A Roadmap for Winning as Insurance Goes Digital

- Forks in the Road
- Motor Insurance 2.0
- Digital Switching Behavior
- Digitizing Customer Journeys and the New Insurance IT Model
- Digital Disruption in the US Small-Business Insurance Market
- Elevating Compliance Risk Management in Insurance
- Creating Value in Insurance M&A
- Building a Digital Technology Foundation in Insurance
- Doubling Down on Data with a Target Operating Model
The Boston Consulting Group (BCG) is a global management consulting firm and the world’s leading advisor on business strategy. We partner with clients from the private, public, and not-for-profit sectors in all regions to identify their highest-value opportunities, address their most critical challenges, and transform their enterprises. Our customized approach combines deep insight into the dynamics of companies and markets with close collaboration at all levels of the client organization. This ensures that our clients achieve sustainable competitive advantage, build more capable organizations, and secure lasting results. Founded in 1963, BCG is a private company with 85 offices in 48 countries. For more information, please visit bcg.com.
The insurance industry is being challenged to rethink the way it does business as digitization changes the economic landscape and new players enter the market threatening to take a substantial share of the insurers’ value chain. In addition, more restrictive regulations, shifting consumer behaviors, new means of distribution and a low interest rate environment are putting immense pressure on insurers to run their organizations leaner and more efficiently. This leads to a consolidation in the market and – at the same time – creates tremendous growth opportunities.

In this publication The Boston Consulting Group puts together a collection of our recent leading edge reports on the insurance industry.

I hope you will find some valuable insights in this collection of articles. Please do not hesitate to reach out to our experts and feel free to provide feedback by sending an email to insurance@bcg.com.

Warm regards,

Pia Tischhauser
Global Leader, Insurance Practice
2015 brought record sales and profitability to the global auto industry. But current success is no guarantee of future success: it’s clear to all that a new road lies ahead.

Fueled by new technology and consumer needs, nontraditional competitors are entering the auto industry with connected software, artificial intelligence, alternative fuels, and shared mobility networks. For those new entrants—such as Tesla with electric vehicle technology, Uber with its collaborative consumption model, and Google and Apple with autonomous vehicles—industry shifts signal opportunities. But for incumbents, they represent uncertainty and perhaps even an existential challenge.

Maybe we’re headed toward an upside-down world, where attackers with deep pockets take control, offering vehicles that are electric, fully autonomous, and not owned but shared through smartphone apps. Upheaval in other industries reminds us how swiftly incumbents can lose their advantage. Think back to 2007, when Nokia had record sales and more than 50% of the global smartphone market. That same year, Steve Jobs introduced the iPhone. The rest is history. Nokia had missed a crucial inflection point in the smartphone business model—toward connected software and a seamless user experience—and experienced a swift and unstoppable decline.

Change in the auto industry could also be much less dramatic, considering the many factors that must fall into place for radical new futures to unfold. For example, electric vehicle adoption is complicated by low oil prices, uncertainty about future tax credits, and the challenging economics of electric charging stations; autonomous vehicle adoption requires error-proof technology, regulatory clearance, and consumers’ willingness to change how they think about mobility; and shared ownership models must be customized for cities and suburbs, where people have very different mobility needs.

Whether the shift in the auto industry is sudden or gradual, profits will continue to flow from the current business model in the near term. But incumbents cannot bank on this continuing indefinitely. Nor can they bank on any particular scenario. Preparing for the possibility of change will require developing new capabilities and shifting resources away from currently successful business models. Incumbents face a difficult balancing act. In an industry whose dominant model has remained virtually the same for more than 75 years, they must navigate new tradeoffs in resource deployment as they seek to fulfill current demand for profit-
able core products while preparing for the future.

A Cross-Industry Predicament

This situation is not unique to the auto industry. In many industries, incumbents can no longer count on stability from long-standing business models, oligopoly structures, and stable regulation. Consider banking, where fully digital models are undermining branch networks; energy, where smart grids, renewables, and upgraded battery technology are reshaping utilities’ revenues; and cable television, where content providers are selling directly to consumers.

The traditional insurance business model is also on the brink of disruption. The industry has provided higher returns than most other sectors since the financial crisis of 2007–2008—not because incumbents are redefining the future but because they are increasing distributions to investors. Management teams have recognized that many of their traditional approaches and products are mature, so maintaining the stock price requires increasing dividends to investors and curtailing reinvestment. Since the start of 2010, European insurers have reduced their investment in new policies by 15% and as a result have increased distributions to shareholders by more than 100%.

Incumbents cannot continue this pattern unless they deliver sustainable profit growth. New business models are being introduced, such as using ubiquitous data to identify and underwrite attractive customers; replacing expensive distribution channels with highly customized digital propositions; and connecting motor and health insurance products to customers’ everyday lives through the Internet of Things.

Traditional insurers, like incumbents in many industries, must innovate and adapt or face losing their industry leadership. Doing so requires switching from old to new business models and satisfying customers and investors during the transition.

The Need for Strategic Ambidexterity

Even if companies know change is coming, it is very hard to recognize exactly when and how to shift business models.

Challenges for Large, Established Companies

Mastering ambidexterity is inherently difficult, because it requires firms to embrace contradictions. Running the business involves optimizing the known in order to deliver quarterly profits; success is often achieved through standardization, scale, efficiency improvements, and top-down management. Conversely, reinventing requires experimenting with the unknown; success depends on a culture of entrepreneurial risk taking, a flexible, decentralized structure, and a focus on the long term.

Ambidexterity is especially difficult for large, established companies. We found in recent research that they are prone to overexploiting the products and business models that were the foundation of past success. Measuring firms’ propensity for exploration using the present value of growth options (PVGO) as a percentage of market capitalization, we found that large, established companies are about 20 percentage points less exploratory.
Large, established companies tend to overestimate the longevity of their business models and underinvest in new ones.

What is clear is that incumbent automakers must step off the well-trodden path to overexploitation. We analyzed PVGO over the past ten years for large automakers, the industry as a whole, and select challengers: non-auto companies that recently entered the space. The results were striking. Whereas the industry’s and large automakers’ orientation toward exploration has not increased, the challengers’ has steadily increased, starting off about 5 percentage points higher than the industry’s in 2004 and growing to a 10-point spread by 2014. (See Exhibit 1.)

Approximately 50% of large automakers are already in the success trap, compared with less than 10% of smaller auto players. (See Exhibit 2.) This suggests that the incumbents should not wait to experiment with new business models.

**Five Imperatives to Build Ambidexterity**

Fortunately, succumbing to overexploitation is far from inevitable. For incumbents in any industry ripe for disruption, we offer five steps.

1. **Understand how change impacts each part of your business.** The Strategy Palette is a useful tool in this regard. (See Exhibit 3.) Auto industry incumbents, like those in many industries, have until recently faced a classical environment, which is stable and predictable,
and where scale is an advantage. The auto industry now faces increasing unpredictability from changes in technology, consumer trends, and regulations. The same forces also create greater malleability and the opportunity to shape industry evolution by influencing technology, customer preferences, and regulatory standards, often through collaboration with other players.

2. Choose the right approaches to strategy and execution. Having understood the strategic environments in which they operate, firms must employ the appropriate approach to strategy and execution for each. The classical approach, built on analysis and planning, works well in stable environments, which are highly predictable. But unpredictable or malleable environments require very different approaches and capabilities.

For example, auto incumbents may find that the classical approach is still appropriate for their core businesses. But new businesses such as autonomous and alternative-fuel vehicles may require adaptive, visionary, or shaping approaches.

3. Build an adaptive capability. Firms in unpredictable environments would be ill-advised to set a strategic direction based on an unreliable “forecast.” Instead, they need to substitute experimentation for prediction in order to place and manage bets on the future.

A portfolio of experiments lets companies quickly test and refine new products and business models and thus adjust rapidly to changing market conditions. Success with such adaptive experimentation requires switching from the classical mindset of “be big” to the adaptive imperative to “be fast.”

To do that, companies must get better at exploiting change signals to inform bets and challenge long-held assumptions to uncover blind spots. Adaptive enterprises monitor experiments using metrics.
suited to the “be fast” approach, such as time to market, cost per experiment, and experimental yield. Firms must also capture and exploit lessons from both successes and failures.

Telenor, the Norwegian telecom company, is a classical incumbent that built an adaptive capability. As the industry evolved from traditional voice to data and Internet, scale advantage diminished. Telenor responded with adaptive experimentation, shortening its planning cycle and focusing on innovation and speed to market. It successfully navigated the industry transition, launching several successful data-oriented offerings.

4. Build a shaping capability.
Incumbents can avoid being a victim of change by using their reach and influence to become instead an orchestrator of change. Orchestrators coordinate a diverse ecosystem of players that share their capabilities, distribute risk, and accelerate market development.

Orchestration requires a shift in mindset for incumbents, from exclusivity to openness and from control to flexibility. To build a healthy network capable of adapting to change, orchestrators should reach beyond industry bounds to find new partners that can make unique contributions. They must also create mutual trust and allow the free flow of ideas and information. This requires creating win-win opportunities for participants and focusing on holistic metrics such as the growth or profitability of the entire network.

We already see signs of this new mindset in the auto industry. For example, Toyota followed Tesla’s lead by opening its hydrogen fuel cell patents, sacrificing complete control over IP in order to bring more participants into its ecosystem. And Ford recently communicated the need for nontraditional partners, such as Google. As Don Butler, Ford’s executive director of connected vehicles and services, said, “We compete but in other senses we are partners. It’s something we have to become accustomed to.”

5. Create the organizational context for ambidexterity.
The ability to exploit the present while exploring the future calls for an organizational context that supports both old and new businesses and allows for adjustment as conditions change.

Firms should consider separating exploratory business units from exploitative core activities and giving them differentiated “performance contracts” with tailored goals, metrics, and incentives. A good example is BMW’s Project i, which manufactures plug-in electric vehicles as a sub-brand of BMW. As its chief, Ulrich Kranz, describes, “I had the freedom to assemble a team the way I wanted. The project was not tied to one of the company’s brands so it could tackle any problem. We were allowed to completely break away from the existing structures.”

In especially fast-changing or uncertain situations, firms should avoid rigid structural solutions and instead encourage free information flow among employees and with customers and competitors. Alibaba is a textbook example: it deals with industry turbulence using self-steering teams. When a team member sees a new opportunity, he or she can initiate a co-creation process, in which employees develop new business ideas directly with customers. This fluidity allows the business to continually match its approach to a changing market.

The road ahead presents both tremendous opportunities and real dangers for incumbents. In the many industries facing disruption from creative and nimble players, incumbents can survive if they become truly ambidextrous. That capability will help them not only fend off attacks in the near term but also position themselves for future growth and success.

Notes
1. PVGO is based on a methodology developed in Han T.J. Smit and Lenos Trigeorgis, Strategic Investment: Real Options and Games, Princeton University Press, 2004. PVGO is calculated as the residual from a company’s market capitalization and the perpetuity of its current dividend stream (taking into account firm-specific beta, yearly US
risk-free rates, and an equity market premium derived from investor surveys) and expressed as a proportion of the company’s market capitalization. We consider PVGO to be a useful proxy for the true extent of exploration activities but by no means an exhaustive measure. A more granular assessment requires internal company data.


Martin Reeves, is a senior partner and managing director in the New York office of The Boston Consulting Group, the director of the BCG Henderson Institute, and a coauthor of Your Strategy Needs a Strategy (Harvard Business Review Press, 2015). You may contact him by e-mail at reeves.martin@bcg.com.

Rachel Bergman is a project leader in the firm’s New York office and an ambassador to the BCG Henderson Institute. You may contact her by e-mail at bergman.rachel@bcg.com.

Antoine Gourévitch is a senior partner and managing director in BCG’s Paris office and a member of the firm’s Automotive and Technology Advantage practices. You may contact him by e-mail at gourévitch.antoine@bcg.com.

Miguel Ortiz is a senior partner and managing director in the firm’s London office and the firm’s worldwide topic leader for insurance. You may contact him by e-mail at ortiz.miguel@bcg.com.
MOTOR INSURANCE 2.0
EXECUTIVE SUMMARY

by Ofir Eyal, Jean-Christophe Gard, Pia Tischhauser, Benoît Macé, and Miguel Ortiz

This Blue Paper was prepared jointly by Morgan Stanley Research and Boston Consulting Group (BCG). It follows on from September 2014’s joint Blue Paper Insurance and Technology: Evolution and Revolution in a Digital World. We have collaborated globally, involving the insurance, technology and autos groups at each organisation.

In researching this report, we conducted 45 interviews with senior executives of insurers, OEMs and technology providers globally. In

![Chart showing methodology and approach]

addition, we commissioned a proprietary 
global survey of drivers and motor insurance 
customers in 11 countries.

We also constructed seven proprietary coun­
try market models to forecast the granular 
year-on-year impact of the introduction of 
technologically advanced vehicles and move 
to shared mobility, from 2015 to 2040. See Ex­
hibit 1 for a summary of our methodology 
and approach.

False sense of security

We believe there is a false sense of security in 
the motor insurance market - in our view the 
market is ripe for disruption by new entrants, 
the personal motor market could shrink by 
up to 35-67% by 2030 in mature countries, 
and a significant part of the ~$200bn² of mar­
ket capitalisation globally could be at risk.

Six underlying trends

There are several underlying trends converg­
ing on the industry: car technology, new mo­
tility, availability of data, digitisation, regula­
tion, and world economics:

1. Innovation in technology, not only 
within the car, from collision avoidance 
features through to fully driverless 
vehicles, but also external technologies, 
which could lead to better accident 
analysis and safer driving through tighter 
speed control.

2. Rise of alternative mobility models. For 
example, ride-hailing, ride-sharing and 
car-sharing, which are gaining traction in 
urban centers with consumers increasing­ly 
switching part of their private miles to 
alternatives, foregoing car ownership and 
built multimodal journeys.

3. Availability of data, including the 
ongoing penetration of connected cars 
and the development of new sources of 
data, both proprietary and publicly 
available.

4. Digitisation, fundamentally changing the 
way in which customers interact with 
car-related data and services, and forcing 
insurers to integrate themselves into an 
increasingly digital mobility ecosystem.

5. Regulation, both at regional and local 
levels, which may slow down or accelerate 
key developments in motor insurance. For 
example, mass adoption of car safety 
features and speed control measures, 
deployment of driverless cars and new

Exhibit 2 | Amongst consumers willing to switch away more miles in the future, 
42% could stop owning a car, which is 25% of all consumers


1Question: You have stated that you see yourself switching some of the miles you currently travel in your private car to 'alternative mobility'. When you do this will you stop owning a car? Morgan Stanley and BCG Insurance Customer Survey 2016.

Amongst consumers willing to switch away more miles in the future, 42% could stop owning a car, which is 25% of all consumers:

<table>
<thead>
<tr>
<th>% of respondents¹</th>
<th>Straight sample average</th>
</tr>
</thead>
<tbody>
<tr>
<td>No, definitely not</td>
<td>10%</td>
</tr>
<tr>
<td>No, probably not</td>
<td>18%</td>
</tr>
<tr>
<td>I don’t know</td>
<td>29%</td>
</tr>
<tr>
<td>Yes, likely</td>
<td>27%</td>
</tr>
<tr>
<td>Yes, definitely</td>
<td>15%</td>
</tr>
</tbody>
</table>


¹Question: You have stated that you see yourself switching some of the miles you currently travel in your private car to 'alternative mobility'. When you do this will you stop owning a car? Morgan Stanley and BCG Insurance Customer Survey 2016.
insurance coverage requirements, ownership of data etc.

6. **World economics**, leading to the ongoing shift of car parc growth to emerging markets.

When combined, these various disruptive forces could have a material impact on the market and re-shape the competitive landscape in a shorter time frame than many insurers may expect. In this report we have sized this combined impact.

**Highlights from our global consumer survey**

Our proprietary global consumer survey - which we conducted in 11 countries around the world – supports these trends and provides some fascinating insights.

**From car ownership to car usage**

Although car ownership remains strongly valued by >90% of respondents across all markets, ages, income levels and residential areas, consumers are increasingly considering foregoing car ownership should convenient, price effective alternatives become available. Only 60% of consumers would keep owning a car they rarely use, and 25% would be ready to stop owning a car given their likely shift to alternative mobility (see Exhibit 2 - Exhibit 3). We believe that the shift is likely to show initially as a reduction in the number of cars per household, as multiple-car owners are already less keen on replacing second and third cars compared to their primary car (see Exhibit 4).

We also expect to see a gradual shift of private miles to public transportation and shared miles, and a gradual reduction in miles traveled per private vehicle per year.

**Consumers seek advanced car safety features**

Consumers across all markets are willing to pay more and bring car purchases forward for accident proofing technology. ~80% would pay to have these features in their future car; at least 65% would even pay to retrofit into their current vehicle; 75% would accelerate purchase plans in order to have the features as early as possible. Consumers from emerging markets and Germany are willing to spend more on such technologies (see Exhibit 5).

We also see broad support for regulatory stimulus. ~70% consumers would support their governments making accident reduction technology mandatory in all new cars, and ~20% would actively lobby for it (see Exhibit 6).
Financial incentives, whether when purchasing the car or in the form of lower insurance premiums, would further accelerate the penetration of accident proofing technology.

**Consumers are generally open to autonomous vehicles**

54% of consumers are very open to taking a ride in an autonomous vehicle, while 52% would consider purchasing one. For 40% of these consumers the key reason is safety (although it should be noted that safety concerns are also the main reason behind resistance to driverless cars).

These findings are consistent with a separate study conducted by BCG and the World Economic Forum which found that 58% of consumers would take a ride in a fully driverless car, and ~30% of consumers would be willing to pay more than $5k extra for an autonomous car.

We note, however, that consumer sentiment towards autonomous vehicles is volatile and overly sensitive to isolated events (e.g. media coverage of accidents involving the testing of a driverless car). Therefore, although inevitable, the transition towards driverless cars may not be a smooth ride.

**The insurance digital experience remains a key area for improvement**

When compared to our 2014 consumer survey, insurers appear to have improved their digital experience, but consumers are still dissatisfied past the acquisition phase. 56% of consumers rate their online experience with insurers as good or excellent (a 2 point increase vs our 2014 survey), although insurers are still ranked in the middle of other online service providers (see Exhibit 7).

We find that consumers prefer online and remote (mail/phone) channels over face-to-face across all of the motor insurance value chain. Consumer adoption is higher for mobile and tablet apps than web portals, but the overall digital customer experience remains one of the most frequently mentioned pain points.

60% consumers using only indirect (intermediated) channels would consider purchasing directly from insurers with a better online offering. Improving the digital experience would not only improve customer acquisition and engagement but also unlock efficiency gains, especially in policy changes and claims processing, where the share of human interactions and online dissatisfaction remain the highest.
Consumers (especially younger drivers) ready to turn to nontraditional players

55% of consumers are willing to purchase insurance from a nontraditional player. When asked to select across a variety of nontraditional players, 40% of customers would consider purchasing motor insurance from OEMs, more than 10 points ahead of tech giants or telcos. This may be because OEMs are already a part of the insurance customer journey for 9% of customers, especially in research (12% of consumers) and purchase (14%). Developed markets, especially Japan, Italy and the US, lead the pack.

As expected, young drivers are even more willing to purchase from non-traditional players; however, this segment would prefer to purchase from a start-up than from an OEM or a tech giant.

Four key implications for the future of motor insurance

We expect that the above trends will have four main implications for the future of motor insurance:

1. **Decreasing motor insurance market size in mature economies**, we estimate by 15-72% by 2040 in nominal terms (in a Limited disruption scenario), driven by downward pressures on the size of the car parc and reduced accident frequency.

2. **Shift from personal lines to commercial lines** (from a ~80/20 personal vs. commercial in 2015 to ~50/50 by 2030 and ~30/70 by 2040), implying a personal motor market in mature markets that is up to 35-67% smaller than today in nominal terms in 2030.

3. **Rise of non-traditional players**, building an underwriting advantage in data, analytics, digital capabilities and direct customer access to take significant (and profitable) share of the remaining personal motor market from incumbent insurers.


1. **Downwards pressure on insurance market size (both short and long term)**

In a Limited disruption scenario we expect...
the total insurance market size in mature economies to shrink by ~15-72% by 2040.

In the short term, despite some resilience, market growth will progressively slow down relative to trend. For example, in the UK by 2025 we forecast premiums could be 17% lower than if premiums had continued to grow at same average rate as for the past 10 years (1.9%). There are two main drivers of this slowdown: (i) a downward pressure on car volumes driven by the stabilisation then slight decrease of the car parc due to consumer adoption of shared mobility solutions, and (ii) a reduction in accident frequency due to the adoption of collision reduction and speed management technology, which will push claims down and lower prices.

Accident severity evolution is less clear. Although there may be an overall increase in severity as more expensive car parts lead to higher repair costs per collision, this is counterbalanced by lower bodily injury claims as the average speed per collision is likely to fall.

When forecasting market size, we believe that there is too much focus on the end state of fully autonomous (Level 5) vehicles. Level 1 and 2 cars (which are already on sale) are significantly safer than predecessors, which is likely to have an immediate impact on claims patterns. On a 5-10 year view, it is these features, and the potential for connected cars and other external technologies to enable stricter speed controls, that will materially impact the risk pool.

In the short term, the decrease in total claims could lead to a boost to profitability in markets where premiums do not fall as quickly as claims. For example, regulatory constraints, price opacity and low levels of competition can lead to stickier pricing in selected markets. In the medium term, we expect the overall profit pool to decline in line with reduced risks.

We have also considered a Heavy disruption scenario, in which a combination of technological, regulatory and social factors accelerate the transformation of the motor insurance market of mature economies, reducing it by 18-60% by 2030 and 54-84% by 2040.

In Exhibit 8 we show the relative size of the various country markets we have modeled in the base case or ‘Limited disruption’ scenario and the ‘Heavy disruption’ scenario. We think premiums will decrease substantially across
all of the mature markets that we have modeled.

2. Shift from personal lines to commercial lines

We expect commercial lines to progressively replace personal lines, as a result of two factors.

First, increasing usage of shared mobility solutions leads to a rise in the number of fleets and commercial vehicles (which is magnified in terms of premium impact given higher utilisation, or miles per vehicle, for shared vehicles versus private vehicles). In our base case (Limited disruption) scenario, we model for commercial lines to represent 49% of market premiums by 2030, and 67% by 2040 compared with 17% at present across the seven markets that we model. We see immediate challenges for personal lines motor where volumes are likely to decline, a trend masked at the aggregate level by commercial lines growth.

Second, the risk pool will shift towards product liability, as vehicles rather than drivers progressively become the main source of accidents.

THREE PLAUSIBLE TYPES OF INSURANCE DISRUPTOR

**Tech giants:** a player such as Google, Facebook, Apple or Amazon for instance could push targeted, highly customised insurance offers to customers via their smartphones. Selection, underwriting and pricing would leverage customer data from the use of navigation services and apps, such as Google Maps and Waze.

**OEMs:** car manufacturers could push tailored insurance offers to connected car drivers via the car dashboard. Pricing would be informed by driving data collected from the car, with analytics possibly sourced from partners.

**Telcos:** telecom companies could leverage their direct access to smartphone customers, along with the customer data they collect – partnering with third parties for pricing and underwriting.
3. DISRUPTIVE THREAT FROM NON-TRADITIONAL PLAYERS

As the value of insurers’ proprietary data and traditional expertise diminishes, the traditional motor insurance model is likely to be heavily disrupted. We see a number of non-traditional entrants whose capabilities allow them to extract value from the market. Indeed, a number of the innovations we are already seeing have been driven by other players: for example, OEMs developing tailored products for their drivers, parts manufacturers mapping the roads, and telematics providers delivering value-add propositions to the digital customer.

We expect data to become a major point of contention in the years to come. Traditional insurers may very well find themselves forced to pay to access driving data unless they can secure it directly through much stronger customer relationships. Moreover, sophisticated counterparties such as shared mobility fleet owners will not only own the data but are likely to perform their own analytics – dramatically reducing the value proposition of an insurer.

Furthermore, we think that a number of innovative models could emerge to dislodge incumbents from the most attractive risks.

Three components are essential to building an underwriting and pricing advantage to ‘cherry-pick’ attractive customers:

- Access to driver data, e.g. from connected cars and smartphones, which can be used to price motor risk as, or potentially more, accurately as using historical claims data
- Superior analytics capabilities combining private data with public data sources
- Direct customer access

In this report we have outlined a credible scenario where each of three types of organisations could take 4-9% of selected markets by 2020: Tech giants, OEMs and, to a lesser extent, Telcos.

Ultimately, insurers face the risk of becoming pure capital providers. Without ownership of the customer and with the erosion of their traditional advantage in the data and analytics necessary to price risk and manage claims and fraud, insurers face being marginalised to less profitable risk pools, and reduced importance in the value chain.
4. RISE OF EMERGING MARKETS
Growth in the motor insurance industry will increasingly shift to emerging markets, predominantly driven by increasing vehicle volumes and miles driven. We expect this growth to more than compensate for reduction in premiums per mile driven by lower accident frequency.

In 2015, China motor premiums represented ~13% of the global motor market, but we expect this share to increase to ~20% by 2025. In a Limited disruption scenario, we think premiums could grow to ~3.5x its current size by 2030 and ~4x by 2040. In a Heavy disruption scenario, we model for faster adoption of technology and think that premiums will still grow, albeit at a lower rate, and potentially triple by 2040. Eventually, we think that premium growth still slow and reach a peak around 2035-2040, although it could be closer to 2030 in a Heavy disruption scenario.

Value at Risk
When combined, we believe that these developments represent an imminent threat to incumbents and could put a significant part of ~$200bn of market value at risk (see Appendix 4 for companies included in the sample).

Exhibit 9 shows the percentage of P&C premiums from motor for major global insurers. We estimate that this represents ~$260bn of motor premiums in 2015, yielding ~$17bn post-
EXHIBIT 10 | We have quantified global insurers’ potential exposure to personal motor, limited commercial lines capability and to markets with declining premiums

<table>
<thead>
<tr>
<th>UK</th>
<th>Large share of premiums from motor</th>
<th>Writes more personal motor</th>
<th>Geographic exposure to markets with declining premiums</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admiral</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Aviva</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Direct Line</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>RSA</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>esure</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Hastings</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>AXA</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Allianz</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Generali</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Zurich</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Swiss Re</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Munich Re</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Hannover Re</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Scor</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>North America</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Geico</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Allstate</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Progressive</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Travelers</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Intact Financial</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Hartford</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Australia</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>JAG</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Suncorp</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>QBE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Japan</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Tokio Marine</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Sompo</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>MS&amp;AD</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>South Korea</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Samsung F&amp;M</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Dongbu</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Hyundai M&amp;F</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>China</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>PICC P&amp;C</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Ping An</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>CPIC</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Taiping Insurance</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Key

- Low exposure: <25% P&C GWP from motor, <25% motor premiums are personal, >50% premiums in growth markets
- Medium exposure: 25-50% GWP from motor, 25-75% motor premiums are personal, 25-50% premiums in growth markets
- High exposure: >50% GWP from motor, >75% motor premiums are personal, <25% premiums in growth markets


1) Large share of premiums from motor: <25% low exposure, 25-50% medium exposure, >50% high exposure.
2) Writes more personal motor: if more than 75% of motor premiums are from personal motor then high exposure, 25-75% medium exposure, <25% low exposure.
3) Geographic exposure to markets where we think premiums will decline - we look at total P&C exposure, as we do not have enough public disclosure of the geographic split of motor premiums

Large share of premiums from motor and representing ~$200bn market cap (a significant part of which is at risk). We see the UK insurers at most risk, while Continental Europe and South Korea are relatively less impacted.

Exhibit 10 shows a ‘heat map’ of global exposures for major insurers in each region. We have identified three ‘risk factors’ and for each insurer indicated whether we think there is low, medium or high exposure to each risk factor. The risk factors that we have identified are: 1) high percentage of P&C premiums from motor, 2) high share of personal motor premiums in total motor premiums, and 3) group P&C geographic exposure to mature markets, where we think premiums will decline dramatically.
Insurers must adapt - we consider three strategic plays

Although certain insurers are anticipating change, we think that the industry as a whole is underestimating the extent and timing of disruption. Whilst significant pain may not be felt in the short term, the next few years will be crucial for motor insurers to lay the foundations for success in the future state. Indeed there are many opportunities for insurers to prepare for this disruption – in the form of new offers, access to new data, improved customer experience, and digital distribution.

In the face of such disruption, we believe that incremental change is not an option: insurers must adapt. Each motor insurer should fundamentally reconsider all aspects of its operating model (including product and business mix, underwriting capabilities, distribution channels, cost structure, and acquisition strategy) as well as the potential response of competitors.

Broadly, we see three, non-exclusive strategic plays:

1. **Digital play:** By leveraging technology throughout the value chain, insurers will be able to fulfill modern consumers’ expectations regarding an end-to-end digital value proposition, improve data capture, analytics and risk management capabilities and achieve superior cost efficiency. We believe this is a necessary step in order to remain competitive. It is not, however, an easy change, requiring significant investment in capabilities, e.g. to transform the level of customer engagement, collect new data from multiple sources and use it in an integrated way across the organisation. We see the current organisational structure of insurance companies – with separate underwriting, servicing and claims functions – as a major impediment to this model.

2. **Partnership play:** To keep growing revenues within the motor insurance value chain and defend against potential disruptors, insurers may turn to strategic partners to secure access to data and customers or complement their range of coverage-related services (e.g. to cover journeys across multiple mobility solutions). OEMs, new mobility players, telematics manufacturers and telcos are the most likely partners, although others will emerge. As most potential partners compete on a regional or global scale, local insurers may be increasingly challenged to develop an attractive value proposition for them, which may lead to a progressive globalisation of the motor insurance market.

3. **Adjacency play:** Insurers may also look to expand into mobility related adjacencies in order to increase consumer engagement, collect more data, replace lost revenues and fuel future growth. Such moves could include expanding into adjacencies such as car safety features, car repairs, services related to roadside assistance, new mobility solutions, and products covering new risks such as cyber.

Choice of strategy will depend on size, global reach and business mix

We believe that the choice of strategy and timing of execution will depend on an insurer’s size, global reach and business mix. Large insurers will be better positioned to make the investments required to keep pace with technology. Global insurers are more likely to be able to form partnerships with disruptors than local players. Insurers focused on personal lines or reliant on an agent network may feel the pressure to adapt their model earlier or more drastically. Players with a predominantly young and / or urban customer base may be affected sooner - this is particularly so in markets such as the UK and US where there is a record of rapid digital adoption. There is no standardised approach, and the path to the future state is unlikely to be linear.

Ofir Eyal is a partner and managing director in the firm’s London office. You may contact him by e-mail at eyal.ofir@bcg.com.

Jean-Christophe Gard is a senior partner and managing director in the firm’s London office. You may contact him by e-mail at gard.jean-christophe@bcg.com.
Pia Tischhauser is a senior partner and managing director in the Zurich office of The Boston Consulting Group and global leader of the firm’s Insurance practice. You may contact her by e-mail at tischhauser.pia@bcg.com.

Benoît Macé is a partner and managing director in the firm’s London and Paris offices. You may contact him by e-mail at mace.benoit@bcg.com.

Miguel Ortiz is a senior partner and managing director in the London office of The Boston Consulting Group. You may contact him by e-mail at ortiz.miguel@bcg.com.
How Digital Switchers Are Disrupting Auto Insurers

Digitally adept consumers, or DIGITALS, are already 20% of the $180 billion US auto insurance market and are growing rapidly.

DIGITALS ARE LESS LOYAL AND MORE COSTLY TO SERVE THAN NONDIGITALS

They switch insurers more frequently and also take more time to decide...

Research switching in the first 9 months of buying a policy

Switch after starting to research

2.5x less likely to make a same-day switching decision, taking up to 2 weeks to decide

Their switching process is more complex, involving more channels...

30% more active across all channels

... and they heed more — and different — influencers

3x as likely to take broker or agent recommendation

3x as likely to take employer recommendation

21% 6%

10% 3%

Phone

Agent

Online

Especially price comparison sites (35% of digitals vs. 25% of nondigitals)
**MEET THE DIGITALS**

A multigenerational wave of technology adopters that’s growing faster than millennials and represents…

33% of millennials
25% of 35- to 54-year-olds
5% of those 55 or older

Digital switchers are less motivated by price alone…

69%
84%
34%
18%

Cite price as a motivation
Are motivated by a multipolicy discount or loyalty program

They represent the trend toward simplified, “fair” insurance
65%
Inclined to switch to a provider offering a fully online buying and service platform
45%
Inclined to switch to a usage-based (pay-as-you-drive) program

**DIGITALS LEAD THE SHIFT TO ALTERNATIVE PROVIDERS AND CHANNELS**

*Today, digitals are more willing to buy insurance from:*  

<table>
<thead>
<tr>
<th>Provider Type</th>
<th>Digitals Willing to Buy (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banks</td>
<td>42%</td>
</tr>
<tr>
<td>Online services and channels, such as Amazon and Google</td>
<td>38%</td>
</tr>
<tr>
<td>Household services companies, like telcos and home security firms</td>
<td>18%</td>
</tr>
</tbody>
</table>

And in 5 years, the fight for digitals’ wallets will escalate:

<table>
<thead>
<tr>
<th>What Digitals Willing to Buy (%)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Expect to purchase insurance directly from a carrier</td>
<td>52%</td>
</tr>
</tbody>
</table>

**WHAT INSURERS MUST DO**

**Challenges**  
Insurers’ advertising and brand expenses are rising, while digitals are pushing lifetime values lower

**Opportunities**  
Reevaluate ad, technology, and agency costs to identify true differentiators
Enlist brand advocates among existing customers, and tap broker/agent relationships to convert and retain digitals

**Challenges**  
Insurers aren’t equipped to sell to multichannel digitals in a cost-efficient way, making it harder to counter disruptive providers

**Opportunities**  
Turn digitals’ longer decision times to your advantage by making targeted counteroffers
Appeal to less cost-conscious digitals with policy bundling and multipolicy offers
C onsider this scenario. Rolf, age 32, lives in Berlin with his wife and their infant daughter, who is approaching her first birthday. One Monday morning, as he rides the bus to work from his new apartment in the city’s Wilmersdorf section, where the family moved over the weekend, Rolf downloads his insurance company’s mobile app and updates his account information. He is surprised and impressed when he discovers that inserting his new address triggers a series of 12 questions.

After providing the answers (which takes only half his 20-minute bus ride), Rolf realizes that he should consider increasing his property coverage for the contents of his home (the new apartment is larger than the old one, and he and his wife bought new furniture), and that he needs liability coverage against problems such as leaks (since he now lives on an upper floor). He has an appointment to speak by phone the next day with his agent to discuss life insurance to protect his newly expanded family. And the company has e-mailed him a link to information on its retirement products.

Before Rolf reaches work, his agent sends him an e-mail inquiry about his car coverage (which is with a different carrier), asking whether the move to a new home means less driving, which could in turn mean lower premiums. Rolf arrives at his office wondering why he hadn’t thought of those needs himself—but grateful that his insurer and agent had.

Although this scenario is unlikely to unfold today—in Germany or anywhere else—it will soon: the data and the technology necessary to support it already exist. The primary holdup is lack of ambition. Most insurers are locked into a products-and-process business model; they don’t put themselves in their customers’ shoes and consider the journeys that people need to take. Often, life events—such as an expanding family or a move to a new flat—trigger such journeys. Many insurers also fail to think about how they can adjust their products to make them more adaptable to digitization. And they may not assess how their business model, and the data and systems that support it, could better serve customers—and generate new revenue streams for the company while cutting costs—if they adapted the model to help guide these journeys.

The Journey, Not the Process

Insurers need to modernize and digitize their systems and business models. This is true even though companies throughout the industry have already invested billions of dollars or euros, and years of effort, in updating their systems. They have—or think they have—digitized the customer experience by building websites and mobile apps, creating digital offerings (online auto insurance, for
example), and constructing in-house digital capabilities.

The flaw in all of these undertakings, however, is that they attempt to apply digital technologies to a company’s existing products and processes—underwriting, claims, and so forth. Meanwhile, from their interactions with service leaders such as Amazon, Zappos, and Google, customers have come to expect convenient digital solutions. Among the advanced features that customers appreciate and demand are one-click buying, set-and-forget refill ordering, product recommendations based on purchase history and social media review, and personalized suggestions curated according to their own purchase history and the experiences of similar people.

Customers are also less and less likely to discriminate between traditionally discrete industries and sectors: if a bank can provide quick, effortless ways to manage household finances online or on the go, customers see no reason why other service providers—including insurers—should not be able to do the same thing.

In BCG’s annual Brand Advocacy Index—which identifies and ranks the percentages of surveyed consumers who are likely to recommend a brand to friends and family—the top-ranking car and health insurers routinely receive index scores in the 20s, 30s, and 40s in such markets as France, Germany, Italy, and Spain. Many banks (as well as companies in other industries) receive scores in the 50s and 60s.

In order to successfully reimagine business processes and meet customers’ rising expectations with regard to service, insurance companies must shift their point of view to the customer’s perspective. Neither the product in question—be it property, casualty, life, or health coverage—or the internal organization is the correct lodestar for digitization. The focus must be on the underlying customer journey. Developing an up-to-date business model starts with asking the right questions.

**Following the Customer**

A customer journey starts with a trigger event. An insurance claim is one example, but so is Rolf’s move to a bigger apartment—or a wedding, a divorce, the birth of a child, a promotion at work, or a new job. Any such event can spark the need for new insurance and can call for adjustments in one or more insurance products that a customer already has. Customers don’t consider the company’s internal processes or organization when they encounter a trigger event. Indeed, like Rolf, they may not even consider the insurance ramifications without third-party guidance. But customers do know that they need to change their on-file address after a move; and once informed of that event’s insurance policy implications, they will want to resolve all of its insurance-related aspects. A smart insurance company will ask, not how big the new apartment is, but what caused the customer to move in the first place?

A digital solution delivers value only if it enables the company to solve all of the customer’s trigger-related needs and requests comprehensively and conclusively (at least from the customer’s perspective), without additional process loops or delays. For the insurer, this means following (or anticipating) the customer journey across segments, products, and channels. Product features, processes, and company departments and functions must follow the customer—not, as is usual today, the other way around.

Taking a customer-centric approach offers insurers a huge and multifaceted opportunity to address customer needs. Improvements in this area will promote customer satisfaction and increase the likelihood of cross-selling. At the same time, reducing the number of process loops decreases the internal processing capacity necessary, and thus reduces costs.

**What Insurers Need to Do**

The insurer should assess each customer journey along two dimensions: customer benefits (for example, the potential to increase customer satisfaction, or the gap between current digitization and customer expectations) and efficiency gains (such as the elimination of redundant or unnecessary processes, or the expected acceptance rate calculated by the customer journey digitization tool). After examining the results of these assessments, the
company can create a prioritization model combining customer benefits and efficiency gains. This model can then serve as the basis for the practical methodology of digitizing customer journeys.

The first step toward digitizing individual customer journeys is to develop a design platform for the reimagination of such a journey. (See Exhibit 1.) The design platform must start with a deep understanding of customer needs (obtained through research). It should include a mapping of current processes and IT architectures, and detailed decision trees for the customer journey.

The next step is to develop a digital journey prototype. This involves combining deep ethnographic research into customers’ digital usage and behaviors, and the agile methodology of concept and prototype development. (See “Five Secrets to Scaling Up Agile,” BCG article, February 2016.) Multiple development sprints, interspersed with customer and agent feedback, produce iterations of the target journey prototype that reflect actual customer use. (See Exhibit 2.) By proceeding in this way, the insurer can maintain its focus on user needs. These sprints also help identify which products and processes are easy to digitize and which require a more comprehensive transformation.

Finally, the company must develop an implementation plan. In a relatively short period (typically about ten weeks), the insurer can produce a ready-to-implement prototype of a digitized customer journey as a proof of concept. It can then use this prototype to advance the broader digitization of all customer journeys.

Benefits of the Digital Journey

Fully digitizing the customer journey offers insurers multiple benefits. Most important, when it works seamlessly (and invisibly to the customer), the digitized customer journey can lift customer satisfaction levels significantly and can yield cost savings of 15% to 25%. It also increases organizational speed and agility. And it can reduce by up to 40% the number of process loops required to complete a customer journey.

The key to achieving these benefits is to generate traffic that uses the digital solution. Customers can complete digitized customer journeys by using an app or the company website, or by working with an agent, broker, or...
call-center agent who has access to the same digital solution as the customer. Either way, the journey relies on self-service rather than on processed operations, which decreases staffing needs in the back office. We expect self-service rates from customers or from agents and brokers to approach 80%, depending on the complexity of the customer journey.

Nevertheless, some customers, especially older ones, may not be keen to complete their customer journey themselves via an app or a website. And agents and brokers need to be in the digitized journey loop, too. So insurers must establish the interaction logic for the digital customer journey on all channels—especially agents, brokers and call centers—to ensure that customers can complete their journey seamlessly across multiple channels.

To build an overall picture of their service users, all companies need to understand why a customer chooses a specific channel in each instance, and how the customer’s journey progresses through channels over time. This understanding should inform both the explicit design of the transition between channels—such as online click-to-connect—and the seamless sharing of information collected along the pathway at each stage. Productive use of customer pathway information is vital. Customers mark down the service experience when they encounter no recognition of what they have already done or when they have to repeat the same information multiple times. Anticipating customers’ needs and addressing them proactively are other features that customers cite as being part of a flawless experience.

Defining Success

In our experience, five factors are crucial to the success of any effort to reimagine and digitize insurance customer journeys:

- Adopt the customer’s perspective, and be ambitious.
- Subordinate both products and processes to strict development of customer journeys from the customer’s perspective, and make ease of switching among channels a
priority so that customers have a seamless experience.

• Pursue agile development with cross-functional teams using short time frames and high-frequency user/customer tests.

• Pursue continuous development and improvement (because, from a customer’s perspective, products and processes always have room for improvement).

• Communicate broadly and focus on enabling the organization to ensure sustainable results.

Insurers that focus on these success factors will be able to make the transition relatively quickly from trying to digitize products and processes to delivering digital customer journeys. Such companies will set themselves on a path of continuous improvement. Early movers have the opportunity to establish a digital advantage over the competition—an advantage that will grow over time and pay continuing dividends as fast-moving technologies evolve.

Michael Urban is a partner and managing director in the Düsseldorf office of The Boston Consulting Group. You may contact him by e-mail at urban.michael@bcg.com.

Bodo von Hülsen is a principal in the firm’s Munich office. You may contact him by e-mail at vonhuelsen.bodo@bcg.com.

Gilles Fabre is a partner and managing director in BCG’s Paris office. You may contact him by e-mail at fabre.gilles@bcg.com.

Jeff Chookaszian is a partner and managing director in the firm’s Chicago office. You may contact him by e-mail at chookaszian.jeff@bcg.com.

Tjun Tang is a senior partner and managing director in BCG’s Hong Kong office. You may contact him by e-mail at tang.tjun@bcg.com.
INSURERS KNOW THAT MANY small businesses in the US—those with up to 30 workers—will eventually buy insurance directly online. What insurers don’t appreciate is how fast this shift is likely to happen.

According to estimates by The Boston Consulting Group (BCG), about 17% of premiums in the US small-business market will be digitally underwritten by 2018. If that is achieved, it will be more than four times the level of 2015 and represent about $13 billion in direct written premiums. Traditional insurers thus face a choice: they can either go after that market now or try to make up the ground later.

In the past, change has come slowly to small-business insurance, and it has been characterized by high retention rates. However, the structural and generational changes taking place in this segment of the US insurance market have created a situation in which the old truths no longer hold.

From California to New York, small businesses are sprouting up at an astonishingly fast clip; half of the companies that will be in operation by 2018 don’t yet exist, according to BCG analysis. Many of these new businesses—particularly the so-called microbusinesses, with one to four workers—will be operated by millennials and Gen Xers, who are very comfortable with all things digital. Entrepreneurs in these age cohorts often don’t make a clear distinction between work hours and personal time, which means that the lines between activities covered by commercial insurance and those covered by personal insurance could become similarly blurred.

What’s more, millennials and Gen Xers do not feel bound to traditional ways of obtaining insurance. When these tech-savvy businesspeople start buying general-liability insurance, property insurance, and business owner’s policies in the next couple of years, they won’t think twice about bypassing traditional insurance offerings, with their cumbersome purchase processes and complex clauses. In fact, if the right offer is available online or via a smartphone app, these businesspeople might not even bother to familiarize themselves with traditional offerings.

So even as the small-business insurance market grows—to an expected $75 billion in direct written premiums in 2018, up from $66 billion in 2015—not all providers will benefit. Instead, the market will split, creating huge swells of opportunity for some and threatening others, including many in the brokerage space.

SPARKING THE DISRUPTION

A variety of companies have begun taking initial steps toward creating the market disrup-
tion. These companies include long-established carriers, such as The Hartford Financial Services Group, Progressive Casualty Insurance, GEICO, and Allstate Insurance; new entrants, such as Insureon (an online insurance agent), Intuit (a software company focused on financial and tax services to small businesses), and Overstock.com (an online retailer that has added insurance products for its customers); and a growing number of venture-backed start-ups. Nobody has cracked the code yet, however.

The carriers that will ultimately capture the digital small-business opportunity must address two challenges simultaneously. The first is to develop simple, modular products that make the experience of buying and using insurance much easier and more straightforward than it is today. Digital options that offer a way to accomplish something a small-business owner can’t do conveniently via an analog form of insurance, for example, could catch on quickly. These include abilities such as toggling between personal-use and business-use car insurance depending on the kind of trip being taken and reducing the level of business owner’s insurance with a smartphone app when an independent contractor is between projects. Documents that replace legalese with plain English, and applications that integrate consumers’ social-media and e-commerce accounts so basic information can be automatically populated online, will make insurance interactions more convenient.

The second challenge for carriers is to devise a truly digital operating model. This will mean de-emphasizing manual processes, “high-touch” customer service, and face-to-face interactions in favor of digitized processes, self-service, and new offerings that customers can access through just about any channel. These changes will be especially important when it comes to the claims process, which is characterized by multiple interactions. Some policyholders of personal home and car insurance already use digital technologies for such activities as uploading pictures, making appointments at auto body shops and checking the status of claims via their mobile devices. At the moment, such applications are much less common in the small-business realm—but that will change. In the event of property damage or a lawsuit, the ability to allow straight-through processing instead of a more manual approach could be a differentiator for small-business insurers.

Companies that touch off the small-business disruption will initially do so using one of three distribution approaches:
• A digital-direct model, in which a carrier with a strong brand and sufficiently broad product coverage offers greater speed and simplicity.

• An “e-brokerage” model, in which a broker capitalizes on its back-end technology and carrier relationships to create a platform that gives small businesses both choice and breadth of coverage, not unlike Expedia’s offers for consumers in the travel market.

• An aggregator model that allows small businesses to comparison shop, and which a disruptor can use both to generate leads and to gain fees or commissions.

These three models will coexist, at least for a time. Inevitably, they will increase transparency and spur greater price competition. They will also drive down expense ratios, since insurers will have to set themselves up to be more frugal, efficient, and nimble in the new competitive environment. Collectively, these digital-centric models will steal share away from the traditional face-to-face brokerage models.

No-Regret Moves for Carriers and Agents

In the UK, where disruption in the small-business insurance market is more advanced than in the US, digitization has already created winners and losers, primarily on the basis of the speed at which they have embraced new technologies. (See the sidebar, “The UK Market Shows How Quickly Fortunes Can Change.”) Companies that rapidly adjust their usual organization and culture also come out ahead: the most successful carriers are those that have managed their digital insurance businesses separately from their traditional insurance businesses, at least during start-up.

In the US, the winners among traditional carriers will mostly be those that rapidly develop strong digital offerings, prove to be skilled at managing channel conflicts, and offer a re-imagined customer experience. Carriers that are slow to adapt, have significant channel conflicts, or think that they can leverage IT systems built for traditional, highly complex products or larger corporate clients will have a tough time getting ahead. These slower-moving companies may also find themselves facing disintermediation at the hands of e-commerce giants such as Apple and Amazon, which have digital expertise in abundance and have not been shy about moving into sectors that may originally have seemed outside their realm.

The agents and brokers with the best chance of surviving disruption will be big distributors that leverage carrier relationships and manage to quickly roll out digital services. Mom-and-pop agents will be the most vulnerable during this period of transformation because they lack the wherewithal to build digital capabilities and the brand awareness to attract millennial and Gen X customers.

This suggests a set of no-regret moves for both carriers and agents in the US. Carriers should create standardized, modular products; invest in strengthening their model-based pricing capabilities; develop new e-commerce IT capabilities; and establish digital, light-touch models. These moves will make their products easier to understand and to underwrite digitally, help them generate traffic, and attract the interest of top online agents. The actions will also allow carriers to leverage third-party big data and to tighten up and simplify the underwriting process.

The no-regret moves for agents include repositioning themselves to be part of an omnichannel world—a world in which disintermediated interactions between customers and carriers are as common as agent-led interactions—and solidifying their carrier relationships as a way of building stronger ecosystems. Agents will need to bring in new people and invest in their talent to make this transition. By taking these actions, agents will improve their ability to match customer needs with different carriers’ appetite for risk and to develop more efficient and customer-centric sales and service models.

Millions of new small businesses are founded each year, and they will increasingly buy their insurance online. This preference for digital solutions will force in-
surance providers to adopt some fundamen­
tally new market approaches. Carriers that
want to hold on to their market share will
have to develop new products designed for
the digital age and come up with lower­
cost operating models. Agents that want to retain
their relevance are going to have to find dif­
ferent ways of providing value to buyers that
may prefer less contact, not more. Many com­
panies are developing online insurance ser­
vices that have a chance of appealing to small
US businesses. Carriers and agents that un­
derestimate the need for speed will be left
behind when the inevitable disruption comes.
The time to get going is now.

Achim Schwetlick was a partner and managing
director in the New York Office of The Boston
Consulting Group.

Lucy Pilko is a partner and managing director in
the firm’s New York office. You may contact her
by e-mail at pilko.lucy@bcg.com.

Miguel Ortiz is a senior partner and managing
director in BCG’s London office. You may contact
him by e-mail at ortiz.miguel@bcg.com.

Nathalia Bellizia is a principal in the firm’s New
York office. You may contact her by e-mail at
bellizia.nathalia@bcg.com.

THE UK MARKET SHOWS HOW QUICKLY FORTUNES CAN
CHANGE

Events in the UK offer a glimpse of how
quickly the small-business insurance
market can move toward disintermediated
insurance products, including digital
offerings.

From 2011 to 2014, the Direct Line Insur­
ance Group, a former division of the Royal
Bank of Scotland, increased its share of the
UK’s small-and-midsize-enterprise insur­
ance market from 2% to 7% by focusing on
simple products that customers could buy
directly through whatever channel they
chose, including their tablet computers or
smartphones.

Other insurers that then jumped in with
their own digital investments were able to
at least hang on to their market shares.
Aviva, for instance, introduced an on­
line-trading insurance platform—enabled
by an investment exceeding £50 million—
that allowed the company to keep its
market share of almost one-third. Similarly,
AXA Equitable Life Insurance rolled out a
new direct digital channel that allowed the
company to hold onto its share of the
market—one-fifth to one-quarter—as well.
Slow movers, however, watched their
market shares erode.

In addition to showing how quickly tradi­
tional insurers can lose ground, the UK
market dispels the myth that brokers and
agents are indispensable: more than
one-quarter of all small-business insurance
is now bought without the help of an
intermediary. And while the regulatory
framework in the UK differs from that in
the US, these events show that channel
disruption in the US insurance market is
not only possible but can happen quickly
once it starts.

Events in the UK offer a glimpse of how
quickly the small-business insurance
market can move toward disintermediated
insurance products, including digital
offerings.

From 2011 to 2014, the Direct Line Insur­
ance Group, a former division of the Royal
Bank of Scotland, increased its share of the
UK’s small-and-midsize-enterprise insur­
ance market from 2% to 7% by focusing on
simple products that customers could buy
directly through whatever channel they
chose, including their tablet computers or
smartphones.

Other insurers that then jumped in with
their own digital investments were able to
at least hang on to their market shares.
Aviva, for instance, introduced an on­
line-trading insurance platform—enabled
by an investment exceeding £50 million—
that allowed the company to keep its
market share of almost one-third. Similarly,
AXA Equitable Life Insurance rolled out a
new direct digital channel that allowed the
company to hold onto its share of the
market—one-fifth to one-quarter—as well.
Slow movers, however, watched their
market shares erode.

In addition to showing how quickly tradi­
tional insurers can lose ground, the UK
market dispels the myth that brokers and
agents are indispensable: more than
one-quarter of all small-business insurance
is now bought without the help of an
intermediary. And while the regulatory
framework in the UK differs from that in
the US, these events show that channel
disruption in the US insurance market is
not only possible but can happen quickly
once it starts.
LONG AN AFTERTHOUGHT FOR most companies, compliance risk management—in financial services generally, and in the insurance industry specifically—is becoming a strategic function at the core of multiple business processes as diverse as new-product development and financial reporting. A comprehensive study by BCG of chief compliance officers (CCOs) and business executives in the insurance industry shows that this trend is set to continue.

Following the 2008 financial crisis, compliance in banking underwent a fundamental transformation as lawmakers and regulators in North America and Europe placed a host of new requirements on financial institutions. Regulatory activity today, especially in Europe, suggests that the insurance industry is facing a similar situation. Many companies view increasing compliance requirements as simply another burden on an already heavily regulated sector. Smart insurers, however, see opportunities to differentiate themselves with customers and consumers and even to establish competitive advantage.

Our study of compliance in the insurance industry assessed current risks, the state of governance and organization in insurance companies, and today’s compliance processes and methodologies. In this article, we summarize our findings, analyze the shifting compliance environment, and consider what that shift means for the insurance industry.

The Rising Importance of Compliance

A number of factors are compelling compliance risk management from backwater to boardroom:

- An evolving business environment that requires increasing attention to such issues as customer and data protection and privacy.
- A rising regulatory wave that is expected to build over the next two to three years and increase requirements in a number of jurisdictions, many of which focus on compliance. (See Exhibit 1.)
- Emerging risks, such as data protection and the inadvertent financing of terrorism, that insurers must manage.
- Growing awareness by consumers of their rights as insureds and greater regulatory focus on company conduct and risk culture, including closer scrutiny of behaviors, customer outcomes, and the value delivered to customers.
- Increasing sanctions for noncompliance, following the precedent set in banking, in which fines, settlements, and redress costs over the past five years reached a cumulative total of approximately €200 billion.

But perhaps most important, new business models and strategic imperatives require more-active management of compliance risks. For example, a growing focus on customer needs puts an emphasis on customer protection, including product design and transparency as well as distribution. Digital sales models raise new and more complex concerns over financial crime and buyer verification. And the increasing use of big data demands...
that privacy and data protection requirements be addressed for an ever-growing body of information.

These and other developments necessitate a compliance function that is much more active, sophisticated, and robust than the ones that most insurers currently have.

BCG’s Compliance Risk Assessment

Our study consisted of in-depth interviews with CCOs and other senior managers at 17 insurers, including global and regional companies, in eight countries. Among other things, we asked these executives to rank the importance of various risks today. (See Exhibit 2.) Client and data protection and financial crime emerged as the two most critical risk categories in our sample for both global and regional players, with an average ranking of 3.0 on a scale of 0 to 5. Market integrity and professional ethics were seen as less relevant, with average rankings of 2.5 and 2.4, respectively.

Within the category of client data and protection, “mis-selling” and fiduciary risk, privacy and data protection, and product adequacy and disclosure are seen as the most critical risks. “My sentiment is that the industry is not doing a good job in screening customer data; the risk is high,” said one senior executive. “Sales force mis-selling is a critical risk for our group, and it will be even more critical in Europe with MiFID II [the European Union’s Markets in Financial Instruments Directive],” said another.

Within financial crime, anti-money-laundering (AML) risks are seen as the most critical. We expect the repercussions of financial crime (especially AML and related sanctions) to become an even more significant factor, as the banking industry has already experienced. As one member of our panel put it, “Money-laundering risk must be tackled in a tailored way, region by region, to be effective while minimizing costs.”

Where Does the Compliance Function Fit?

Compliance risks should be managed by the part of the organization that takes the risks. What’s more, that management is inherently ineffective without the strong involvement of business functions. Mitigation of compliance risks is primarily a frontline responsibility. Thus, company executives and their staffs are the first line of defense against poor or inadequate risk management.

The compliance function, along with other control functions, should support business by providing standards, methodologies, and policies. Compliance is the second line of defense, and, as such, it should coordinate risk assessments and provide guidance for designing controls and defining mitigating actions.

The audit function is the third line of defense. It should provide independent assurance about the adequacy of the framework for compliance risk management.

Compliance Governance and Organization

The compliance function itself should have the following key elements:

- **A strong organizational structure** that combines content specialization and operational efficiency, typically including departments that focus on type of risk (such as financial crime and customer protection) and on activities across various risks (such as methodologies, monitoring and controls, and reporting).

- **Independent reporting lines** that safeguard the independence of the CCO. Companies use different CCO reporting models today (to the CEO, to general counsel, or to the chief risk officer, for example), but in all cases, direct access to the board of directors should be guaranteed.

- **A clear relationship between group-wide and local activities.** Local CCOs should have a strong and codified functional reporting line to the group CCO, who should provide significant input on HR decisions (such as hiring, termination, and promotions) and the budgets of local CCOs.

- **An appropriate mix of competencies.** Compliance’s traditional focus on legal skills, which remain critical to understanding regulations, should be complemented with business knowledge and risk management skills in order to work with business personnel to manage compliance risks.

- **Adequate sizing.** Group-wide compliance functions currently range from 10 to 20 full-time-equivalent (FTE) employees for regional insurers and from 25 to 35 FTEs for global organizations, depending on overall scale. Local compliance functions must be able to adequately cover all principal risks at the local level and all core cross-risk activities, such as risk assessments, controls, and reporting.
To make sure that roles and responsibilities are clearly delineated, the compliance function’s mandate and scope should be differentiated from those of the legal and operational-risk functions. With regard to compliance risks, the legal department should provide advice on current and new regulations, as well as judiciary practices. The operational-risk function should maintain oversight of nonfinancial risks, focusing on internal processes and procedures, people, and systems; identifying and measuring risks; and applying a common approach across all functions, including compliance. Compliance should take the lead on more-specialized activities, such as supporting the business function on definition policies regarding controls, taking mitigating actions, and supporting the operational-risk function on the qualitative element of risk assessments.

EXHIBIT 1 | New and Upcoming Regulations Focus on Compliance

<table>
<thead>
<tr>
<th>NAME</th>
<th>DATE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMIR</td>
<td>Implementation in process</td>
<td>Clearing, reporting, and risk mitigation techniques for derivative contracts negotiated over the counter</td>
</tr>
<tr>
<td>CRS</td>
<td>Implementation in process</td>
<td>Due diligence on all customers for tax purposes and the reporting of certain clients’ financial incomes to the appropriate authorities</td>
</tr>
<tr>
<td>MAD II AND MAR</td>
<td>July 2016</td>
<td>European definitions of market abuse crimes and related criminal sanctions, and the extension of liabilities to legal entities</td>
</tr>
<tr>
<td>AML DIRECTIVE IV</td>
<td>Jan 2017</td>
<td>Stronger due diligence for new clients, with a broader scope and a more severe process to identify beneficial owners with a follow-the-money approach</td>
</tr>
<tr>
<td>PRIIPS</td>
<td>Jan 2017E</td>
<td>Comprehensive Key Information Documents to be distributed together with specific investment products</td>
</tr>
<tr>
<td>IDD II</td>
<td>Jan 2017E</td>
<td>Conduct requirements for distributors of insurance products and transparency requirements on products and services offered to clients</td>
</tr>
<tr>
<td>MIFID II AND MIFIR</td>
<td>Jan 2018E</td>
<td>Full disclosure to customers of product features and profitability, enhanced product governance, and a review of market infrastructures</td>
</tr>
<tr>
<td>IFRS 4 (PHASE II)</td>
<td>Jan 2018E</td>
<td>Economic balance sheet rules (that is, a market-based valuation of insurers’ assets and liabilities) and granular reporting requirements</td>
</tr>
<tr>
<td>GDPR</td>
<td>Jan 2018E</td>
<td>Strong limitations on personal data usage and enhanced protection of clients’ sensitive information</td>
</tr>
</tbody>
</table>

Source: BCG analysis.


To make sure that roles and responsibilities are clearly delineated, the compliance function’s mandate and scope should be differentiated from those of the legal and operational-risk functions. With regard to compliance risks, the legal department should provide advice on current and new regulations, as well as judiciary practices. The operational-risk function should maintain oversight of nonfinancial risks, focusing on internal processes and procedures, people, and systems; identifying and measuring risks; and applying a common approach across all functions, including compliance. Compliance should take the lead on more-specialized activities, such as supporting the business function on definition policies regarding controls, taking mitigating actions, and supporting the operational-risk function on the qualitative element of risk assessments. Splitting responsibilities between the operational-risk and compliance functions on the sole basis of a risk taxonomy definition, as discussed in the following section, has proven difficult for many companies because implementing differences in day-to-day activities can result in inconsistent methodologies, processes, and outcomes for similar risks.

Compliance Processes and Methodologies

At the base of any compliance methodology, insurers must establish a structured risk taxonomy that is integrated with operational risks. If compliance risks cannot be clearly described, they cannot be measured, managed with appropriate mitigating actions, or reported within the organization in a consistent and coherent manner. Our survey findings suggest that while most insurers identify compliance risks at both the group-wide and local levels, few align their compliance risk taxonomies with operational risks. As the CCO of one regional insurer told us, “We manage data privacy, and risk management manages data protection separately, despite great similarities between them.” The result is a potential duplication of processes and, possibly, different assessments of risks that are similar or even identical to one another.

Risk assessments that prioritize risks on the basis of objective evidence, expert opinions, and business feedback are the first pillar of comprehensive compliance risk management. They provide a clear view of the risks and the processes that the risks threaten. In our experience, however, too many insurers view them as “gap assessments” focused only on regulatory requirements.

Risk assessments should be used to measure the risks underlying each regulation and should be
based on an in-depth understanding of each insurer’s business model. They should provide clear guidance on where to focus remedial actions and controls. The board of directors, executive managers, and business functions should be actively involved, and the compliance function should provide support and guidance regarding methodologies.

Most insurers today perform traditional bottom-up assessments, which are time-consuming exercises, especially when they need to be completed for multiple business units, legal entities, and processes affected by a broad set of regulations. The bottom-up approach typically does not prioritize risks before the assessment, so the subsequent efforts neither focus on the most significant risks nor facilitate executive decisions on risk mitigation.

In a top-down risk assessment, however, CCOs engage boards and top management to identify and prioritize the most important risks arising from current and new regulations with a very simple and high-level risk taxonomy that includes no more than 20 risks. Together, they determine the business processes in which these risks are particularly relevant and discuss the impact of new strategic initiatives on the compliance risk profile.

Not only do top-down assessments require less time and effort, but they also serve as a much more effective tool with which insurers can:

- Prioritize efforts on a risk-based approach, as has been suggested by many regulations (for example, the new AML Directive IV in Europe), so that these risks can be the subject of more traditional and detailed bottom-up assessments.
- Encourage the board of directors and executive managers to become involved and to view compliance as a business imperative.
- Link compliance more closely to company strategy.
- Adopt a forward-looking perspective to assess not only current risks but also risks that may emerge within the timeframe of the planning strategy.
- Gain an external perspective on emerging risks and trends through industry intelligence, which cannot be captured internally.

More advanced insurers are also developing so-called compliance risk appetite frameworks that embed shareholders’ appetite for compliance risks into their risk assessments. The boards of these insurers, supported by the CCO, set tolerance limits for compliance risks that are linked to the results of compliance risk assessments. The CCO of a global insurer describes his company’s approach
this way: “We draw a risk map with the inherent risk on one axis and the controls environment on the other axis, which gives us a very good view of the positions of the different risks. Then we compare the positioning of each risk against our risk appetite framework to identify priorities and the risks to focus on.”

Such companies are enforcing their “zero appetite” philosophy for noncompliance with regulations by establishing a clear appetite for the risks related to the regulations. Since compliance risk levels can never be reduced to zero, understanding that such risks can only be mitigated helps to set priorities and maximizes the efficacy and efficiency of mitigating actions.

For most insurance companies, managing compliance risks means having a solid controls system in place. But effectiveness is often equated with comprehensiveness, when in fact the actual effectiveness of such systems depends much more on prioritizing and focusing on the critical risks, employing a lean and efficient design, and positioning the controls upstream in business processes to avoid costly loops and duplications. The experience of the banking industry is instructive in this regard. In the wake of the 2008 meltdown, controls and FTEs exploded, along with the investments required to manage them—but increases in compliance levels did not necessarily follow.

Insurers should rigorously review their controls framework, updating guidelines and policies, understanding risk factors, reviewing controls objectives and risk indicators, and rationalizing controls activities. We have developed a framework of best practices based on our study. (See Exhibit 3.) One of the key concepts is to link the strength and number of controls to the level of residual risk measured by the risk assessments so that controls are focused on the areas in which the perceived residual risk is significant.

Insurers can help top executives and members of the board to focus on and understand risk management by synthesizing the overall risk profile into a few figures—the key risk indicators (KRIs) of compliance. The most difficult challenge is to merge different metrics and qualitative information into a KRI number. The first step is to define the “risk tree,” which encompasses all the drivers that contribute to the risk indicator. Once the risk tree is defined and agreed upon by the board and top management, the compliance function can find an appropriate way to measure and compare each of the drivers and then build the overall indicator into a useful reporting tool.

**Levers for Competitive Advantage**

Managing compliance risks goes beyond controls and reporting. Our study highlighted three strategic actions that companies should take to transform compliance from a burden into a source of competitive advantage.

**Involve the board.** Companies should actively help boards of directors to better understand compliance risks and their impact. At more than 75% of the insurers that we interviewed, board committees (such as risk, control, and audit) meet at least quarterly to discuss compliance topics. CCOs, however, are invited to these committee meetings only on an ad hoc basis to discuss current issues or to present periodic reports. Very few CCOs are actively involved in strategic discussions of compliance risk profile and regulatory strategy.

Changing this approach is not an easy task. CCOs highlighted several common issues that need to be addressed, including limited board knowledge of compliance topics, the difficulty of translating technical compliance concepts into simple messages that focus on taking action, and uncertainty about the type of information to be reported at the board level. To handle these issues, a number of leading companies are launching training programs for board members, including self-assessments and regulatory inductions. Such sessions are already common in banking.

**Embed compliance in insurers’ strategic-planning processes.**

Forward-looking management of compliance is critically important for insurers, but only about 15% of insurers raise compliance risk management to the level of strategic planning. These tend to be the companies with top-down risk assessment processes in place. Such assessments help to embed compliance thinking into the strategy of the company and the main strategic initiatives launched by the businesses. For example, the European Union’s Insurance Distribution Directive II is bringing fundamental changes to the relationship between insurers and their intermediaries and requiring new levels of information disclosure to customers, both of which raise key strategic questions. A best-practice compliance risk management approach would incorporate the expected changes from the new regulations into the distribution strategy and use new information requirements as the basis for developing innovative products targeting specific customers with focused marketing campaigns.
Make the necessary investments. Insurers need to allocate the required budget to ensure that their compliance risk management framework stays current with regulatory requirements and to integrate compliance into business strategy. CCOs outlined three main areas for investment:

- Reviews of current operating models, including the roles of, and information exchange among, control functions and compliance processes to ensure business engagement and compliance function involvement

- Better design of risk dashboards and risk reporting, an increasingly common request from boards of directors

- Training programs for compliance officers and business executives that address methodologies, processes, and business cases to build the necessary understanding of compliance risks

A Roadmap for Insurers

Each insurance company starts with different compliance capabilities, processes, and methodologies. And each will need to contend with varying degrees of complexity, depending on the insurer’s size, footprint, and business mix. All companies need to assess their readiness for upcoming challenges and build more robust models if required. Most will benefit from taking the following steps:

- Perform a rapid health check to benchmark a starting point with respect to peers and regulatory expectations on a predefined set of dimensions.

- Launch compliance risk assessments and mitigation programs, focusing on the most critical risks and taking a strategic and forward-looking view.

- Revise compliance governance to reflect priority risks and move toward a more business-oriented approach, making compliance governance “regulator ready.”

- Strengthen holding-company and local compliance functions, ensuring that the right organization, activities, sizing, and competencies are in place.

- Conduct an end-to-end review of the controls framework with a risk-based approach, including policies and procedures, risk factors, controls objectives, and control activities.

- Launch ad hoc training programs to apply compliance risk management to real business cases, with relevant training for boards of directors, business management, and the compliance function.

REGULATORY changes and emerging business models are transforming compliance risk management from a formal exercise to a top concern for insurers. Awareness of compliance risks has risen dramatically, and as our study shows, many companies have already started the journey toward structured, business-driven, and forward-looking compliance risk management practices. There is still significant work to be done. Those that tackle the challenges and move quickly to establish best practices in their organizations will
reap the rewards of leadership and competitive advantage.

Matteo Coppola is a partner and managing director in the Milan office of The Boston Consulting Group. You may contact him by e-mail at coppola.matteo@bcg.com.

Lorenzo Fantini is a principal in the firm’s Milan office. You may contact him by e-mail at fantini.lorenzo@bcg.com.
Although not quite at the stage of mania, mergers have been sweeping the global insurance industry. Exor-PartnerRe, Willis Group–Towers Watson, Willis–Gras Savoye, ACE–Chubb, and Anthem–Cigna are just a few of the high-profile transactions announced over the past year.

Behind the headlines, however, lies a stark reality. The Boston Consulting Group’s analysis of one-year relative total shareholder return in 778 transactions involving insurance companies between 1990 and 2014 found that only 51% created value and 49% actually destroyed value. In other words, the odds of success are similar to those in a coin toss. The half of insurance deals that failed to deliver value had fallen prey to a variety of culprits. (See Exhibit 1.)

Insurers can do better. Our experience with companies throughout the industry shows that acquirers can tip the playing field to their advantage. The keys to success in insurance M&A relate to strategy and target analysis, deal execution, and postmerger integration (PMI). This article explores how to apply this framework.

Multiple Forces Drive Consolidation

A multitude of macro-level forces will continue to propel consolidation in insurance over the next five years or more. They include more stringent regulatory requirements, continued low investment yields, new entrants, rapidly advancing technology, and limited growth opportunities.

Regulatory requirements, especially those having to do with capital adequacy (the EU’s Solvency II Directive is one example), continue to intensify, putting pressure on both independent insurers and conglomerates. The provisions of the EU’s Insurance Mediation Directive 2 (IMD2), which the EU says “is designed to improve EU regulation in the retail insurance market, increase consumer protection, and improve consistency between the regimes operating in the different member states,” must be written into member states’ national law by early 2017. Among other things, IMD2 will likely decrease some consumers’ willingness to pay for financial advice at current levels.

Interest rates as well as investment yields are likely to stay low for some time (at least in mature markets), making profits in traditional life insurance difficult.

New entrants as varied as supermarket chains and telecommunications companies are in a position to disrupt the insurance value chain: they have a powerful asset in the customer data they collect, and they own the “last mile” link to the customer. New operating models are making it difficult for incumbents to play across the entire value chain. The incumbents are vulnerable to specialists that disrupt existing models—one example being online aggregators that offer consumers a variety of price-transparent product choices from multiple providers. Large incumbent players are best placed to
make the investments needed to fend off such assaults. Midsize insurers that still handle all aspects of their business internally are especially likely to feel the competitive heat.

Insurance companies are prime candidates to exploit insights into customer behavior and needs, but building the necessary big-data technology, culture, and teams is cost prohibitive, especially for smaller players.

Insurers face limited opportunities for growth. Mature markets are consolidating, and, although the risks that consumers face are expanding (data security, for example), the industry hasn’t succeeded at demonstrating the need for coverage beyond the most basic. Emerging markets offer potential for growth, but they have their own complexities—building a presence organically can be slow and difficult; and near-term profitability is a challenge. Scale in new markets can be achieved most realistically through acquisition.

**Three Steps to Creating M&A Value**

Creating value—and mitigating risk—through M&A in insurance, as in other industries, requires three steps: rigorous strategy and target analysis, strong deal execution, and effective PMI. (See Exhibit 2.)

**Rigorous Strategy and Target Analysis.** Many insurance acquisitions are made opportunistically, in a time-pressurized window, and often with an investment bank serving up the target. Candidates are analyzed largely on their financials, but this assessment is only one component of a successful acquisition. Smart acquirers actively seek out proprietary deals, employing a proven, systematic approach and an analytical framework. They think through all aspects of a merger before initiating the transaction (including potential bids by competitors and other interlopers).

Two of the reasons for failed acquisitions cited most often by respondents to BCG’s 2015 Corporate Leaders M&A Survey were unclear strategic fit and lower-than-expected synergies. Acquirers should be able to surface both of these issues with a disciplined review-and-selection process. In our 2015 M&A Report, we recommended five imperatives to guide the target selection process:

- Understand industry dynamics, including the factors influencing the direction of the industry in the next five to ten years.
- Don’t pursue M&A without a strategy. A sound portfolio analysis is the starting point for a target search.
- Follow a systematic approach and focus efforts on quantifiable value creation. Pay particular attention to the strategic fit between candidate and acquirer.
- Be rigorous: invest the time required to analyze targets in depth.

---

**EXHIBIT 1 | Corporate Leaders Cite Three Main Reasons for Failed Acquisitions**

<table>
<thead>
<tr>
<th>Deal preparation and execution</th>
<th>Percentage of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wrong candidate</td>
<td>41%</td>
</tr>
<tr>
<td>Unclear strategic fit</td>
<td>69%</td>
</tr>
<tr>
<td>Overpaid</td>
<td>49%</td>
</tr>
<tr>
<td>Bad process structure</td>
<td>36%</td>
</tr>
<tr>
<td>Lack of integration</td>
<td>55%</td>
</tr>
<tr>
<td>High complexity</td>
<td>64%</td>
</tr>
<tr>
<td>Difficult cultural fit</td>
<td>61%</td>
</tr>
<tr>
<td>Low synergies</td>
<td>64%</td>
</tr>
<tr>
<td>Market timing</td>
<td>58%</td>
</tr>
</tbody>
</table>


*Note: A total of 54 corporate leaders responded on this subject; respondents could cite multiple reasons for failed acquisitions.*
• Embed the search process in your organization. Approach the search as an opportunity to set up a permanent screening process for future acquisitions.

A company may need to devote more resources and attention to a small deal in an emerging market than to a much larger transaction in its home market. Cultural and market differences complicate integrating the two companies’ businesses, which is a prerequisite to realizing synergies. (See “From Acquiring Growth to Growing Value,” BCG article, October 2015.)

**Strong Deal Execution.** Deal teams are driven to complete deals. Rigorous due diligence can reveal that acquisitions that initially looked attractive are not. Acquirers should focus on assessing key value drivers during the due-diligence period and walk away from a deal if future value seems unlikely to be realized. “We have already invested so much time” is not sufficient reason to complete a poorly conceived transaction.

Acquirers also need to gauge a deal’s impact on the current business by conducting a side-by-side analysis of their company and the target. They should also run a simulation of the deal in order to understand the transaction’s effects on their financials and market position. In addition, they should look closely at the correlation between risks on the two balance sheets, as well as at how markets and customers are likely to react.

**Effective PMI.** Many of the reasons for failed acquisitions involve what happens after a deal closes. These include lack of integration, high complexity, difficult cultural fit, and low synergies. Plenty of companies struggle to integrate fully after the deal. Synergy targets that were so enticing in the run-up melt away under the realities of meshing two very different organizations in a short time.

PMI is one of the hardest challenges that senior executives face. It is a complex undertaking, often involving multiple simultaneous changes in a company’s business processes, organization structure, and management personnel. Bringing together two organizations, each with its own culture, norms, and behaviors—while protecting day-to-day cash flow—is a corporate mission unlike most others. And while most executives believe that they know how to integrate properly—and stand ready to devote the necessary resources to making sure PMI gets the attention it requires—they often find that they either overestimated their preparedness or underestimated the challenges. In most organizations, PMI is not a core skill. It requires considerably different talents and capabilities than conventional line management, and every situation is different.

Inexperienced deal teams often do outside-in estimates of synergies...
and integration costs, failing to include business and operations people in the discussion. Effective PMI requires considering integration—of businesses, people, processes, and technology—from the start of the due-diligence period. Realistic synergy expectations can be formed only when there is operational experience on the deal team. Including deep insurance-industry knowledge in the planning for, and execution of, PMI can accelerate downstream value creation.

A best-practice approach to preparing for integration examines five critical factors:

- **Geographic Footprint and Number of Countries.** Sometimes mergers do not deliver economies of scale owing to profound differences across the countries in which insurance companies operate and the business models in those countries. The success of the merged company depends on managing the integration process to derive synergy.

- **Legal Entity Structure and Regulatory Context.** Ideally, the merged entity should operate as one legal entity. There can be numerous legal and regulatory hurdles to this goal, however. For example, in the UK, Part VII of the Financial Services and Markets Act 2000 enables a book of insurance policies to be moved from one legal entity to another, but this can be complex and take time to execute. For some purposes, reinsurance will suffice, but if the acquirer wants to separate the policies permanently from the transferor, reinsurance is insufficient and a more structured approach is required. This is just one example of a PMI issue that is best assessed before the acquirer makes an offer to the target.

- **Brand, Product, and Channel Landscape.** M&A financial analyses often overlook issues related to the target’s brand, products, and distribution channels. Insurance companies have some of the most recognizable branding in the world, representing significant equity, and these factors need to be taken into account. The transition from two brands to one in the combination of AXA and Winterthur has taken almost four years. Distribution channels present a similar issue: some companies have brokers, others have their own agents, and still others sell directly to consumers. These important tactical matters can quickly become thorny; they need to be thought about in advance, since they can sometimes turn out to be deal breakers.

- **IT and Operational Landscape.** Most insurers’ IT shops are heavily weighted toward legacy systems. On paper, their costs may appear low and thus attractive, but acquirers will inevitably need to invest heavily to upgrade core business systems. Such an investment affects ultimate value and can substantially alter the terms of a deal.

- **Organizational and Cultural Fit.** Companies should pay particular attention to the organizational and cultural fit between candidate and acquirer. A high number of adjacencies in lines of business enable the acquirer to evaluate a target most effectively. For example, a company that sells auto insurance (short-tail products, high turnover, and an automated sales process) will have difficulty assessing the potential value of a low-adjacency target that sells B2B commercial insurance, using qualified underwriters and a high-touch sales process.

The impact of organizational and cultural fit cannot be overestimated. Deals can span a wide spectrum of complexity, with each transaction encountering a variety of hard and soft factors. (See Exhibit 3.) In some instances, complexity more than overwhelms financial attractiveness.

### The Role of the “Clean Team”

In many M&A transactions, a “clean team” ensures that sensitive competitive information and data on the target company’s business, which are prohibited from disclosure before the deal’s close, are fully captured. The team is responsible for collecting, safeguarding, and analyzing the relevant data—and presenting recommendations to the acquirer. A typical approach is for the team to be composed only of advisors or company executives who are not involved in commercial, strategic, or pricing decisions. The team’s analyses are shared only on an aggregated level prior to closing. After clearance, the clean team can facilitate fast information exchange between both parties. A clean team is particularly relevant in insurance M&A, where antitrust concerns may delay an acquisition.
gates risk and unlocks the true potential for M&A value. By following such a rigorous approach—and focusing on the three steps—insurance industry acquirers can dramatically boost the odds of long-term success.

Pia Tischhauser is a senior partner and managing director in The Boston Consulting Group’s Zurich office and global leader of the firm’s Insurance practice. You may contact her by e-mail at tischhauser.pia@bcg.com.

Miguel Abecasis is a partner and managing director in BCG’s Lisbon office. You may contact him by e-mail at abecasis.miguel@bcg.com.

Miguel Ortiz is a senior partner and managing director in the firm’s London office. You may contact him by e-mail at ortiz.miguel@bcg.com.

Davide Corradi is a senior partner and managing director in BCG’s Milan office. You may contact him by e-mail at corradi.davide@bcg.com.

Jens Kengelbach is a partner and managing director in the firm’s Munich office and the global topic leader for M&A. You may contact him by e-mail at kengelbach.jens@bcg.com.

**EXHIBIT 3 | The Complexity of PMI Is Caused by Both Hard and Soft Factors**

<table>
<thead>
<tr>
<th>DRIVERS OF COMPLEXITY IN INTEGRATION</th>
<th>EACH TRANSACTION HAS ITS OWN SET OF COMPLEXITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geographic footprint and number of countries</td>
<td>Illustrative examples from recent transactions</td>
</tr>
<tr>
<td>Legal entity structure and regulatory context (for example, Part VII of the UK Financial Services and Markets Act 2000)</td>
<td></td>
</tr>
<tr>
<td>Brand, product, and channel landscape</td>
<td></td>
</tr>
<tr>
<td>IT and operational landscape, and legacies</td>
<td></td>
</tr>
<tr>
<td>Organizational and cultural fit</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Drivers of Complexity</th>
<th>Illustrative Examples from Recent Transactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjacency of business acquired</td>
<td></td>
</tr>
<tr>
<td>Governance and operating model</td>
<td></td>
</tr>
<tr>
<td>Cultural fit</td>
<td></td>
</tr>
<tr>
<td>Comparability of country size</td>
<td></td>
</tr>
<tr>
<td>Readiness of top management for deal</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Evaluation</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integration Complexity</td>
<td>Low</td>
<td></td>
<td></td>
<td></td>
<td>High</td>
</tr>
</tbody>
</table>

Sources: BCG analysis of recent transactions.
INSURERS TODAY FACE A host of digital to-dos if they want to stay competitive—much less gain an advantage on their peers. These undertakings include digitizing the customer experience, building digital offerings and business models, and constructing in-house digital capabilities. Underpinning them all is the question of how to adapt legacy IT systems and architectures to the needs of digital business models. This challenge can require new front-end architectures to mimic the mobile-first customer experience of digital natives. It can also necessitate a fundamental overhaul of core insurance systems to digitize end-to-end customer journeys and automate decision making in basic functions such as underwriting and claims handling. The prospect is daunting.

Most insurers need to overcome significant constraints in their current IT landscape. For example, BCG research shows that about 35% of all applications in the industry run on legacy technology stacks that are not “cloud ready” and that a similar percentage of incumbents still rely on static HTML-based digital channels that do not work well on mobile devices—the consumer’s digital device of choice.

We recently researched the readiness of insurers to go digital. We interviewed CIOs and IT architects at leading insurance companies worldwide. We also interviewed executives at prominent solution providers.¹ We conducted a “follow the money” assessment of some $17 billion in venture capital investment in more than 900 technology startups with relevance to the insurance sector. And we analyzed the main IT trends on the basis of four years of architecture benchmarking with top insurers in the German market.

Insurance CIOs and other IT executives will not be surprised to learn that we found multiple pain points at all levels of IT architecture. For example, only 36% of insurers use a central customer-data repository or CRM application to engage with clients, and only 64% have mobile apps. Such shortcomings limit insurers’ ability to gain a full view of client needs and to provide omnichannel interactions. The average age of core insurance systems in the companies we interviewed and benchmarked was 13 years.

Insurance companies have their IT work cut out for them. This article provides a framework for their efforts that is based on three questions:

- What are the main technological building blocks of a digital insurer?
- What emerging architectural strategies can help insurers accommodate future developments in technology?
• How do incumbent insurers jump-start digital implementation and stay ahead of the competition?

Key Trends, Developments, and Building Blocks

The complexity of the digital IT challenge is due in large part to the sheer number of technology trends and developments that have an impact on IT architectures today. There are no fewer than nine—including social media and mobile technology, the Internet of Things (IoT), open ecosystems, big data and advanced analytics, and cloud computing. (See Exhibit 1.)

The combination of these digital developments affects the entire IT landscape, which leads many insurers to go beyond building digital channel functionality and undertake an integrated front-to-back overhaul of the IT landscape across six architecture layers. (See Exhibit 2.) Others decide to focus on one or more layers as initial priorities. Substantial amounts of venture capital have been pouring into these six layers, indicating that tech players and their financial backers see big opportunities for improvement in current systems, platforms, applications, and approaches.

Front End, or Customer Engagement. This layer provides device-, location-, and context-aware customer interfaces and enables digital companies to deliver tailored advice and recommendations, as well as a rich multichannel, multidevice digital customer experience. More than $4 billion of venture capital is backing innovation in omnichannel user-experience platforms, social-network listening tools, and IoT and telematics platforms.

Smart Process and Decision Management. By using automated decision engines and artificial intelligence, this layer offers tailored customer-centric services based on microsegments and personalized risk profiles. Some $3.5 billion in venture funding is at work here. In contrast, legacy systems, in which core business processes (such as pricing and underwriting) are “hard coded,” allow for only static decision making based on broad customer segments and statistical patterns.

Back End, or Core Insurance Systems. This layer contains all systems of record for the core insurance business (the policy-administration, claims, and billing functions) and its support (risk management and finance, for example). Digital platforms integrate modular product architectures and “zero touch” processes. The former enable insurers to

---

**EXHIBIT 1 | Nine Digital Trends Affect Insurance Industry IT Architectures**

<table>
<thead>
<tr>
<th>Social Media and Mobile Technology</th>
<th>Cloud Computing</th>
<th>Internet of Things</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always-on mobile devices allow for context-aware, personalized interaction models</td>
<td>Provides insurers with out-of-the-box software and highly scalable computing power</td>
<td>Connected physical objects allow insurers to interact with insured objects and their users</td>
</tr>
</tbody>
</table>

- **Open Ecosystems**: Insurers can tap into developers’ open ecosystems to create value-adding solutions.
- **Big Data and Advanced Analytics**: Build deep insight into customer behavior through internal and external (big) data sets.
- **Machines Learning**: Intelligent predictive and learning capabilities offer virtual advice and automate decision making.
- **Augmented Reality**: New device and display technologies enable a visual layer of information to be overlaid on the real world.
- **Biometric Identification**: Prevents fraud and secures customers’ personal data without compromising the customer experience.
- **Intelligent Operations**: Enable dynamic routing of customer requests and automation of process steps.

Sources: BCG analysis.
package multiple product and service components into a broad customer proposition, while the latter are completely automated processes that can be changed with minimal involvement from IT. This layer has attracted some $500 million in venture capital.

Central Data. This layer captures all data (both structured and unstructured) for real-time processing and analytics. The recipient of more than $4 billion of venture funding, it provides a “single source of truth” that gives insurers a 360-degree view of the customer and can reduce customer churn or detect fraudulent claims. In contrast, in today’s legacy IT landscape, data is typically scattered across multiple systems and not available for real-time analysis.

Cloud-Based Infrastructure. This layer allows for scalable high-performance digital services and rapid time to market for new digital solutions. Some $500 million of venture capital has been committed here. Cloud solutions replace on-premises legacy systems that depend on (expensive) self-owned data centers and a central team to manage the IT infrastructure and provide IT services.

Integration and Security. This layer manages these two functions by decoupling front-end from back-end platforms, integrating applications with external parties on the basis of open application programming interfaces (APIs), and managing security and privacy across the IT landscape. It has attracted more venture funding than any other layer—more than $5 billion—for good reason: data security and customer privacy are huge issues. Integration and security for most insurers today involve proprietary interfaces with partners, aggregators, brokers, and clients, with perimeter security and data privacy confined to enterprise IT systems.

---

**EXHIBIT 2 | A “Future Proof” Digital IT Architecture Consists of Six Layers**

<table>
<thead>
<tr>
<th>LOGICAL FUNCTIONS IN DIGITAL IT ARCHITECTURE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CUSTOMER ENGAGEMENT LAYER</strong></td>
</tr>
<tr>
<td>Customer support</td>
</tr>
<tr>
<td>Customer relationship management and omnichannel orchestration</td>
</tr>
<tr>
<td><strong>SMART-PROCESS AND DECISION MANAGEMENT LAYER</strong></td>
</tr>
<tr>
<td>Intelligent business-process management and robotics</td>
</tr>
<tr>
<td><strong>CORE INSURANCE SYSTEMS LAYER</strong></td>
</tr>
<tr>
<td>Policy administration</td>
</tr>
<tr>
<td><strong>CENTRAL DATA LAYER</strong></td>
</tr>
<tr>
<td>Operational data stores</td>
</tr>
<tr>
<td>Master data management</td>
</tr>
<tr>
<td><strong>CLOUD-BASED INFRASTRUCTURE LAYER</strong></td>
</tr>
<tr>
<td>Legacy stacks</td>
</tr>
<tr>
<td>Cloud orchestration</td>
</tr>
</tbody>
</table>

**Sources:** BCG analysis.
Emerging Architectural Strategies

Given the complexity of the challenge, it’s no surprise that across the industry, insurance companies are taking fundamentally different approaches to building their digital platforms. Digital architecture is moving beyond mainstream software, with most digital functionality available now through ready-to-go software as a service (SaaS) platforms or open-source software. Four architectural patterns are emerging: mainstream software platforms, integrated core insurance suites, cloud platforms, and open-source platforms.

Many insurers continue to rely on mainstream software platforms from vendors such as Oracle and IBM. (The old adage “Nobody got fired for hiring IBM” still holds.) These platforms offer broad functionality ranging from mobile-first capability to API managers that span all the layers of the reference architecture, with the exception of core insurance. This architectural strategy appears most suitable for companies with complex legacy-integration challenges that need industrial-strength solutions. For example, one European insurer built a business-process-management layer with IBM software on top of its legacy system and accelerated the time to market of process changes by a factor of ten.

Other companies, most notably in the property and casualty segment, are betting on integrated core insurance suites. Core insurance software vendors such as Guidewire Software and SAP are rapidly expanding their offerings into digital portals and analytics so that they too can offer end-to-end solutions across all layers of the reference architecture. This approach is best suited for insurers that are looking for mature mainstream digital functionality and don’t see a need to establish a digital competitive edge. These packages, which employ standard software, work well with stable legacy systems that allow for easy integration with the front end (such as through an enterprise service bus). The packages also require little upfront investment owing to their pay-

We are also seeing the rapid adoption of open-source platforms such as Liferay for portals and Hadoop for big data. About 40% of the insurers we interviewed use these types of solutions to tap into the innovation speed and talent pool of the open-source community. A good example is The Wall, which gives MetLife a 360-degree view of its 118 million customers and was built on MongoDB in just three months.

Jump-Starting Implementation

As with their architectural strategies, insurers are also taking fundamentally different pathways toward their desired digital technology end state. (See Exhibit 3.) The two principal decision axes are whether to buy or to build and whether to focus expressly on the digital front end or to start with the core insurance back end. The tradeoffs create four pathways with radically different investment and risk profiles. Each also has a different business impact.

Four factors substantially determine the suitability of each approach for a particular company: speed of change, investment required, implementation flexibility, and appetite for risk.

A customer-centric-package approach is the best option for insurers that are looking for mature mainstream digital functionality and don’t see a need to establish a digital competitive edge. These packages, which employ standard software, work well with stable legacy systems that allow for easy integration with the front end (such as through an enterprise service bus). The packages also require little upfront investment owing to their pay-
per-use models, but they constrain rapid experimentation or radical innovation. Their biggest implementation risk is in data consistency, particularly maintaining a full customer view across legacy systems. Speed of change is typically less than six months.

**Digital native front-end platforms** are the best option for insurers facing competitive pressures and needing fast-differentiating digital solutions. They are custom built to drive digital innovation in customer engagement. Like the customer-centric-package approach, they require stable legacy systems and the ability to integrate them with new platforms. Speed of change depends primarily on how fast the insurer can build an internal engineering capability. These platforms can be significantly less expensive than customer-centric packages. They offer full control of the front end, but implementation of end-to-end digital customer journeys is constrained by the legacy IT back-end systems.

AIG moved to a digital native approach for its new front-end applications. It established a mobile innovation-and-delivery center in the heart of the California tech industry and assembled a dedicated data sciences team to develop custom-built analytics engines. The company gradually phased out legacy back-end systems, taking a natural end-of-life approach and replacing them with core insurance solutions from a leading software provider. AIG is also constructing a “data lake” to create a “single version of truth” across channels and products.

An **integrated core-insurance suite** is typically the best option for insurers facing a scattered legacy landscape at the end of its useful life. This approach, however, involves the modernization of back-end systems to enable digitization of end-to-end processes, requires top-down commitment to endure the disruption of a large-scale transformation that encompasses significant reengineering of business processes as well as major data migration. It also involves a big upfront investment (which can be 100% to 150% of the annual IT budget). Transformations take time—typically two or more years (often even longer in the life insurance segment), although this can be shortened to about six months in the case of a greenfield project that starts with a clean slate.

Achmea, a large multiline insurer in the Netherlands, chose to modernize its application and data landscape through an SAP solu-
tion rolled out in a phased manner. On the basis of the SAP core insurance suite, Achmea is implementing digital customer-service and process chains with integrated front-to-back functionality, from quotation and underwriting to claims handling. The insurer expects efficiency gains, improvements in flexibility, and access to innovations. For example, the solution enables Achmea to configure new products within weeks, including front-to-back functionality.

A digital native end-to-end platform is the best option for insurers that put a strategic priority on technology-led innovation. This approach requires a world-class engineering capability that helps the insurer compete with actual digital natives. The level of investments depends heavily on the complexity of the business model, but it is not necessarily prohibitive or even large. One company built an auto insurance startup from scratch with a development team composed of a handful of people. Greenfield implementation can also be fast (as little as 12 months); regulatory approvals are often the bigger constraint. The main risk factor can be the difficulty of maintaining custom-built software owing to the competition for, and attrition of, key engineers.

One Asian insurer that pursues an agile early-adopter strategy for customer-facing technology manages all of its software development in-house. It applies a regular multiyear renewal cycle to its fully integrated core insurance platform in order to avoid large-scale legacy issues. It also taps into the open-source community, rather than traditional vendors, to keep pace with innovation.

Three Major Considerations

The extent of any insurer’s digital IT task is a factor of its digital business strategy and ambitions. Insurers should focus on three overall considerations. First, digital affects the entire IT landscape. Many successful companies take an integrated front-to-back approach that goes beyond mere digital-channel functionality. For those that choose to focus more narrowly, at least initially, the smart-process and decision-management layer is key to offering customer-centric tailored services and maximizing lifetime value.

Second, digital architectural strategy should extend beyond the solutions offered by mainstream software. Most digital functionality today is available through ready-to-go SaaS platforms or open-source software. Third, implementation pathways (such as build or buy) should be carefully designed because they pose radically different investment and risk profiles. Insurers that aspire to radical innovation typically invest in building an internal engineering capability, while those with less extensive goals can rely on mainstream commercial software. Insurers with major legacy IT constraints should take an end-to-end transformation approach. Others have the option of a front-end focus.

The complexity can be confounding, but companies should not be put off. The range of solutions available today, both tailored and off the shelf, vary widely, but they make it possible for every company to determine how best to address its particular circumstances.

NOTE

1. The authors are grateful to executives from the following technology companies for their input: Accenture, Earnix, eBaoTech, Guidewire Software, HCL Technologies, IBM, Innovation Group, Microsoft, Novidea, Pegasystems, Salesforce.com, SAP, SAS Institute, and Wipro.

Hanno Ketterer is a senior partner and managing director in the Amsterdam office of The Boston Consulting Group. He leads BCG’s Technology Advantage practice in insurance globally and manages large technology transformations for insurance companies and banks. You may contact him by e-mail at ketterer.hanno@bcg.com.

Jonathan Koopmans is an associate director in the firm’s Amsterdam office. He has more than 15 years of experience in designing and managing complex IT and digital transformations, focusing on the financial institutions and insurance sectors. You may contact him by e-mail at koopmans.jonathan@bcg.com.

Rolf Mäurers is a managing director of Platinion, a wholly owned BCG subsidiary. You may contact him by e-mail at maeurers.rolf@platinion.com.
ASSET MANAGERS TODAY FACE a fundamental and indisputable fact: the world they are analyzing in order to make and execute investment decisions is increasingly complex and rich in data. For some managers, this is a tremendous opportunity: more complex strategies can be supported.

However, for most firms, the ability to keep up, from an investment and trading standpoint, will require significant investment and material changes to almost all elements of the target operating model, the blueprint that governs nearly every component of the business. The alternative to adapting that model is to risk becoming less competitive in the ability to generate alpha.

Keeping up in this context requires significant investment in developing and maintaining advanced, digital data and analytics capabilities in support of the front office. Doing so isn’t just a matter of technology. It requires a step change increase in capabilities related to process flows, work structure, roles, metrics, and talent.

ADVANCED ANALYTICS AND DATA GO MAINSTREAM
Historically the realm of a small subset of esoteric strategies, investment in advanced analytics, machine learning, big data, and other capabilities is on the verge of becoming mainstream. The enablement of investment decisions with any or all of these tools cannot be confined to just a few managers, nor can it be just something that IT can figure out on the firm’s behalf.

Embracing these capabilities will be central to the way many large investors make decisions—even those that have traditionally relied on human judgment—and go to market. It is therefore critical for all asset managers to reconsider their operating model to ensure that they are set up to deliver on these capabilities in the near term.

A target operating model, in BCG’s view, is a framework with three primary components: process and technology, structure, and organization. (See Exhibit 1.) These three elements provide a blueprint for an asset manager’s future state and translate into a series of business questions and decisions for front-, middle-, and back-office operations.

Investment in advanced analytics is on the verge of becoming mainstream.

In recent years, many leading asset managers have pushed to better align their target operating model with their core business strategy.
They are, for example, creating centers of operational excellence, evaluating alternative sourcing models, and adapting operational and technological skill sets to the structure of their business.

Such changes have helped firms scale their businesses more effectively, accelerate new-product speed to market, trade in new asset classes and markets, and operate more efficiently.

BCG’s 2016 Global Asset Management Benchmarking Survey uncovered a number of significant operating model changes that originate directly in the front office and that are impelled by the analytical and data-driven challenges described above. Some forward-thinking firms are adapting their target operating model in ways we believe are relevant to all asset managers. Their efforts focus in particular on adapting technology and data infrastructure to handle these changes by building excellence in data management and honing capabilities to use a rapidly expanding set of technology tools.

**Front-Office Trends That Drive Operating Model Changes**

An evolving data landscape is not a new phenomenon for asset managers, but the pace of change today and the breadth of opportunity it has created represents a significant step forward. The scope of change increasingly touches multiple elements of the target operating model.

We believe that of all the changes, advanced analytics, portfolio order and execution management capabilities, innovation in trading, and data in the front office have the greatest potential for profound impact.

**Advanced Analytics.** There is rapidly rising interest in the potential of advanced digital technologies and techniques to provide competitive advantage in investment management processes and elsewhere. Technologies that push the boundaries of traditional analytics—such as machine learning, data visualization, artificial intelligence, natural-language processing, and predictive reasoning—were once the province of a small set of alternative managers. Now they are becoming mainstream, sometimes yielding highly targeted investment insights with unprecedented speed.

**Portfolio Order and Execution Management Capabilities.** Managers looking to take on more-complicated investment strategies, trade at higher volumes, and execute more efficiently are adopting technology tools that can help them. The technology providers of these products are building progressively more sophisticated tools across asset classes.

The most frequently integrated new tools fall into three front-office functions:

- Portfolio management tools can help portfolio managers and analysts view

---

**EXHIBIT 1 | Three Elements of a Target Operating Model Provide the Blueprint for an Asset Manager’s Future State**

<table>
<thead>
<tr>
<th>TARGET OPERATING MODEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROCESS AND TECHNOLOGY</td>
</tr>
<tr>
<td>Technology</td>
</tr>
<tr>
<td>Process model and flows</td>
</tr>
</tbody>
</table>

| STRUCTURE |
| Shared services | Sourcing and outsourcing |
| Workload balancing | Footprint |

| ORGANIZATION |
| Structure, roles, and accountability | Talent and skills |
| Governance and metrics | Coaching and enablement |

*Source: BCG analysis.*
their positions and exposures, develop and test strategies, construct model portfolios, and perform scenario analysis.

- Order management and compliance tools can help firms enter orders for execution, check for compliance or rule violations, and route orders to trading.

- Execution management tools can help traders route trades, access pools of liquidity, and execute market transactions more effectively.

A single source of truth is vital for risk organizations.

The reevaluation of front-office tools requires significant work operationally, as well as the technology and data to handle that complexity. As tools have evolved, vendors have begun to look for opportunities to integrate them across functions and asset classes. Most managers, however, focus on developing or procuring best-of-breed solutions.

Innovation in Trading. A number of factors now disrupt the trading space: near-real-time technology, access to liquidity, strategic ability to pick a trade’s timing and exchange market, cost minimization, and ability to obfuscate trades. At high-frequency-trading firms, much in-house technology focuses on the ability to beat the market. Other pressures for change include the sometimes-disruptive financial-technology innovations of fintech firms, as well as constantly changing regulation.

Data in the Front Office. Some investment managers still view advanced analytical tools and sophisticated front-office IT as secondary to sound investment process and are, therefore, not adding resources in those areas. Still, despite a range of views, almost every investment manager we have encountered has identified improvements to the governance, quality, availability, and breadth of data as priorities for the front office and the risk management organization.

Data initiatives are being launched in three areas, each of which creates very specific business value for managers:

- **A Single Source of Truth.** Maintaining the flow of consistent and accurate data throughout the organization is critical, especially as portfolio management systems become more common and strategies grow more complex. A single source of truth is vital for risk organizations as they take a more active role in monitoring areas such as liquidity and counterparty exposure.

- **Real-Time or Near-Real-Time Data in the Front Office.** For some investment strategies, having start-of-day positions is adequate. Increasingly, however, investment managers want the ability to look at positions, cash, and open orders in near-real time. The ability to do this while maintaining data accuracy (for example, recording details of corporate activity) is behind the concept of providing an investment book of record (IBOR), which has become the North Star of data for many managers.

- **Focus on Data Quality and Governance.** Managers seek to achieve excellent data quality and effective governance in various ways but almost always with significant implications for the operating model.

**Implications for the Operating Model and Investment Process**

Every trend affecting the front office affects one or more of the target operating model’s three elements. There are implications for each element, and we see leading firms making some changes as they invest in the front office.

**Process and Technology.** Technology and data, in our experience, receive the most investment and will continue to attract the keenest focus of managers’ time and resources. Firms are emphasizing investments in core platforms and related workflows and building two-speed technology platforms for experimenting and learning in more agile ways:
• **Core Platform Technology.** Investments in core platform technology include implementing new front-office backbones, such as portfolio or order management systems, and new data infrastructure. Many of these investments are multiyear programs that require significant commitment. But they do improve the alignment of technology with firm-wide investment goals, such as the ability to operate in a truly multiasset class environment. Alternatively, some managers focus efforts on incremental standardization of investment tools to mitigate risk and improve scalability across the front office. Another area of increasing opportunity is the development of portfolio management collaboration tools and technology that allow managers to work together across traditionally siloed investment activities.

• **Delivery Model Technology.** The premise of a two-speed technology is critical for firms experimenting with advanced analytics and machine learning tools. The most innovative firms are investing in building “sandbox” environments for testing tools and evaluating potential technology partners more quickly than otherwise possible. Highly innovative firms are creating joint business and technology teams that operate in an agile way, disconnected from the broader workflow and operations.

**Data Architecture and Big Data.** To support advanced analytics and promote evolution of the investment process, it is critical to obtain the right high-quality data in a timely way. Leading asset managers’ efforts to modernize data architecture have taken different forms. For many firms, the right first step along a data modernization path is to evaluate and rethink their data-warehousing strategy, creating a more cohesive architecture for delivering data in a more consistent and timely way. Other firms have invested in building big data architecture, bringing in new tool sets that allow them to maximize value derived from the structured and unstructured data that they bring into the firm and that they create.

In many cases, investments in data are made in conjunction with a broader front-office effort, such as portfolio management and order management replatforming:

• **Data Sources.** The breadth of both traditional quantitative structured data, as well as unstructured data that many investment professionals want to capture, is rapidly growing. Social data, such as Twitter feeds, can provide insight but only if it is made available to investment professionals in a timely and digestible way. Leading technology organizations are partnering with investment professionals to enhance their understanding of current and future data needs and the architecture required to import that data.

Innovative firms are investing in building “sandbox” environments for testing tools.

• **Data and the Investment Book of Record.** Historically, a firm’s portfolio management system and models were fed data in an overnight batch process that reflected the day’s transaction activity, any corporate actions that happened over the course of the day, and updated cash positions. For many firms, however, a more systematic IBOR solution is now required to track those changes throughout the day—owing to the high volume of transactions, frequent changes in cash, the breadth of their positions, or complicated trading strategies. These tools pull data from order management and trading systems, as well as accounting systems, to give full intraday views of a manager’s positions and to help support ever-advancing analytical activities.

**Work Structure.** Shared services, organization structure, and resourcing are all areas in which the evolving dynamics in the front office affect the operating model:

• **Shared Services.** One critical first step in building an organization that is proactively able to meet front-office analytical and data needs is the identification and
prioritization of the right use cases. Relying on inadequately trained and focused people to do this work has been a stumbling block for many firms. Many innovative firms are creating a dedicated organization to build capabilities for data and analytics. These groups are centralized to allow access by all investment groups and to keep them focused and prepared in deploying and developing their analytical and technical skills, as well as to keep them in touch with the rapidly evolving vendor landscape.

• **Sourcing and Outsourcing.** The landscape of new vendors offering fresh data and analytical capabilities is evolving rapidly and has the potential to disrupt many parts of the investment process. Some managers are focusing on building partnership models to evaluate different potentially disruptive technology partners. For a few leading firms, this has meant creating investment vehicles, using firm assets to take venture stakes in exciting technologies. For others, it has been far simpler: staying abreast of new ventures and bringing them in for proof-of-concept assessment when new analytical questions arise. Either way, firms that are pulling ahead are highly reliant on partners to help deliver capabilities. They are building their organization and processes to fully support that model.

**Organization.** The ability to tackle and deal effectively with any and all of these trends can place significant stress on the organization. Processes and tools change, creating the need for significant change management. It is crucial to identify and hire new talent, and that requires competing in a variety of talent pools. Competition is steep for data scientists, architects, and governance professionals—and not just with other buy-side institutions but also with the sell side and leading technology companies. Bringing new people into the investment group and into IT requires viable career paths and career development expectations.

*Gary Shub* is a partner and managing director in the Boston office of The Boston Consulting Group and the global leader of the asset management topic area.

*Brent Beardsley* is a senior partner and managing director in the firm’s Chicago office and the global leader of the asset and wealth management segment.

*Hélène Donnadieu* is a principal in BCG’s Paris office and the global manager of the asset and wealth management segment.

*Benoît Macé* is a partner and managing director in the firm’s Paris office.

*Zubin Mogul* is a partner and managing director in BCG’s New York office.

*Achim Schwetlick* was a partner and managing director in the New York Office of The Boston Consulting Group.

*Ben Sheridan* is a partner and managing director in BCG’s San Francisco office.

*Kenneth Wee* is a project leader in the firm’s New York office.

*Qin Xu* is a partner and managing director in BCG’s Hong Kong office.

*Yasuhiro Yamai* is a partner and managing director in the firm’s Tokyo office.
Acknowledgments
The authors thank their colleagues at The Boston Consulting Group who contributed to this publication, especially Carrie Forster and Johanna Nemson.

For Further Contact
Pia Tischhauser
Senior Partner and Managing Director, Global Leader Insurance Practice
BCG Zurich
+41 44 388 8716
tischhauser.pia@bcg.com

Miguel Abecasis
Partner and Managing Director
BCG Lisbon
+351 21 3214 846
abecasis.miguel@bcg.com

Brent Beardsley
Senior Partner and Managing Director
BCG New York
+1 212 446 2979
beardsley.brent@bcg.com

Jeff Chookaszian
Partner and Managing Director
BCG Chicago
+1 312 627 2960
chookaszian.jeff@bcg.com

Matteo Coppola
Partner and Managing Director
BCG Milan
+39 02 65599 406
coppola.matteo@bcg.com

Davide Corradi
Senior Partner and Managing Director
BCG Milan
+39 02 65599 265
corradi.davide@bcg.com

Gilles Fabre
Partner and Managing Director
BCG Paris
+33 1 4017 1453
fabre.gilles@bcg.com

Jean-Christophe Gard
Senior Partner and Managing Director
BCG Paris
+33 1 4017 1135
gard.jean-christophe@bcg.com

Antoine Gourévitch
Senior Partner and Managing Director
BCG Paris
+33 1 4017 1162
gourevitch.antoine@bcg.com

Jens Kengelbach
Partner and Managing Director
BCG Munich
+49 89 2317 4312
kengelbach.jens@bcg.com

Hanno Ketterer
Senior Partner and Managing Director
BCG Amsterdam
+31 20 548 5843
ketterer.hanno@bcg.com

Benoit Macé
Partner and Managing Director
BCG Paris
+33 1 4017 1165
mace.benoit@bcg.com

Zubin Mogul
Partner and Managing Director
BCG New York
+1 212 446 2855
mogul.zubin@bcg.com

Miguel Ortiz
Senior Partner and Managing Director
BCG London
+44 7908 770929
ortiz.miguel@bcg.com

Lucy Pilko
Partner and Managing Director
BCG New York
+1 212 363 0696
pilko.lucy@bcg.com

Martin Reeves
Senior Partner and Managing Director
BCG New York
+1 212 446 2858
reeves.martin@bcg.com