$100 compressor in a \$1 million piece of equipment that prevents a \$100 million business-interruption loss, an entirely new value chain is created. If carriers don’t seize the moment, outside tech firms could launch IoT platforms that already have an ingrained risk-transfer component, thereby beating insurers at their own game.²³

Nor are life insurers immune to the disruptions caused by connectivity. More carriers will likely take the plunge into telematics, including some utilizing a fitness-monitoring device to award points for those who exhibit healthy behaviors, thereby allowing policyholders to earn premium discounts and other rewards while facilitating a richer, more holistic relationship with their insurer.

The risk of disruption

At a fundamental level, disruptors that access more precise, experiential data could eliminate a lot of time and inconvenience from the insurance application, renewal, and claims processes, while improving the accuracy of underwriting and pricing decisions by basing them on the actual, ongoing state of an insured property or individual. The enhanced connectivity being leveraged to generate new data streams could also greatly reduce the need for some types of insurance while emphasizing the value of risk management over risk-transfer. With auto policies, for example, new sensing technologies being incorporated in vehicles—including software that prevents speeding, drifting out of lanes, and collision avoidance—could substantially lower loss frequency and force down premiums for collision damage coverage.

Greater connectivity generates new data sources and breeds heightened competition.



Even a relatively modest reduction in loss costs, and subsequently in pricing, could have a substantial financial impact on carriers, as personal auto property coverage generated \$71 billion in net premiums written in 2014, representing 14.3 percent of the P&C industry's total.²⁴ Similar downward pressure on rates and premium volume should be felt in other lines of coverage as IoT takes hold and cuts exposures across more web-connected properties and products.

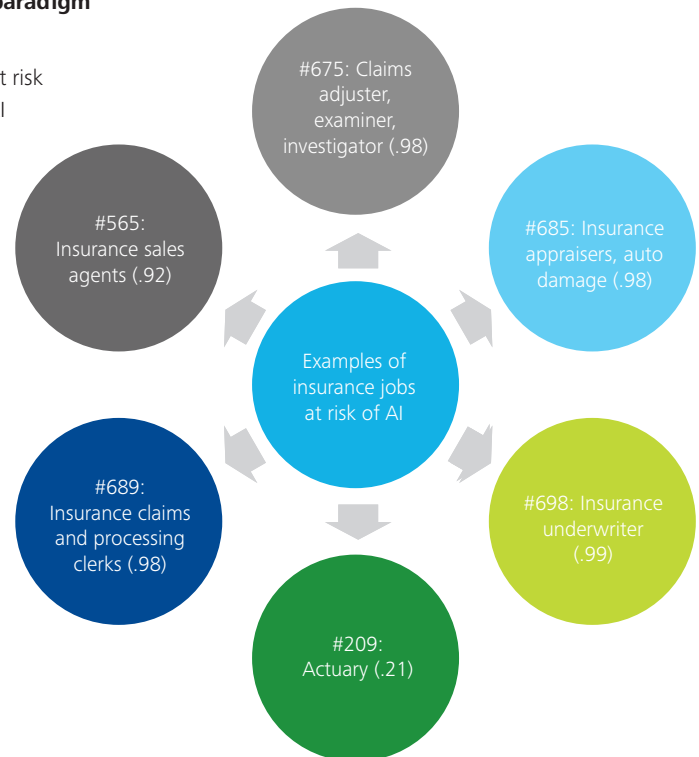
Over the long term the biggest connectivity disruptor could be broad deployment of a "driverless" car, which represents the culmination of new connective sensing technology. This disruptor may reduce or perhaps one day eliminate the need for personal auto liability coverage, which for 2014 generated \$112 billion in premiums, accounting for 22.5 percent of the P&C industry's total business.²⁵

Data transformations could also disrupt the industry's talent infrastructure. For instance, as telematically fueled predictive analytics assumes a dominant role in more and more lines and systems run by artificial intelligence, the need for hands-on underwriters could perhaps be lessened substantially. The US Bureau of Labor Statistics projected that employment of insurance underwriters would decline by 6 percent between 2012 and 2022, due mainly to the introduction of automation.²⁶ Such a reduction could save insurers around \$409 million in labor costs, based on the most recent salary figures reported to the bureau.²⁷

Savings could end up being far greater as the pace of transformation in automated data collection and analysis accelerates over the next few years. Other positions in the industry could be scaled back thanks to AI as well (see Figure 3). While some of these savings would likely be passed along to consumers in the form of lower premiums, insurers could still see significant bottom line improvement by lowering their cost structure.

Figure 3: Social brokers changing the paradigm

- 700 occupations examined
- Score of 1 most at risk, score of 0 least at risk
- #1 least at risk, #700 most at risk from AI



Source: "The Future of Employment: How susceptible are jobs to computerization?," Carl Benedikt Frey and Michael A. Osborne, September 2013.

The latest Individual Life Insurance Operations (LIONS) benchmarking study by Deloitte's Global Benchmarking Center also indicated there could be major savings from automated underwriting. Comparing the five participating carriers that had automated 70 percent or more of their underwriting against the other seven that had not automated at all, underwriting and direct support operations cost per \$1,000 in new business face amount was 38 percent lower for the automated carriers, while the new business labor cost per staff member was 24 percent less.²⁸ The new business overhead rate per full-time equivalent staff member was 43 percent lower, while the new business processing cost per application written was 49 percent less.

Carriers that fail to pursue such automation-driven cost savings do so at their own peril, and not just because it could leave them at a disadvantage against their traditional competitors. Consider the competitive edge that automated startups could enjoy, unburdened as they would be by any legacy underwriting costs. Such disruptors could leverage the technological and economic advantages of AI for underwriting, pricing, and claims to offer a faster, more convenient customer experience at a lower cost, then pass along such savings to take market share from less tech-proficient competitors.

Carriers that fail to pursue such automation-driven cost savings do so at their own peril, and not just because it could leave them at a disadvantage against their traditional competitors.



What should insurers be doing to disrupt themselves?

Enhanced connectivity of people and properties over the Web are undermining the exclusivity of insurer access to and control over risk-related information in general, and real-time data in particular (see Figure 4). As a result, insurers can no longer rely on their legacy data pools as an entry barrier. They need to move quickly to fully embrace the IoT and operationalize new sources of real-time data to run their business more efficiently, improve customer experience, bolster their risk-management capabilities, and spur sustainable growth in both the top and bottom lines.

To start, this will entail developing a command of the analytics of things—that is, how insurers make sense of all the information they gather to improve their risk assessment and pricing capabilities, and avoid drowning their underwriting and rating systems with the flood of new data at their disposal.²⁹

One line primed for expansion in an increasingly connected world is product liability, as responsibility for accidents caused by driverless or at least highly autonomous cars would likely be shifted from the vehicle’s owner to the manufacturer or software producer. Even if a fraction of the \$112 billion generated by auto liability insureds makes its way into the product liability market—which as of 2013 produced only \$2.72 billion in net premiums written³⁰—the potential profit pool for the latter group of carriers could be substantial.

There should be similar growth potential for cyber liability insurance. A market that was worth an estimated \$2 billion in gross written premiums in 2014 could more than triple to \$7.5 billion by 2020, according to a recent Insurance Information Institute report.³¹ ABI Research is even more bullish, forecasting cyber insurance premium volume to grow at a compounded annual rate of 36.6 percent, reaching \$10 billion by 2020.³² Insurers should be up to the challenge of figuring out how to price this growing exposure since this is a very familiar risk to them, given that they are prime targets of hackers themselves and could leverage their own risk-management experience to underwrite and help limit the exposure of other industries.

Insurers could also enhance the value of their client relationships by insuring an individual’s overall exposures in a multi-line policy rather than focusing on specific properties (see Figure 5).³³ For example, rather than merely cross-selling a number of separate policies as is often done today, a carrier could bundle adjacent coverages (such as auto and homeowners, and perhaps even life and disability) in a single “personal insurance” package, increasing customer convenience as well as discouraging attrition. Such joint coverage could appeal to consumers as the concept of ownership and business versus personal use of property blurs in the sharing economy.

Figure 4: Web connectivity expands sources of data, competition

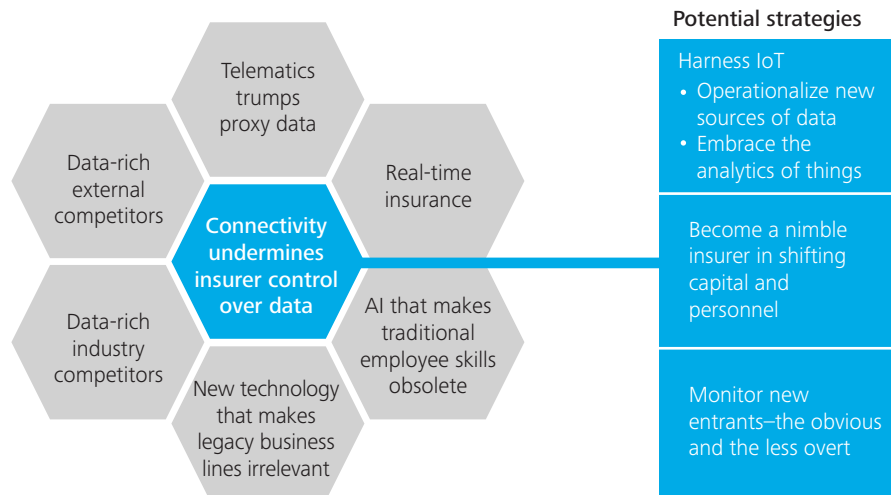
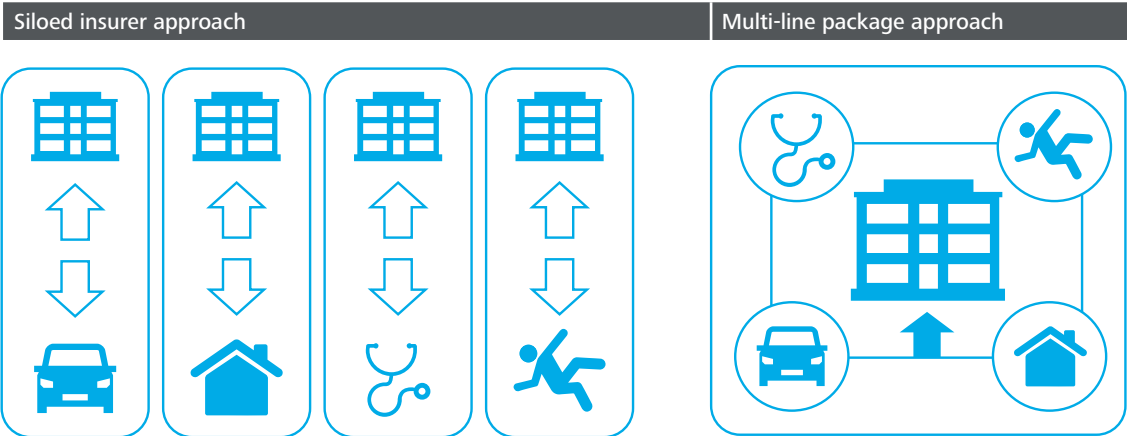


Figure 5: Market may transition to multi-line policies



Enhanced connectivity and data analytics could also allow carriers to customize standard insurance coverages offer real-time risk management advice, as well as partner with outside product and service providers in a referral system based on telematic monitoring of a policyholder’s location, activities, and preferences.³⁴

Our insurance forecast

Enhanced connectivity among devices, properties, and individuals will increasingly erode traditional insurer exclusivity in data access and risk analysis, while lowering entry barriers for new, more tech-savvy competitors—including those from outside the industry.

Artificial intelligence will boost insurer bottom lines by reducing headcount in underwriting and claims, increasing precision in pricing and fraud investigations, and facilitating personalized rather than commoditized coverage.

Connectivity among vehicles will drive down auto insurance loss frequency, but will also result in lower prices and premium volume as well, prompting a reallocation of resources to more growth-oriented lines.



Insurers cope with new competition on risk pooling

The fourth orthodoxy goes to the heart of the industry's business model. It's the notion that because risk pooling is the key to a viable insurance market, the amount of capital assembled by carriers—individually and as a whole—cannot easily be replicated by potential competitors. That is no longer necessarily the case.

Take the property-catastrophe market, where institutional and individual investors had amassed \$26.25 billion in outstanding catastrophe bonds as of mid-March 2016.³⁵ "Cat" bonds are not new, but are taking on an increasingly higher profile as more primary carriers and individual commercial policyholders are turning to the capital markets instead of buying traditional policies to help cover their risks.³⁶

Issuing insurance-linked securities answers a need for affordable, reliable coverage for major disaster exposures. One leading reinsurer estimates that over \$30 billion of annual losses from earthquake, flood, and wind damage are currently uninsured.³⁷ That's more than half of the \$55 billion in annual US natural catastrophe losses.³⁸ Capital markets are helping to pick up the slack, while satisfying investor desire for uncorrelated risks in their portfolios and more attractive returns in this persistently low interest rate environment.

The P&C market is also facing additional competition from hedge funds pouring new capital into newly launched reinsurance entities. Hedge fund managers entering the reinsurance market believe they may be able to more effectively leverage pools of risk-transfer capital by generating higher returns on float (the money earned on investments of premiums) via more dynamic investment strategies than legacy insurance carriers have typically employed.

Alternative capacity sources undermine traditional carrier supremacy.

Aon Benfield reports that the total alternative capital market increased 8 percent for the nine months ending September 30, 2015 to \$68.8 billion, representing about 12 percent of global reinsurance funds, which stood at \$565 billion. Barring a significant shift in supply and demand dynamics, Aon Benfield maintains its estimate that alternative capital could double, reaching between \$120 billion and \$150 billion by 2018.³⁹

The risk of disruption

In the property-catastrophe market, those offering alternative risk-sharing options have widened and deepened the pool of insurance capacity providers, putting tremendous downward pressure on pricing in the traditional market, squeezing profit margins, and prompting consolidation in the reinsurance sector. Such disruption could be exacerbated over the long term as securitization expands into additional lines, particularly for risks that are underinsured in the traditional market, such as cyber liability and longevity exposures in annuities.

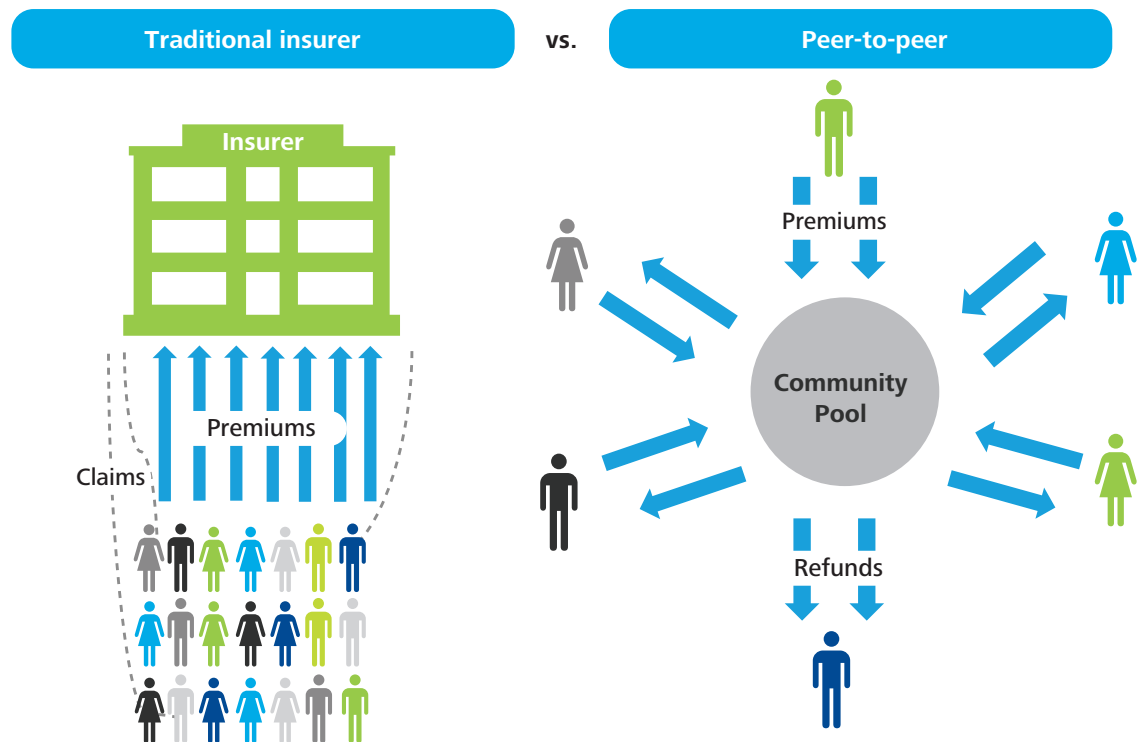
On a more individualized basis, crowdfunding through relatively small peer-to-peer facilities could potentially disrupt insurer risk pooling in many basic lines of business (see Figure 6). The German-based Friendsurance allows people to insure one another for home contents, private liability, and legal expenses, while offering a cash-back bonus of up to 40 percent of premiums for participants who remain claimless.⁴⁰ Another example is the UK-based Guevara, which organizes like-minded auto insureds into peer-to-peer groups.

There have been fewer such startups in the United States than in Europe and Asia, but we anticipate the pace picking up in this country over the next few years. As noted earlier, New York-based Lemonade, led by two tech entrepreneurs, is preparing to launch a consumer insurance peer-to-peer facility with a different twist—as a licensed carrier, rather than a broker.⁴¹ Boston-based Gather is facilitating a small business insurance peer-to-peer group.⁴²

Part of the new business model for peer-to-peer groups is to cut loss costs by discouraging fraud. The rationale is that small group insureds who often know one another or share an affinity group, and who are eligible for significant premium refunds based on individual and group loss history, are less likely to file fraudulent claims than are those covered by large, more anonymous carriers that insure millions of people but don't offer much if any chance for premium recovery, even if policyholders are loss-free.

The potential opportunity here may be quite substantial. An estimated 10 percent of all P&C losses incurred and loss adjustment expenses spent are due to fraudulent claims, costing insurers (and ultimately their policyholders) about \$32 billion annually.⁴³ When non-P&C lines including life and health insurance are factored in, the Coalition Against Insurance Fraud "conservatively estimates the cost of fraud at \$80 billion annually."⁴⁴ If even a fraction of these fraudulent outlays are eliminated in a peer-to-peer exchange, that could lower the overhead cost of insurance considerably and make such alternative risk-transfer vehicles a formidable competitor for standard carriers.

Figure 6: More insurers will crowdfund coverage through peer-to-peer facilities



Retroactive crowdfunding is another emerging alternative source of capital. One such high-profile effort was initiated in Ferguson, Missouri in 2014, after local businesses were damaged or destroyed during public protests. A number of affected business owners sought contributions over the Web with a GoFundMe campaign to help cover uninsured rebuilding or relocation expenses.⁴⁵



What should insurers be doing to disrupt themselves?

New forms of risk pooling are undermining the unique value proposition and pricing power of mainstream reinsurers and primary carriers. Insurers might head off these challenges through mitigation, adaptation, or some combination of each.

To mitigate the effect of rising capacity, insurers in markets impacted by securitization could fortify their positions through a merger or acquisition (M&A). Deloitte's 2015 Insurance M&A report identified "intense competition from traditional and alternative sources of capital (e.g., insurance-linked securities, catastrophe bonds, etc.)" as among the prime "triggering mechanisms driving reinsurance firms to consolidate." The report said "transactions will focus both on increasing scale and product breadth (to enhance marketplace positioning) and on expanding into primary specialty insurance (to diversify revenue sources and insulate from competition)."⁴⁶

As noted earlier, insurers are also likely to target fintech companies for acquisition or startup financing in an effort to import innovation into an industry that has been hard put to generate it organically.⁴⁷

Meanwhile, a number of P&C carriers—both primary and reinsurance—are disrupting their own operating models and turning securitization to their advantage by facilitating capital market risk-transfer initiatives on behalf of their clients. Others are issuing insurance-linked securities to help spread their own risks.⁴⁸

Looking ahead, annuity carriers concerned about financing lifetime income guarantees with lifespans on a rising trajectory could tap the capital markets to hedge long-term liabilities with investor-driven longevity bonds. Securitization could similarly become a major factor for life insurers in accounting for catastrophic mortality exposures raised by terrorism and pandemic events.

Meanwhile, if crowdfunding catches on in a big way as part of the growth in the sharing economy, traditional carriers could be cut out of a large layer of premiums. On the other hand, insurers could participate by backstopping peer-to-peer groups with coverage above a certain loss benchmark, as well as by providing fee-producing administrative services (see Figure 7). Insurers could also initiate and manage their own peer-to-peer groups, generating subsidiary revenue by again providing both a backstop and administrative services.

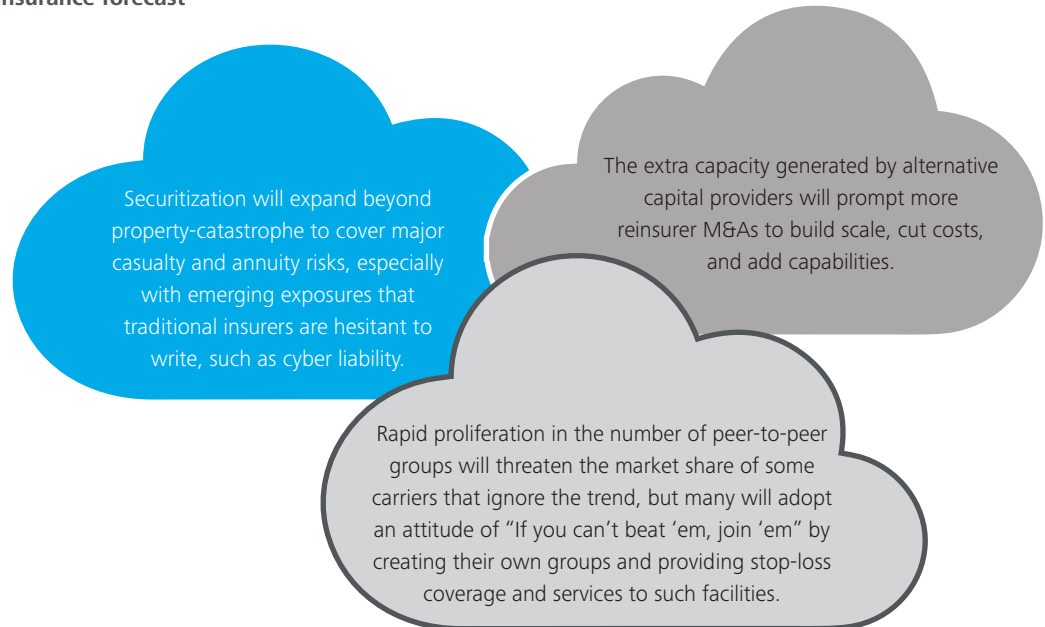
After-the-fact crowd-funded "insurance" to cover losses without prearranged policies, such as the effort to finance repairs in Ferguson, Missouri, may resemble charitable contributions more than traditional risk transfer at the moment. But a more formalized retroactive program backed by stop-loss insurers could be initiated in which individuals or small-business owners commit to raise funds on their own after a loss along the lines of a large deductible program, but then draw on traditional stop-loss policies if the claim exceeds a certain level.

Figure 7: Insurers could coexist with peer-to-peer groups



Life insurers could similarly support such grassroots risk-transfer initiatives. What if people who have a relatively clean gene map come together online to pool their risk? If someone in the pool dies, everyone pays a modest, agreed upon amount. If no one in the group is lost in a given year, no one pays anything beyond a modest membership fee to cover operating expenses. Anything in between is considered their “premium” for coverage.

Our insurance forecast





Disrupt or be disrupted

Disruption isn't likely to be a singular event for insurers, but rather an ongoing challenge. As a result, efforts to mitigate the impact of disruptive trends, as well as capitalize on the growth opportunities they present, will be part of a continuous journey rather than a final destination.

Carriers will need to constantly innovate and experiment as they adapt to the accelerating evolution in technology and consumer expectations, reinventing their products, systems, and business models accordingly. Speed is of the essence, as insurers may not have much time in many

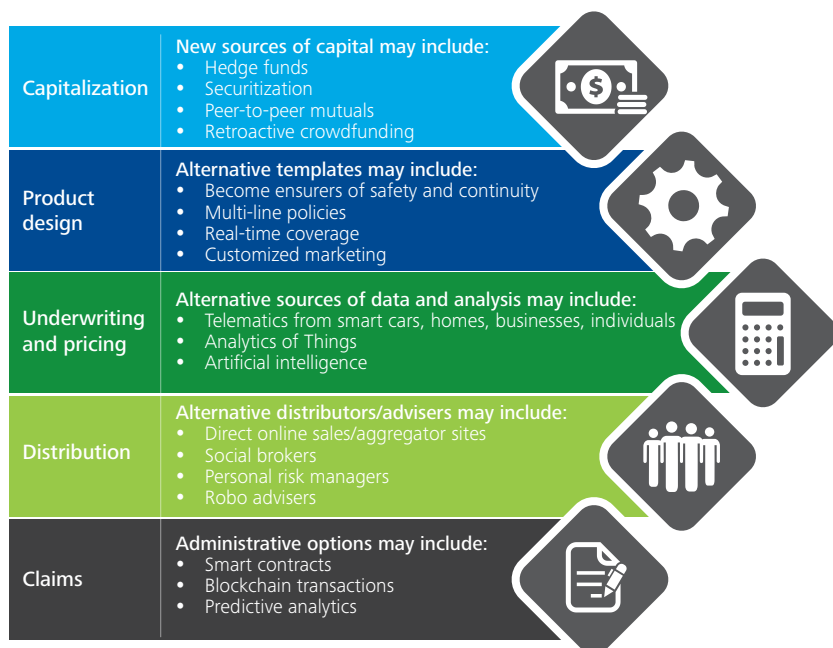
cases to transform their operations, policies, and personnel in response to an emerging strategic threat or opportunity.

Insurers should therefore put together a long-term strategic plan to stay ahead of these emerging trends and new types of players, while keeping up with business model adjustments being made by more traditional competitors. Rather than be victimized by disruptive developments, insurers should be proactive in turning them to their advantage, in some cases perhaps by working with complementary providers from outside the industry.

To start, insurers might try looking through the eyes of non-legacy competitors contemplating the potential to enter the market as a disruptor of the status quo. If they were starting an insurance company from scratch today (see Figure 8):

Figure 8: Reinventing the traditional insurance company

How might a new challenger start an insurer from scratch leveraging disruptive options?



- How might they attack the friction-adding, unproductive time, and cost factors hindering current business models, and what might they do to make a better mousetrap to capture existing and untapped profit pools?
- How would they go about capturing a greater volume and higher quality of data than they do now, and how might they leverage and monetize new types and sources of information to gain and maintain a competitive advantage?
- How might they reinvent their business model and processes to improve customer experience, in order to generate growth and a better bottom line?
- Last but not least, how might they attract new capital into the business, and what efficiencies could they achieve to improve the industry's comparatively low return on equity?

These are among the critical questions insurers will need to address by coming up with innovative solutions before others—both within and outside the traditional insurance industry—beat them to it.

Endnotes

- ¹ "Captives and Other Risk-Financing Options," Insurance Information Institute, March 2016.
- ² Calculation extrapolated based on Insurance Information Institute figures on 2014 P&C net premiums written, part of the Commercial Lines section on www.iii.org.
- ³ Laura Mazzuca Toops, "Harris 'Reputation Quotient' Survey Shows Insurance Should Play to Strengths," *PropertyCasualty360*, May 7, 2014.
- ⁴ Daniela Yu and Chris Portera, "Insurance Companies Have a Big Problem with Millennials," *Gallup Business Journal*, March 5, 2015.
- ⁵ Andrew G. Simpson, "Entrepreneurs Raise \$13 Million to 'Reinvent' U.S. P/C Insurance with Peer-to-Peer Insurer," *Insurance Journal*, December 8, 2015.
- ⁶ *Ibid.*
- ⁷ Sam Friedman, Michelle Canaan, Nikhil Gokhale, "Voice of the Annuities Consumer: Exploring Innovative Approaches to Accelerate Annuities Market Growth," Deloitte University Press, May 22, 2015.
- ⁸ "The Future of Financial Services: How Disruptive Innovations Are Reshaping the Way Financial Services Are Structured, Provisioned and Consumed," A Report from the World Economic Forum, in Collaboration with Deloitte, 2015.
- ⁹ Sam Friedman, Michelle Canaan, Nikhil Gokhale, "Small Business Insurance in Transition: Agents Difficult to Displace, but Direct Sellers Challenge Status Quo," Deloitte Center for Financial Services, November 2015.
- ¹⁰ Deloitte analysis of data from SNL Financial.
- ¹¹ *Ibid.*
- ¹² Walmart Stores, Inc., "Walmart Works with AutoInsurance.com to Bring Customers First-of-Its-Kind Comparison Service," press release, April 30, 2014.
- ¹³ Rich Hurley, Peter Evans, Arun Menon, "Insurance Disrupted: General Insurance in a Connected World," Deloitte LLP (UK), 2015.
- ¹⁴ *Ibid.*
- ¹⁵ *Ibid.*
- ¹⁶ Bought By Many LTD, "About Us," boughtbymany.com, accessed October 23, 2015.
- ¹⁷ Tim Zawacki, "Berkshire Hathaway Targets 2016 for Direct-to-Small Business Insurance Platform Launch," SNL Financial LC, October 9, 2015.
- ¹⁸ Boris Lukan, "2016 Insurance M&A Outlook: A Year of Continuing Exuberance," Deloitte Development LLC.
- ¹⁹ David Schatsky & Ragu Gurumurthy, "Cognitive Technologies: Applying Machine Intelligence to Traditional Business Problems," Deloitte University Press, October 6, 2015.
- ²⁰ Jim Eckenrode, "The Derivative Effect: How Financial Services Can Make IoT Technology Pay Off," Deloitte University Press, October 13, 2015.
- ²¹ Sam Friedman, "Long Range Vision Trumps Myopia When Capitalizing on Tech Opportunities," *Quick Look Blog*, Deloitte Center for Financial Services, January 27, 2016.
- ²² Insurance Information Institute, website accessed December 4, 2015.
- ²³ *Ibid.*
- ²⁴ 2014 Occupational Outlook Handbook, US Bureau of Labor Statistics, website accessed December 4, 2015.
- ²⁵ *Ibid.*
- ²⁶ Statistics from "Life Insurance Operations (LIONS) Benchmarking Program," Deloitte Global Benchmarking Center, provided December 15, 2015.
- ²⁷ John Lucker, "The Analytics of Things: Why IoT Isn't Enough," Deloitte Development LLC, May 20, 2015.
- ²⁸ Insurance Information Institute, *Property/Casualty Insurance Premiums by Line, 2015 Insurance Fact Book*.
- ²⁹ Robert P. Hartwig and Claire Wilkinson, "Cyber Risks: Threat and Opportunities," Insurance Information Institute, October 21, 2015.
- ³⁰ ABI Research, "Risks to Drive \$10 Billion Cyber Insurance Market by 2020," July, 2015.
- ³¹ "The Future of Financial Services: How Disruptive Innovations Are Reshaping the Way Financial Services Are Structured, Provisioned and Consumed," A Report from the World Economic Forum, in Collaboration with Deloitte, 2015.
- ³² *Ibid.*
- ³³ Artemis Catastrophe Bond and ILS Dashboard, accessed March 17, 2016.
- ³⁴ Andy Mais, "Securing Tomorrow: The Ripple Effects of Insurance-Linked Securities in the Reinsurance Market," Deloitte Center for Financial Services, January 2016.
- ³⁵ Monica Ningen, "Closing the Protection Gap Before the Next Natural Catastrophe Event Occurs," *PropertyCasualty360*, September 14, 2015.
- ³⁶ *Ibid.*
- ³⁷ Aon Benfield, Inc., "Reinsurance Market Outlook," January 2016.
- ³⁸ "Friendsurance: The P2P Insurance Concept," www.friendsurance.com, accessed October 6, 2015.
- ³⁹ Andrew G. Simpson, "Entrepreneurs Raise \$13 million to 'Reinvent' U.S. P/C Insurance with Peer-to-Peer Insurer," *Insurance Journal*, December 8, 2015.
- ⁴⁰ Gather, www.gatherins.com, accessed December 9, 2015.
- ⁴¹ Insurance Information Institute, "Insurance Fraud," December 2015.
- ⁴² "By the Numbers: Fraud Statistics," Coalition Against Insurance Fraud, www.insurancefraud.org, accessed March 17, 2016.
- ⁴³ Danny Wicentowski, "Juanita Morris' Boutique Was Torched During Ferguson Unrest, Now It's History," *Riverfront Times* (blog), January 30, 2015.
- ⁴⁴ Boris Lukan, "2015 Insurance M&A Outlook: Continuing Acceleration," Deloitte Development LLC.
- ⁴⁵ Boris Lukan, "2016 Insurance M&A Outlook: A Year of Continuing Exuberance," Deloitte Development LLC.
- ⁴⁶ Artemis, "Alternative Capital: A Resource for Reinsurance Industry," July 16, 2015.

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