

# Insurance on the threshold of digitization

## Implications for the Life and P&C workforce

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## Implications for the Life and P&C workforce

For years now, digital advances have been transforming a range of industries. The insurance industry has generally been slow to adopt new digital approaches, but times are now changing. This shift is manifesting itself in major – and disruptive – trends in four areas, with leading insurers already playing a frontrunner role in driving their adoption:

**Omnichannel world.** Customers are making ever-greater use of multiple channels: more than half of Europeans now research insurance products online. These customers often subsequently visit agents to submit a final application, and expect them to be fully informed about the online quotes and offerings they have seen. Many new entrants are active in this space as well. In one example, Kroodle in the Netherlands has brought out a Facebook app for quoting and purchasing Life products. Axa has announced a strategic partnership with Facebook. And, most prominently, Google has recently launched a price-comparison Web site for auto insurance in the US and the UK. In a further digital innovation, insurance products can be directly integrated into (the Web sites of) online shops, as Simpleurance successfully does. The claims process is increasingly going mobile, too. Liberty Mutual, for example, offers an award-winning mobile motor claims app, and Axa offers eServe, a digital claims tracking tool.

**Digital products.** Technological progress makes it possible to monitor insured assets and insureds' behavior in real time, enabling the use of innovative digital products and/or digital value-added services. Aviva UK is an example of a major player that has developed multiple new digital products such as telematics-based motor insurance, where an app monitors customers' driving patterns and then offers corresponding discounts. Both Gothaer Versicherungen and Allianz are partnering with providers of smart home solutions. Online flexible product bundling is becoming ever more common, too, for example at CosmosDirect. In addition, digital is creating new needs for protection, and insurers such as Allianz have designed new products to protect against cybercrime.

**Advanced analytics.** Insurers have always been specialists in handling large data sets, but up to now the full potential of this data has lain largely untapped. Novel analytical techniques are now available, while leading-edge data and analytics providers are offering opportunities from new data sources. Zurich Insurance Group is one innovator in the field: alongside its own fraud squad, it has developed leading fraud detection capabilities drawing heavily on advanced analytics, and is now planning to deploy its anti-fraud software worldwide. Wellpoint, to cite another example, leverages IBM Watson for clinical decision making and claims pre-authorization. CSS, the second largest Swiss health insurer, is experimenting with telematics-like pricing based on the exercise level of the policyholder.

**Digital process innovation and automation.** New technology and agile development methodologies allow swift process automation at limited cost. An app for submission of medical claims from HanseMerkur, for instance, enables straight-through processing at the back end using QR codes. Liberty Mutual has a mobile home insurance app that allows customers to add, edit, or delete insured items easily, enabling a step-change in the digitization of the corresponding back-end processes.

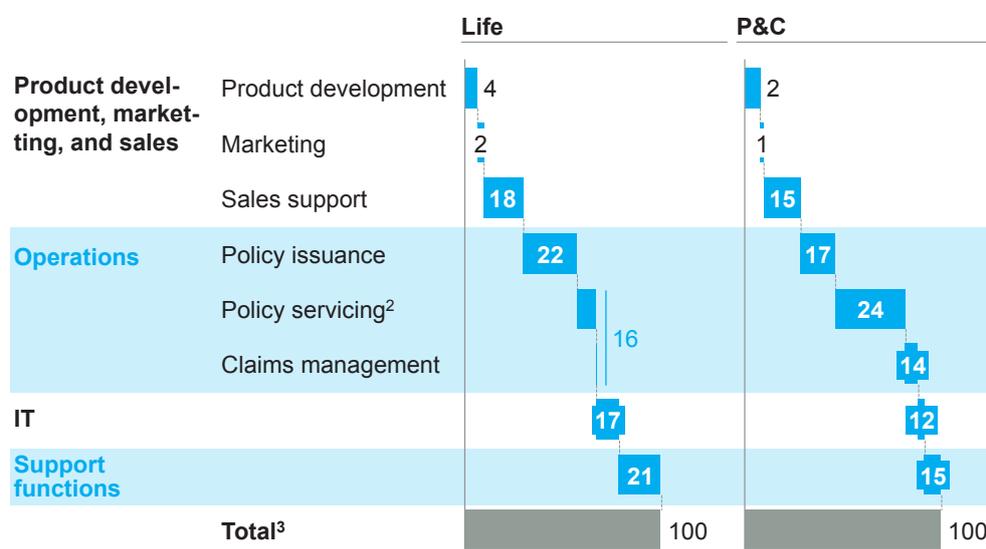
Each of these trends is inevitably having a knock-on effect on workforce patterns in the sector that will accelerate substantially as the transformation progresses. The changes go way beyond “simply” adding a few data scientists to the existing workforce: a largely new set of skills will be needed, requiring insurance companies to create internal cultures that will attract and retain this kind of talent. At the same time, truly digital business models allow insurers to operate at significantly lower staff levels – an opportunity all insurers will need to act upon given continuous cost pressure from low interest rates. To understand the extent of the change and its full ramifications for insurers, this paper analyzes the impact of these trends on both the capabilities staff will require and the size of the insurance workforce.

### Workforce shifts required in all areas

Currently, a majority of the insurance workforce is concentrated in operations and support functions (Exhibit 1). Of all these areas, operations will be most affected by the introduction of automated rule-based decision making, a greater focus on self-service, and completely digital products and processes. For this reason, a substantial drop in the total number of operations employees is likely in the coming years.

**Exhibit 1** Currently, the bulk of the insurance workforce is concentrated in operations and support functions

FTEs<sup>1</sup> in %; full sample 2010 - 13



1 Full-time equivalents

2 Including benefits administration in Life insurance

3 Because the size of the salaried sales force varies greatly from one company to another, salaried sales reps are not included

SOURCE: McKinsey's Insurance 360° benchmarking

At the same time, the need for personnel will grow in functions such as marketing – and in any positions requiring skills in data, analytics, the development of algorithms and rules, or agile software development. The same is true for key positions involving direct customer contact, where customer excellence skills are critical for success. Staff with other capabilities such as actuarial skills are already in short supply today, and short innovation cycles will further intensify this situation.

### Many change processes already started

Staffing levels are already sinking in many areas. In recent years, most leading insurance companies in Europe and other mature markets have kicked off ambitious transformation programs to lower costs and boost efficiency – especially in back-office and support functions.

Insurance 360°, McKinsey's annual benchmarking study, confirms that the workforce is shrinking in some insurance functions (Text box 1). For example, from 2010 to 2014 the average number of policy issuance employees fell by 10 percent in Life and 7 percent in P&C at the group of insurance companies analyzed. However, there was little evidence of such a decline in the policy servicing and claims/benefits functions of these companies (Exhibit 2).

#### Text box 1

##### Insurance 360°: brief overview of the methodology used

McKinsey has been conducting Insurance 360° – an insurance cost benchmarking and root cause assessment – since 2005. The survey uses a valuable and proven methodology to identify cost gaps and their root causes. At its core, Insurance 360° is built on holistic disaggregation and mapping of costs and FTEs to ensure that costs and FTE splits are comparable across insurers. The mapping follows a detailed taxonomy that specifies clear definitions of all functions that have been validated and refined over the last ten years.

Each individual assessment is substantiated by a McKinsey expert to maintain strict adherence to the benchmarking methodology. More details on McKinsey's Insurance 360° benchmarking can be found at our Web site<sup>1</sup>.

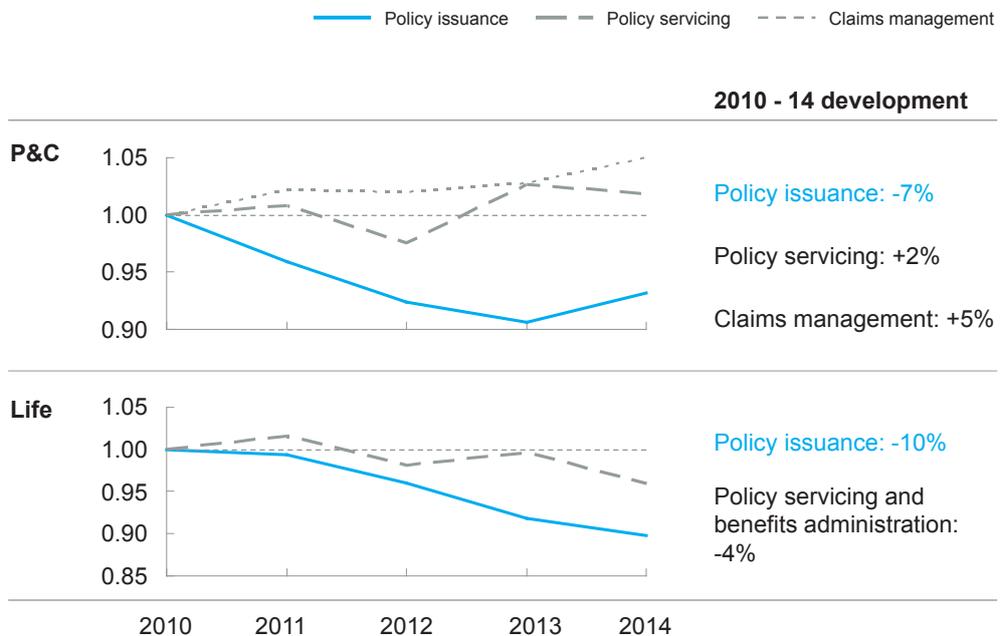
The analyses used in this paper are based on the development of FTE data between 2010 and 2014 for our long-term participants from Western Europe. All figures refer to the median of the group surveyed, with data taken from our sample in December 2015.

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<sup>1</sup> [http://www.mckinsey.com/client\\_service/financial\\_services/expertise/insurance/insurance\\_360](http://www.mckinsey.com/client_service/financial_services/expertise/insurance/insurance_360)

## Exhibit 2 The number of policy issuance FTEs has decreased in recent years

Indexed development of FTEs in operations (base year = 2010), median, selected participants



SOURCE: McKinsey's Insurance 360° benchmarking

These findings clearly reflect the strong influence of automation at the interface between insurers on the one hand and agents, brokers, and bank and direct channels on the other. Similarly, they reveal significant remaining potential to automate policy servicing activities (Text box 2). The number of employees also dropped noticeably in support functions, falling by 14 percent in Life and 9 percent in P&C. The implications of digital go beyond the insurance FTEs and also affect intermediaries. The number of agents in Germany, for example, has been declining for years, from 220,000 in 2011 to 193,000 in 2015, to take the most recent figures.

### Text box 2

#### Case example on FTE adjustments and upskilling needs

After implementing standard software for its policy management system, a Western European insurer needed to downsize and upskill its policy administration team for two reasons. First, standard software had opened up new automation opportunities, resulting in opportunities for FTE reductions. Second, operating the new software also required a new skill: developing and maintaining algorithms for automated decision making. These algorithms ensure, for example, that high-risk cases are excluded from automated processing and sent to specialist underwriters for manual review instead. The designers of these algorithms need expert knowledge of the technical guidelines, as well as strong quantitative and business problem-solving skills to develop the algorithms and spearhead further process optimization – a very rare and highly sought-after combination of skills.

At the same time, this new system led to significant reskilling and an FTE reduction in the IT department. The new system required specific programming skills not widely available previous to that. Programming skills for the multiple legacy systems were no longer needed. As the new system replaced multiple old ones, it allowed more configuration by the users themselves. It also offers upgrades that include most legal changes. As a consequence, the total amount of development capacity needed went down as well.

#### Further decline in net staff requirements foreseeable

Extrapolating the current observations already described and factoring in the substantial shifts from moving towards a digital business model, a substantial change in the number and skill requirements of insurance employees is emerging. McKinsey has developed a scenario-based forecasting model for the next ten years to give both a qualitative and quantitative view on the changes ahead (Text box 3).

#### Text box 3

##### Methodological approach: scenario-based forecast for the next ten years

McKinsey's model forecasts the impact of digital on the insurance workforce as a range based on two different potential scenarios. Forecasts for specific insurers can be generated by applying the two scenarios to the insurer in question, using its concrete situation today as a starting point.

- In the evolutionary scenario, significant changes take place in the nature of business, but these do not lead to a fundamental overhaul of insurers' business models. Despite this essential stability, processes within the business models will undergo considerable change. For example, the level of digitization at customer interfaces will increase, and staffing in traditional sales organizations will fall. The evolutionary scenario foresees fast-paced automation, which will be especially intensive in core operations and the back office. IT delivery models will continue to shift towards agile, next-generation infrastructure.
- The accelerated change scenario assumes disruptive changes in the nature of business, including a substantial market share for new digital intermediaries, widespread digitization of customer touch points, a strong decline in traditional distribution, and

strong commoditization of product lines such as motor and personal property. This scenario will also be characterized by even more accelerated IT transformation than in the first scenario.

To model the scenarios, a number of parameters are used to represent the anticipated extent of change to the business model. They include the degree of modification in sales, the change in the share of direct and aggregator business, the rise of additional intermediaries, and the extent of the increase in churn. Other parameters provide metrics for a range of factors: how radical product changes are likely to be; the expected change in the number of channels for servicing requests (and their use); the degree of automation in the back office, call center, and admin functions; the resulting savings; and the intensity of the IT transformation towards agile development, next-generation infrastructure, and the use of standard software. Both change scenarios also take the impact of exogenous variables on the underlying business into account. The evolutionary scenario assumes this effect to be rather limited. In contrast, the assumed effects in the accelerated change scenario are broader because they reflect material growth (for example, in cyber-risk-related products) and a continued shift to more capital-light savings products.

Using this forecasting model, McKinsey analyzed the resulting impact of several parameters on staffing levels and structures for a “typical” insurer (based on the findings regarding insurers’ typical personnel structures today from the Insurance 360° benchmarking study). Starting from this basis, the anticipated impact on employee capacity at each stage of the value chain over the coming decade was computed (Exhibit 3). The results show that insurers should be prepared to see their total workforce drop substantially over the next ten years. Here is a detailed overview of the findings for the evolutionary scenario:

[Product development and marketing](#) are the only divisions that will see absolute FTE growth. In [product development](#), this increase will be driven by shorter innovation cycles, new digital products, and more tailored offerings, as well as more tightly controlled pricing and risk selection and faster tariff changes. Since significant improvements to IT will take place in parallel, however, these changes will lead to moderate growth only.

The number of [marketing](#) FTEs will rise for a number of reasons, especially an increased emphasis on digital marketing and a stronger presence on social networks. Greater focus on individual targeted marketing and more developed brand management will contribute to this trend as well. Furthermore, insurers will devote more attention to qualitative management and return on investment. The growing need to work with sponsors and advertising agencies will also drive up headcounts. Data-supported marketing will play a far greater role than it has in the past.

**Exhibit 3 In the evolutionary scenario, the number of FTEs grows in product development and marketing but declines in operations and support areas**

Salaried FTEs, impact resulting from mix of volume and digital effects

		Strong increase	Moderate increase	Minor changes	Moderate decrease	Strong decrease
		<b>Strongest increase (examples)</b>		<b>Strongest decrease (examples)</b>		
Product development, marketing, and sales	Product development		Digital products, pricing	Standard product reporting		
	Marketing	Digital marketing, campaign management, and sponsoring				
	Sales support	Channel management	Sales monitoring			
Operations	Policy issuance	Business rules administration (e.g., for flagging claims for manual processing by an expert)		Regular operations (e.g., processing standard applications, handling simple policy/claims processes)		
	Policy servicing					
	Claims management					
IT	Application development and maintenance	Advanced analytics, "fast speed" development (e.g., portals, apps)	Designing and building solutions for core systems			
	Infrastructure				Infrastructure operations	
Support functions	Human resources	Digital recruitment	Transactional HR processes			
	Postage and logistics	Postage handling				
	Facility management					
	Finance, tax, and planning					Standard reporting
	Other support functions					

Average view, size of effects differs by product line and market depending on respective business growth/decline

SOURCE: McKinsey analysis

**Sales support and sales management** will increasingly rely on supporting activities in order to manage the growing palette of channels (such as agents, brokers, direct channels, aggregators, or new partnerships with third parties) and make digitization strides in all of them. These activities will include evaluating the effectiveness of individual channels, agents, or brokers and building the advanced analytics teams such analysis requires. Other tasks will involve generating leads for customer contacts and working with insurance comparison portals and other third parties. At the same time, automation will increase in many analysis and reporting processes, and the share of channels requiring less support – such as the direct channel – will likely increase. As a result, the model predicts that staffing needs in this area will drop slightly.

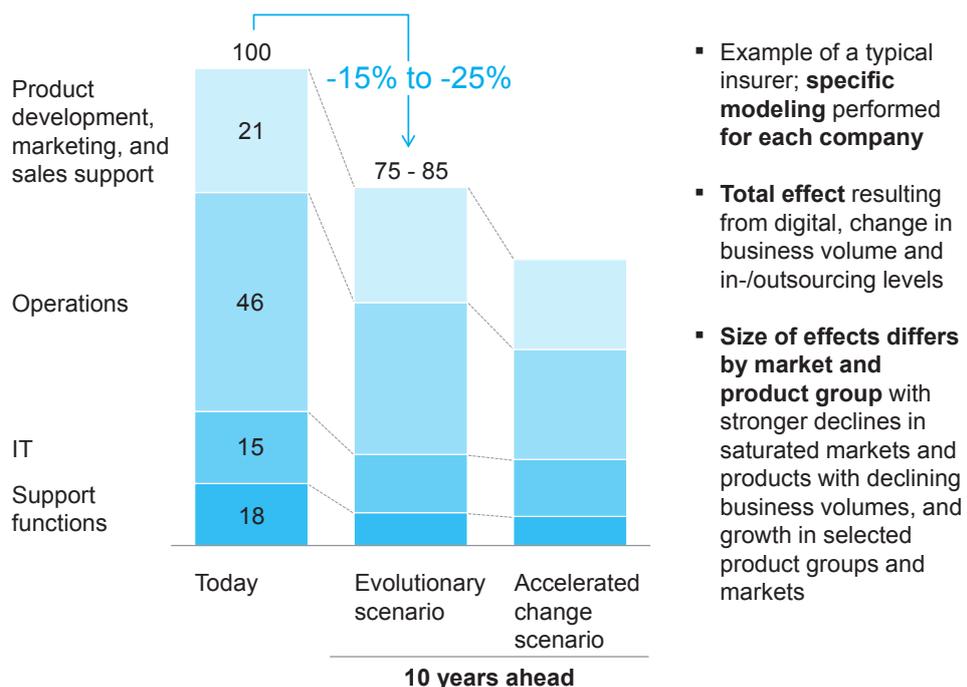
**Policy issuance, policy servicing, and claims** will see ever-greater levels of self-service and automation, as well as completely new, highly streamlined digital processes. The number of requests to call centers and back offices will drop sharply as a result. For example, far fewer customers will call to change the list of items covered by their household contents insurance, change their address or banking information, or ask about the status of a claim. As a result, policy issuance, policy servicing, and claims will be the value chain stages seeing the steepest FTE decline. Another factor is that claims frequency will fall due to improved technology and telematics. While there are some exceptions for highly qualified claims experts – such as those involved in fraud detection or the modeling of decision algorithms for automated segmentation – the overall effect on the claims staff in “flow” functions is likely to be clearly negative.

IT headcount shows a mixed picture. More workers will likely be needed in “high-speed” application development to create new apps or portals in fast development cycles. This area requires skills such as agile software development, test automation, and experience with new Web-based technologies or tools for advanced data organization, storage, and analysis. A business-oriented mindset and the ability to work in an agile environment with short cycles and a test and learning culture are also crucial. Digital will also require the modernization of core legacy systems and lead to the greater use of standard software, resulting in additional development and maintenance capacity needs in the short and medium terms, followed by a decline in the longer term. Infrastructure departments face the impact from continuing commoditization of infrastructure and the use of outsourcing and cloud solutions, reducing FTE intensity. Overall, IT headcount is likely to drop significantly.

Support functions will experience decreasing headcount. In areas such as finance, greatly improved reporting and analytics tools will reduce the number of FTEs needed, while HR will benefit from the automation of basic processes. In addition, the overall drop in FTEs due to, for example, reductions in the claims staff will further reduce support needs in areas such as HR or facility services. In short, aggressive automation will directly and indirectly trigger several developments that, taken together, could greatly reduce the workforce.

In the evolutionary scenario, the number of employees overall drops by 15 to 25 percent in the coming decade, driven primarily by reductions in operations staff. In the accelerated change scenario an even steeper reduction takes place (Exhibit 4).

**Exhibit 4 The workforce will likely shrink by up to 25% over the next 10 years; depending on the scenario, this reduction could be even greater**



SOURCE: McKinsey analysis

## Insurers need to act now

Projections for the next decade show a massive shift in the insurance workforce demand, both in absolute numbers as well as in the relative mix of talents. Will this automatically become a huge management challenge? Not necessarily, as the efforts and impact will depend a lot on the structure of the local insurer's age pyramid, as well as the proactivity in addressing the changes.

Insurers can anticipate developments by implementing targeted HR measures along three dimensions. First, they should identify skill and headcount gaps. Then they will need to put initiatives in place for training/retraining employees and hiring targeted specialists. Finally, they will need to engage in longer-term preparation for FTE reductions in the areas affected.

**1. Using scenarios to assess the HR impact of digital is the first step towards facilitating broader long-term strategic workforce planning.** Such an assessment starts by identifying the potential gap between supply and demand with regard to headcount and skills mix by building the current baseline (in FTEs) bottom up for each entity, value chain stage, and position. At this point, insurers should project the FTEs required for the next ten years based on a sound scenario-based estimate of the impact of digital for each job cluster. To identify the gap, projected demand for FTEs is compared with the supply view, based on anticipated attrition and hiring.

**2. Planning and operationalizing steps to substantially boost workforce skills.** Major upskilling will be required for around 50 percent of jobs along the entire insurance value chain (Text box 4), especially key positions in customer excellence management and in areas relating to analytics and data-driven decision making. Cooperative efforts with third parties, such as comparison portals, banks, or claims processors will also undergo major changes requiring new capabilities in supplier and partnership management.

### Text box 4

#### Deep dive: new skill requirements for leveraging machine learning

Advanced analytics and machine learning (self-learning algorithms for data prediction) will become ever more widely used in insurance. Examples include prediction of productivity for third-party distributors, prediction of customer churn, identification of the next-best offer and propensity to buy, prediction of claims severity for long-tail lines, fraud prediction and – as an internal use case – predicting which employees are most likely to leave.

Implementing this successfully requires new skills that are highly sought after in all industries. Besides advanced statistics and data science skills in the core analytics team, the most critical talent is an analytics manager who combines strong analytical problem-solving skills with business knowledge and strong leadership and communication skills. He or she translates advanced analytics into business functions. This involves identifying opportunities to apply analytics, structuring analytical problems and syndicating with key business and analytics leadership, as well as drawing out the business-relevant conclusions from analytics results.

This will affect most parts of the insurance value chain. In marketing, for example, this relates to activities such as tracking customer experience across touch points, creating and leveraging real-time single-customer views, as well as defining and working with data-driven customer segmentation. Another important area is defining decision-making rules driven by big data (for example, “next-best action” algorithms).

However, the market for new, digital skills is highly competitive. Insurers are already finding it difficult to hire the right people. They will therefore need to ramp up their recruiting to position themselves attractively in highly sought-after segments such as the multiskilled analytics manager described above. Some of the leading insurers have started cooperating with universities on selected digital and also risk assessment questions to identify promising talent early. A change in the management of traditional career paths – i.e., recognizing and promoting alternative “expert” tracks – will also be needed to make the employee value proposition attractive to new sought-after talent pools.

Achieving this requires substantial upskilling of the HR function as well, including the ability to identify skill gaps and retraining needs, leveraging advanced analytics to identify critical resources likely to leave, understand digital recruiting sources, manage reputation and evolve innovative recruiting formats for scarce skills. For transactional HR processes, self-servicing tools need to be introduced and maintained.

**3. Preparing a long-term personnel development and adjustment plan.** The implications of automation for specific insurers will highly depend on the competency profiles and age structure of their staffs. Insurers with generally younger staffs and clear gaps to required competency profiles will need to expect extensive changes. Successfully navigating these changes will involve preparing an overall change story. It will also be crucial to inform key stakeholders – such as the relevant business units, the HR function, and works councils – early on about the opportunities and challenges resulting from the change story.

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Employees’ knowledge and capabilities are among the most valuable assets for any company – especially during periods of rapid change. Digitization is causing a shift in staffing and personnel utilization, both in terms of how many employees an insurer needs and what skills it requires. Insurers face a challenging dual task: to begin transforming their cultures and ensure that core new competencies are available, while at the same time proactively shaping personnel development and adjustment processes to meet the inevitable changes ahead. For this reason, an insurer’s HR strategy is a critical issue requiring top management attention.

## Authors and contacts



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