

Insurers, AI and the Fourth Industrial Revolution

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Although the U. S. has experienced technological change and disruption during prior periods of industrial revolutions, the pace and scope of the Fourth Industrial Revolution positions it to have a far greater impact on the U. S. and global economies. The recent advancements in AI and robotics are some of the most significant computer science advancements of our generation. Google CEO Sundar Pichai has compared it to the discovery of electricity and fire, while Bain & Company predicts that the U. S. will invest \$8 trillion dollars in automated technologies by 2030.¹

Artificial intelligence, robotics and automation

The U. S. is currently the global leader in developing and investing in AI technologies and robotics; however, our global competitors are rushing to catch up. In 2017 AlphaGo, an AI program developed by Google, defeated Ke Jie, the world's champion Go player.² (Go is a popular and complex ancient board game made digital). In response, China's government launched the „Made in China 2025“ campaign to become a market leader in developing these new technologies by 2025. As China and other global leaders invest in smart factories, which are driven by AI and robotics, the rise of these factories will not only impact production but also potentially eliminate jobs and keep wages down worldwide. This intense focus and investment from our largest global competitors will likely further accelerate the pace and scale of change and limit our ability to manage the disruptive effects across many sectors of our economy.

About the article

Over the past decade, U. S. tech firms have made significant advancements in artificial intelligence (AI) and robotics, making it far easier and efficient to automate tasks and functions across industries. Recently, AI's ability to rapidly collect and analyze large, diverse and unstructured data sets is proving beneficial in the fight against COVID-19. AI affects all types of risks and lines of insurance, and the Workers' Compensation market has a particularly large stake in its development.

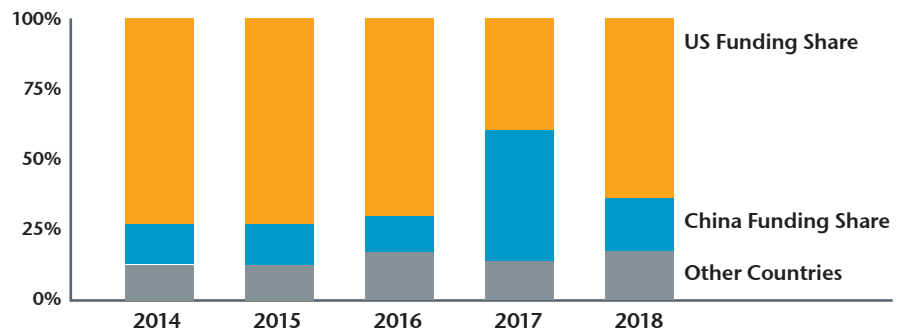
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Significantly, the new technologies are poised to challenge traditional assumptions that AI and robotics will be used to perform only low-level and highly-repetitive tasks. The latest research from The Massachusetts Institute of Technology (MIT) shows that machines are better than humans at pattern recognition and judgment calls. New AI technologies and robotics are also helping doctors detect early signs of cancer by analyzing a condition and comparing it to data points of other patients.

It remains unclear whether the benefits of AI and robotics will outweigh the disruption to many traditional industries and their employees. In fact, a number of influential CEOs, venture capitalists, and academics have already raised concerns about how these new advances in AI and robotics could fundamentally change our society and the future of work for blue- and white-collar workers. Blackstone's CEO, Stephen Schwarzman, who provided \$350 million to launch MIT's new college for AI and robotics, remarked that "We face fundamental questions about how to ensure that technological advancements benefit all – especially those most vulnerable

Figure 1: AI startups – Investors' Equity Funding Shares



Source: CB Insights, <https://cbinsights.com/research/china-artificial-intelligence-investment-startups-tech>

to the radical changes AI will inevitably bring to the nature of the workforce.”³

The future of work – Labor-intensive industries, insurance and law

The recent developments in robotics and AI have changed the playing field for automated technologies. Historically, automation was beyond the reach of small- and medium-sized companies. Robotics were costly, required highly sophisticated programming expertise, took months to integrate, and could only perform single discrete tasks.

In 2012 the advent of AI was a game changer. AI brought collaborative robots to the market – robots that see and feel like humans, learn from new data sets and information, and perform multiple tasks. These collaborative robots are also more cost effective and easier to integrate, making them available and attractive to small- and medium-sized businesses.

AI and robotics are now transforming many traditional labor-intensive industries, such as farming, construction, factories and fast food. While Amazon continues to be a global leader in leveraging AI and

Editorial

Andres Webersinke joined Gen Re more than 25 years ago. He heads the global unit Underwriting and Research & Development. The Business School team within R&D supports Gen Re's clients by developing and providing seminars, web-based trainings and publications to meet the various needs of professional education. The product offer ranges from soft skills to target group specific technical topics.



We live in a VUCA world (volatile, uncertain, complex and ambiguous). This statement in one of the articles of this year's issue of *Risk Management Review* may sound scary to some, for others it uncovers the variety and pace of new opportunities this new world offers. There are good reasons to embrace the VUCA world. In times of COVID-19, for example, Artificial Intelligence has demonstrated reasons for hope by accelerating – inter alia – early warning signals, probability calculations of infection and spread, and research into vaccine development. The article on insurance accounting reveals

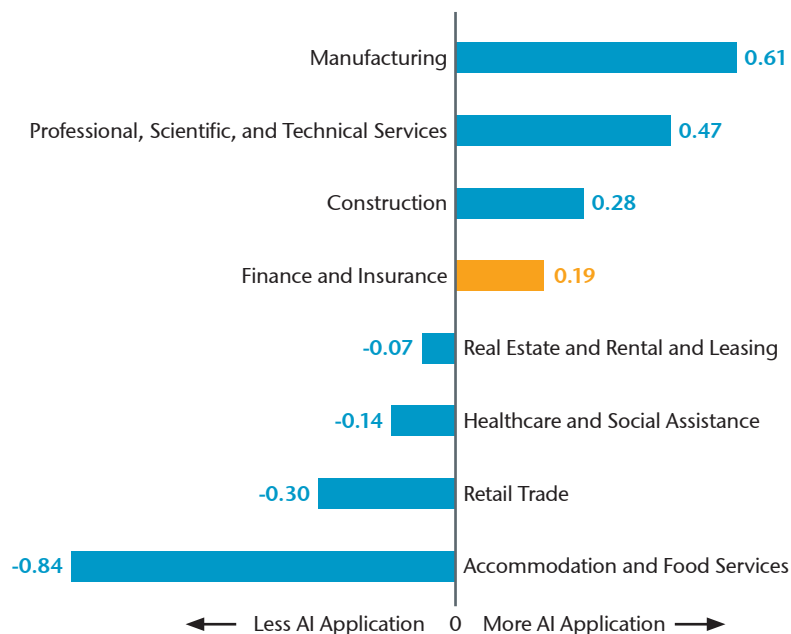
the paradigm shift that comes with IFRS 17 and the termination of various traditions together with introduction of guidance that won't be fully principle-based in all areas. Complexity may be replaced with new complexity but offers consistency and greater insights. Venturing to these new shores requires the right leadership. Management styles must adapt to the uncertainties our teams face and coaching is identified as a key component in a manager's toolbox. Don't be scared but enjoy reading this issue!

Your Editorial Team

smart robots, plenty of examples of smaller businesses across the country embrace these new automated technologies. Agricultural farms are utilizing automated tractors and drones to help with growing their crops. Construction firms are purchasing automated brick laying machines (to lay 3,500 bricks per day). Restaurant owners are investing in automated machines that can store, prep and cook fast food in a highly controlled environment without any human intervention. If the adoption of these new automated machines continues, there will be fewer jobs and payrolls in these industries. Over time, the job and payroll loss will materially impact insurance carriers who specialize in writing workers' compensation insurance for these industries.

Historically, technology's disruption was limited to blue-collar workers; however, AI technology now has its sights set on white-collar workers, including insurance underwriters, claims executives and legal professionals. The insurance industry,

Figure 2: AI exposure by select industry sector



Source: Brookings Institute, "What Jobs Are Affected by AI", November 2019, www.brookings.edu

which has not been an easy industry to disrupt, is primed for major transformations due to developments in AI and automation.

Three years ago, Cambridge University predicted that insurance underwriters were vulnerable to automation. Since that time, we have seen a greater demand among U.S. carriers to invest in new AI technologies that allow them to automate the underwriting and settlement of claims for small commercial insureds. Given the shortage of new talent available to fill expected retirements, coupled with new AI technologies, we expect this trend to accelerate.

Developments in AI and automation are already changing the U.S. legal profession, one of the most regulated and specialized professions in the U.S. McKinsey estimates that 22% of lawyers and 35% of paralegal tasks can be automated today. A recent HBO documentary, "The Future of Work," supports this prediction.⁴ It highlighted how LawGeex, a new AI-driven computer software, performed against a seasoned corporate lawyer on a common task –

analyzing complex legal documents.⁵ LawGeex proved its ability to review and interpret the documents, identify potential legal issues, and provide substantive advice to a client in half the time – and with much greater accuracy – than the seasoned corporate lawyer. While LawGeex and other AI technologies will not displace lawyers in the short term, it will exert pressure on lawyers to shift their time to more highly skilled work – such as negotiating and deal structuring – and away from research, writing and reviewing documents. The result could significantly change law firm practices and economics.

Artificial intelligence, robotics and automation in the fight against COVID-19

AI is improving the speed and manner in which the world identifies, contains and combats infectious disease outbreaks. Its unparalleled ability to rapidly analyze massive amounts of unstructured data has already proven to be an early detection and warning tool for seasonal influenza. The CDC, recognizing the potential value of AI, holds an annual competition for AI firms and academic institutions. The participants develop new AI



algorithms to help identify and predict the severity of future influenza outbreaks.⁶ Many of these participants are now actively leveraging their technology and data sets to fight COVID-19.

In the wake of the global pandemic, AI technologies are offering hope and promise in the fight against COVID-19. In fact, AI technology first sounded the alarm on COVID-19. The algorithm developed by BlueDot, a Canadian AI firm, which scours news reports and airline ticketing data to predict the spread of diseases, detected the outbreak in China on December 31, 2019.⁷ On the same day, HealthMap – a Boston Children’s Hospital website that uses AI to scan social media, news reports and Internet search queries, and other signs of infectious disease outbreak – spotted a news report of a new type of pneumonia in Wuhan, China and alerted global health officials and epidemiologists of its findings.⁸ HealthMap’s AI technology was also the first to detect and notify the Chinese health officials

that COVID-19 was expanding outside of China. These AI alerts can play a critical role in detecting and controlling future outbreaks.

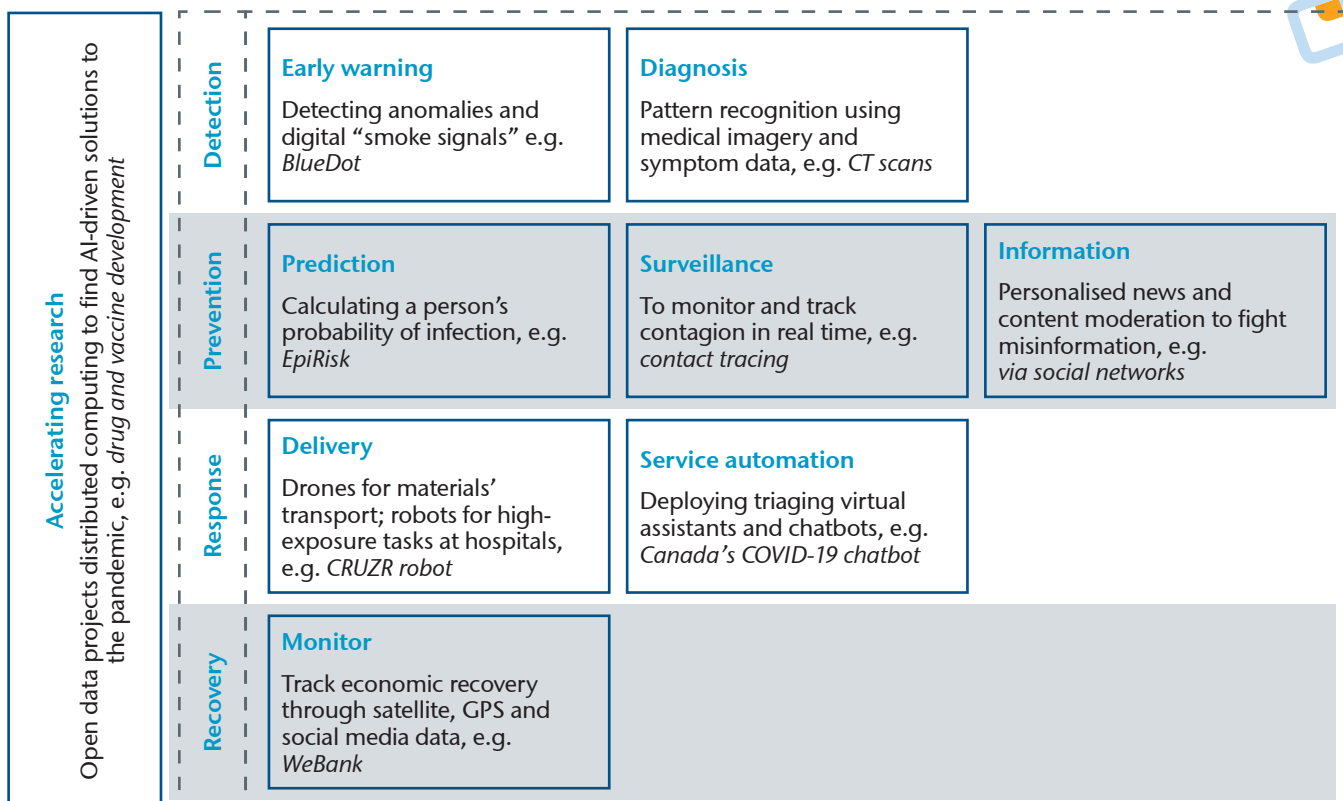
MIT’s Watson AI Lab is funding a research project designed for early detection of sepsis, a deadly complication of COVID-19.¹⁰ Approximately 10% of COVID-19 patients turn septic within a week of showing symptoms and only half survive. The project aims to develop a machine learning system to analyze images of a patient’s white blood cells for signs of an activated immune response against sepsis. MIT is also working to develop an AI tool to help doctors find better ventilator settings for COVID-19 patients and decide how long to keep them on these devices. Shorter ventilators treatments will limit lung damage and free up ventilators for other patients.

The results from several completed studies are encouraging. At Mount Sinai, a leading New York research hospital, a recent study found its AI solution could quickly and accurately analyze chest scans of patients and

detect early signs of COVID-19 on par with highly trained and experienced radiologists.¹¹ In fact, the study showed Mount Sinai’s AI solution was even more effective and accurate at detecting early signs of COVID-19. A similar study in China, which utilized an AI solution from Baidu, also found its AI solution was able to identify potential cases more quickly and with greater accuracy than an experienced radiologist. Given the high incidence of COVID-19-related pneumonia and the seemingly fast progression many patients make from being asymptomatic to being hospitalized, the studies’ findings are extremely encouraging.¹² Once the technologies are fully developed and embraced by the medical community, they can be automated and assist radiologists to identify COVID-19 cases. The use of this AI technology will allow for quicker and more accurate diagnoses and second opinions.

The world’s leading tech firms and academic institutions are also strategically partnering with governments and hospitals to limit

Figure 3: Examples of AI applications at different stages of the COVID-19 crisis⁹





the spread of COVID-19 in high traffic areas. Boston Dynamics and MIT have developed Spot, a smart robot, to deliver medicine and monitor patient vital signals of COVID-19 patients.¹³ In addition, Care.ai, a U. S. tech startup, recently developed a sensor to detect whether visitors entering a hospital have COVID-19 symptoms (i. e. elevated temperatures). Care.ai has currently installed its AI sensors in Florida’s Tampa General Hospital.¹⁴

As an emerging AI superpower, China is also applying its AI capabilities to limit the spread of COVID-19 and to protect healthcare workers. China installed a no-contact infrared sensor that tests the temperatures of up to 200 persons per minute at Beijing’s Qughe Railway Station to help detect and limit the spread of COVID-19.¹⁵ China also created a smart field hospital in Wuhan designed to relieve overtaxed medical professionals.¹⁶ The hospital provided its COVID-19 patients with electronic wearable devices to monitor their vital signs and utilized smart robots to distribute medicine to them. Finally, China is utilizing smart robots, created by UVD Robots, a Denmark robotics firm, to disinfect hospital rooms with the

use of powerful ultraviolet light that decontaminates surfaces by tearing apart COVID-19’s DNA strands.¹⁷

AI Technology is being used worldwide to accelerate the development of a COVID-19 vaccine. In the U. S., the Harvard T. H. Chan School of Public Health and the Human Vaccines Project have partnered to use AI models to accelerate vaccine development.¹⁸ Similarly, researchers at Northwestern’s Kellogg School of Management are using AI to predict which of the many studies and trials have the most potential to provide real treatments and vaccines for COVID-19.¹⁹ However, given the lengthy time required to create, test and approve a COVID-19 vaccine, academic institutions and AI firms are also working with the world’s leading scientists to identify FDA-approved drugs that could be repositioned to treat or contain COVID-19. MIT is currently using AI to sift through medical records and claims for any signals indicating that drugs used to fight chronic conditions like hypertension, diabetes, and gastric reflux may be repositioned in the fight against COVID-19.²⁰ At the same time, BenevolentAI, a UK tech start-up,

already successfully applied its drug discovery platform, which analyzes scholarly papers, medical data sets and prior clinical trials, in order to identify potential drugs that could be repurposed to treat and halt the progression of COVID-19.²¹ It took a mere 90 minutes of computing time and three days of additional work for BenevolentAI solution to identify Baricitinib, a prescription drug to treat rheumatoid arthritis, as a possible treatment.²² Baricitinib has already entered a U. S. clinical trial to determine whether it can be effectively repurposed to treat COVID-19.

Some in the medical community are reluctant to widely adopt AI solutions to treat medical conditions. They worry that the data to train the AI algorithm, which is the lifeblood of any AI solution, is still too small, lacks critical metadata and has not been appropriately labelled by medical professionals.²³ However, a group of radiologists at Stanford University is addressing this concern by compiling and labeling a new global data set of chest images from COVID-19 patients from over 200 medical institutions around the globe.²⁴ The group, led by Dr. Matthew Lundgren, anticipates sharing its comprehensive and well-labeled data set with the medical community to supplement radiologists’ diagnoses.

What insurers can do now

Embracing a growth mindset and understanding how the new disruptive technologies could materially impact our industry, are among the best strategies to prepare for the opportunities and challenges of the Fourth Industrial Revolution. At Gen Re, we prepare for potential headwinds and change by critically analyzing the trends and technology – and their potential impact on our clients. We also explore developing new products and partnerships that will allow carriers to replace premium lost. We advise clients to routinely update their companies’

boards on how AI advancements and collaborative robots are changing their clients' industries and whether technology is replacing or complementing workplace activities.

What are some critical actions for evaluating AI and developing technologies?

1. Separate the hype from reality.

The amount of information can be overwhelming for any CEO or board, so consider getting assistance from Gen Re and other trusted advisors in tracking developments. Evaluate which disruptive technologies are most likely to affect core businesses and which might provide opportunities.

2. Focus on the core practices, processes, products and people at your customer organizations.

Your policyholders' employees can help you analyze which industries in their portfolio are most vulnerable to automation within the next five years. If a critical assessment reveals that a significant part is susceptible to obsolescence, consider whether product development, market expansion or new partnerships can provide a buffer for anticipated premium or market share loss.

3. Don't overlook your own underwriting and claim operations.

Can you use AI to improve your own underwriting results or identify creeping catastrophic claims? Having a work culture that encourages a growth mindset and embraces new technology is essential. We can assist clients with evaluating opportunities and how their standards and practices can be affected by AI and other disruptive technologies.

4. Critically track and examine the legal and regulatory issues that can slow the adoption of AI, robotics and automation.

While AI technology continues moving forward, many legal and ethical questions surrounding this technology remain unanswered. Driverless technology provides one pressing example for insurers. As Warren Buffett commented at the 2017 Berkshire Hathaway Annual Meeting, "If driverless cars became pervasive, it would only be because they were safer," which would mean that "the overall economic cost of auto-related losses had gone down and that would drive down the premiums" for insurance companies. We do not know when driverless technology will be widely adopted, but we know that now is the time to prepare for its impact on Auto, Umbrella and Workers' Comp portfolios.

5. Don't wait

It is not too soon to start the journey toward understanding the impact and possibilities of AI, robotics and automation. Ignoring the trend can be costly regardless of what lines of insurance you write.

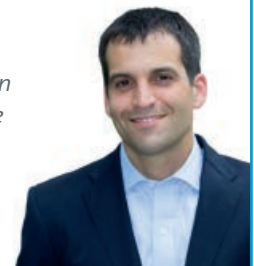
Have you considered how robots, AI and automation will change the workplaces of your insureds – and your own company? Gen Re monitors these trends and what they mean to the workforce we insure and reinsure. Together, we can navigate the fourth industrial revolution.

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IFRS 17 – A Fundamental Revision of Insurance Accounting

by Stefan Engländer, Actuary DAV, Senior Manager KPMG Audit Insurance, Cologne

About the article

Financial reporting that is in line with International Financial Reporting Standards (IFRS) is in widespread use by both consolidated groups of entities and individual companies. Up to now, however, accounting for insurance contracts was driven by very diverse, locally developed traditional approaches. The new IFRS 17 “Insurance Contracts”, to be applied from 2023 onwards, introduces for the first time a comprehensive, consistent and accounting-driven approach for insurance contracts. It’s about 280 paragraphs long, making it one of the longest IFRS, to provide guidance on what to do but the background of the requirements is not always immediately clear. This article provides such background information.

In these days, the IASB will finalize its record project on International Financial Reporting Standards (IFRS) – more than 23 years tracking insurance contracts – by issuing final “Amendments to IFRS 17 (2017)”. According to the amendment, insurers will be obliged to apply IFRS 17 from 2023 onwards for their IFRS reports.

IFRS 17 is a paradigm change – from a traditional actuarial regulatory/solvency-driven statutory valuation of insurance contracts to a recognition, measurement and presentation approach that is fully driven by accounting theory. With a “fresh start”, various traditions of insurance accounting were terminated by the IASB, e.g. presenting premiums as revenue when due. Although the majority of stakeholders wholeheartedly welcome this paradigm change, there are concerns that the technical complexity and product peculiarities cannot be always properly reflected by the guidance of IFRS 17. This is primarily due to the fact that the guidance in some areas is not fully principle-based and not in line with the economics of the contracts. As a result, the information provided might not always be comprehensible or adequate and complying with IFRS 17 might require unnecessary effort in some cases.

Accounting theory cannot solve the two key issues of insurance accounting: the lack of statistical data or the lack of a yardstick for the valuation of non-traded risks. The measurement of insurance contracts is highly dependent on judgement more than people might be used to seeing in other industries. IFRS 17 cannot provide any improvement for shortcomings of financial reporting due to the lack of data, particularly in the case of liability for incurred claims, commercial risks and reinsurance, but also regarding the market price for the time value, especially in the case of ultra-long durations.

Hence, the reader might appreciate the advanced accounting theory included in IFRS 17 but note as well the unavoidable shortcomings arising from those issues. On the other hand, in some areas applying the guidance may not always result in information, which represents what is purports to represent.

The hybrid accounting approach

The IASB (IASC) insurance project started in 1997 in the heyday of fair value accounting. During the financial crisis, however, it turned out that fair value is not the passe-partout solution for all and everything. Most particularly, contracts with customers to provide services are measured on the basis of allocating the remuneration



International Financial Reporting Standards



In 1997
the IASC launched
the project on
insurance contracts

received in proportion with the fulfilment of the contract. That basis was established in IFRS 15 “Revenue from Contracts with Customers”, which was developed and completed in parallel to the ongoing insurance project. By contrast, IFRS 17 establishes a hybrid accounting approach that intends to be in line not only with IFRS 15 but with IFRS 9 “Financial Instruments” and IFRS 13 “Fair Value Measurement” as well:

- Financial risks are measured by applying the concepts of fair value, i.e. a market notion.
- Services, understanding provision of coverage as a service, and the inherent and related non-financial risks are measured in each period based on the remuneration which the entity would demand for the services provided in the period, i.e. an entity-specific notion.

Accordingly, the measurement is based on market- or entity-demanded remunerations. On that basis, the reporting entity determines at the reporting date the remuneration which it would currently demand for all future services and risks as well for the services provided and risks born in the expired period.

The valuation technique: The building block approach

Both measurement notions of IFRS 17 – the reference to market remunerations and the reference to remunerations demanded by the entity – do not provide for a practical way to determine the amounts directly based on observations. The amounts need to be estimated and IFRS 17 provides tight guidance how to approach such estimations. Close to the valuation techniques described in IFRS 13, IFRS 17 prescribes an estimation approach that is based on risk-adjusted, expected present values of future cash flows. This consists of three explicit aspects:

- An estimation of the expected values of future cash flows

- A discounted value with a yield curve estimating the effect of time value of money and, if not already included in the expected value of future cash flows, the market-based value of financial risk (risk adjustment for financial risk)
- An estimate of the remuneration, which the entity would require for bearing the deviation risk, i.e. entity-specific value of non-financial risk (risk adjustment for non-financial risk)

These values allow the separate assessment of financial risk and non-financial risk since they are subject to different valuation notions (market vs entity-specific) and will be presented and disclosed separately, as outlined later in this discussion. Such a valuation technique, consisting of several explicit components, is also referred to as a “building block approach”. This part of the measurement of the insurance contract is called “Fulfilment Cash Flows” (FCF), a bit of a misnomer, since the FCF are not the cash flows arising in fulfilling the contract themselves but their aggregated risk-adjusted expected present value.

The reason for estimating the different aspects explicitly is that some can be determined with a higher objectivity than others. Therefore IFRS 17 requires a separate measurement of those aspects and certain explicit input parameters (assumptions) and their separate disclosure to enhance the insight about the estimation process.

The least subjective estimate from a statistical perspective is usually the estimate of the expected value of cash outflows of a period. The economic reason for using this figure is the theory that the remuneration demanded for services in a period would not normally be lower than the expected value of the related cash outflows. Hence, the expected value is a reasonable starting point of estimating remunerations.

Of course, cash flows to be provided more distant than the immediate future will require the inclusion of monetary time value in the measurement.



Therefore an expected present value approach is applied for future cash flows. The discounting represents the pure time monetary value. Any financial risk – e.g. due to dependence of cash flows on market developments – is considered and then addressed by an adjustment either to the discount rate or to the cash flows. The measurement is based, as outlined above, on a market notion.

Typically, entities demand higher remunerations than the expected present value, which also represents their opportunity cost, which is remuneration for bearing any risk of adverse deviations from the expected value resulting from non-financial risks. In addition, it takes into consideration the chances of possible favorable deviations. This accounting convention represents the notion that economic entities are risk averse.

The macroeconomic purpose of the insurance industry is to pool non-financial risks of their policyholders, achieving – as described by the Laws of Large Numbers and the Central Limit Theorems – a proportionally reduced risk exposure on the level of the pool. However, the risk mitigation in a pool does not eliminate the risks transferred to the insurer entirely. The insurer therefore demands a remuneration for the remaining risk. Moreover, further risk mitigation measures – e.g. the retransfer of parts of the risk to the policyholder or the community of policyholders (e.g. participation features, retentions etc.) – are considered in determining the remuneration for the retained risk. This “risk adjustment for non-financial risk” is included as additional part in the measurement.

While the estimate of the expected present value will already demand significant accounting judgment, the subjectivity in determining the risk adjustment for non-financial risk will be even more substantial. By definition, the notion of entity-specific remuneration already creates subjectivity to some extent, but lacking data about deviation risks adds further measurement uncertainty. In contrast to estimates of expected values of future cash flows, risk



adjustments cannot even be back-tested.

There is, as well, severe measurement uncertainty for determining the “time value of money” – particularly for very long durations – due to insufficient market observations. Further, since uncertainties in amount and timing are considered in measurement explicitly, to avoid double counting of values of risk, the “time value of money” is represented by a “single illiquid risk-free yield curve”. By definition, interest rates on illiquid instruments cannot be observed in markets. Therefore, the applied yield curves derived from market observations will unavoidably be diminished by liquidity premiums to some extent.

IFRS 17 requires special disclosures about the illiquid risk-free yield curve applied and the risk adjustment for non-financial risk. The disclosures allow the user of the report to compare those fundamental, but nevertheless severely judgmental measurement assumptions of different reporting entities, and possibly the disclosures will motivate reporting entities to develop consistent assumptions and approaches.

The allocation of the excess premium: The contractual service margin

The actuarial calculation of the demanded remuneration for services and risks, i.e. the FCF is typically lower

than the premium, which is the actually charged remuneration; otherwise, the contract is considered to be onerous. Under fair value approaches, positive differences between amounts received and the result of a valuation technique are considered to be immediate gains from the transaction; however, any such positive difference in a contract providing services, as an insurance contract, is assumed to be an additional margin in the remuneration charged for the future provision of services. Therefore, it belongs to those future periods where the services are provided and cannot be recognised as revenue earlier. The losses from onerous contracts are to be presented, as a general accounting principle, always immediately as an adverse effect of the transaction.

The FCF covers only those parts of the remuneration where the purpose of charging the amount is specifically identifiable applying actuarial valuation approaches. The remaining non-specifiable part of the actually charged remuneration is assumed to be a remuneration demanded by the insurer for providing services in general beyond identifiable future cost (including opportunity cost).

IFRS 17 assumes that financial risks are priced at their fair value in line with the

outcome of the valuation technique; hence, any part of the remuneration received that cannot be explained by the valuation technique is assumed to belong to the provision of service rather than being a gain from the financial risk. This theoretical view, based on the assumption of an arbitrage-free financial market, is a severe deviation from the usual perspective in insurance business: that a part of the gains result from interest margins. The resulting revenue recognition pattern referring to services only is assumed by some stakeholders to be misleading. In the 2020 amendment to IFRS 17, the issue is slightly repaired by also considering the cost of providing investment services in the allocation of the remuneration, which is allocated to a period but which is not the same as recognising a margin on the interest.

Under IFRS 17, this margin – the excess of the premium charged over the FCF – is therefore referred to as Contractual Service Margin (CSM) and needs, as a part of the remuneration received for the provision of service, to be allocated to periods in proportion to the volume of service provided in each period. Since the expected costs (including opportunity cost) of providing the service are already explicitly included in the FCF, the release pattern of the CSM is based on a mere conceptual idea of the volume of the provided service. Economic measures such as cost, prices or profit margins are not seen as a generally permissible description of service volume. In the simplest case, an identifiable sum under risk may be seen to represent the volume of insurance service, but in many cases accounting judgment is needed to identify a yardstick describing the volume of service.

Recognising the CSM as an additional part of the insurance contract liability, on top of the actuarially determined FCF, eliminates any otherwise arising initial gain measured from the starting point of issuing the contract. The primary purpose of including this “plug” in the liability was to allocate this amount to the periods where the entity provides the services, understanding that amount as remuneration for those services rather

than as a gain achieved already by writing the contract.

Deviating from earlier methods of accounting, the CSM is not “locked-in” but represents on a current basis the profits arising while considering changes of expected future cost (including opportunity cost) for providing the contractual services. The CSM is therefore adjusted in each period in response to changes in estimates of future cost. The CSM represents only the (yet unallocated) gain resulting from service, i.e. subject to non-financial risk. Any effects of financial risk, e.g. changes in discount rates or values of minimum financial guarantees, are presented immediately in comprehensive income in line with the measurement of financial instruments. Accordingly, the adjustments of the CSM are determined based on the historic financial scenario as of the initial recognition of the contract.

Since liabilities for incurred claims are understood to be related to the settlement of past services, changes in value of FCF related to those do not adjust the CSM. They are seen as experience resulting from past coverage unrelated to future services.

Participating contracts

Participating contracts are broadly measured against being fully in line

with the general principles. The IASB noted that in case of some participating contracts, the benefits to policyholders are contractually determined based on the surplus after providing all contractually fixed payments in a manner that means only a certain, usually variable fee, remains for the insurer. The insurer does not benefit directly from the performance in fulfilling the contract but ultimately the contracts determine which profit the insurer may retain. This changes the character of the insurer's overall profit since it is a contractual variable fee. The profit is granted by the contract to the insurer, not as a result of its performance. Any variation of the fee due to changes in the surplus is, as part of the overall contractual fee, the remuneration for all services and therefore to be allocated to the periods by an additional adjustment of the CSM (“Variable Fee Approach”). Accordingly, the source of the insurer's profit is the surplus generated by each contract, which is the basis of measurement of the contract to determine the CSM. That outcome causes particular issues since determining this surplus generated by a contract demands a significantly wider degree of using judgmental allocations than usual.

In traditional accounting, the collective surplus is not allocated to



contracts because they generated it but measurement is based on expected subsequent distributions of that amount to contracts, regardless of whether they generated it or not. However, that does not represent how insurer's profit emerges.

The Variable Fee Approach shows a profit pattern which deviates significantly from the normal profit pattern since the effects of all incurrences to the profit are proportionally distributed over all remaining periods. Therefore, the criteria for application are quite restrictive. As a consequence, products which might be seen economically as quite similar, may be subject to certain legal differences that might cause them to be subject to the Variable Fee Approach, while others aren't.

Further measurement features

Generally, accounting principles require an insurer to account for items based on the individual transaction, particularly the individual legal agreement between parties, i.e. the contract. However, close to the end of the project, the IASB decided to deviate from that principle to some extent, hoping to simplify calculations and to match better with the insurance business model. IFRS 17 permits the subsequent measurement of the CSM to be based on collectives complying with some homogeneity criteria (Groups of Insurance Contracts), i.e. determining the adjustments to CSM on a net basis of the collective. While e.g. US-GAAP permits a company to assess the adequacy of liabilities on the aggregated level of lines of business, the criteria of IFRS 17 restrict the aggregation in a manner which was not generally accepted up to now, particularly the prohibition to aggregate contracts beyond annual new business cohorts. The resulting artificial aggregation does not reflect the way the business is internally organised and therefore causes additional effort without actually reflecting how the business is managed.

The IASB noted that for short duration contracts without significant financial risks, taking a simple proportional

allocation of the total premiums to periods, as in the traditional unearned premium approach, produces very similar results to the general approach. To avoid unnecessary effort for such contracts, IFRS 17 permits all contracts of a coverage duration of not more than a year to apply the Premium Allocation Approach, allocating the total expected premiums proportionally to periods. For this simplified approach, the entity needs to estimate only total expected premiums, but not claims and cost. The approach can also be applied if its result does not deviate materially from the general approach. However, the liability for incurred claims is yet to be determined when applying the building block approach.

Balance sheet

Due to the strict limitation of the number of balance sheet lines in IFRS consolidated reports, the values of each contract can be presented in their entirety, aggregated in one balance sheet line only. The traditional differentiation of the contract value particularly in future benefit liability and claims liability, is to be provided in the notes only. Due to the IFRS 17 amendment 2020, an asset is only presented if an entire business line is on an aggregated basis in an asset position, which will hardly ever be the case. Amounts related to reinsurance contracts held (outwards reinsurance) are presented entirely separated in the balance sheet, as elsewhere in the report. The measurement assumptions for measuring reinsurance contracts held are consistent with those of the ceded parts in the measurement of the underlying contracts.

The balance sheet amounts can be assumed to be merely overestimated, they include adjustments for risk and the CSM, but are expected to be never lower than the fulfilment cash flows. The liability for incurred claims deviates from the ultimate cost, reduced by discounting and increased by a risk adjustment for non-financial risk. The net effect of both adjustments depends on the individual situation, the liability for incurred claims

may be higher or lower than the ultimate cost. Details, particularly the amount of the CSM and of risk adjustments for non-financial risk, can be derived from the notes, allowing the identification of the expected present value of future cash flows, only adjusted for financial risk in line with market prices.

This detailed information is not available for the contracts subject to the Premium Allocation Approach. However, such contracts can be assumed to be of short duration and therefore any margin included in the presented liability will be released to revenue in due course. Details about the liability for incurred claims are provided always in detail, including loss development triangles.

Income statement

The main focus of IFRS 17 is to achieve a more meaningful income statement. For this purpose, IFRS 17 splits the movements of the insurance contract liabilities and all payments into the following:

- A service part, the insurance service result
 - Insurance revenue representing any remuneration demanded by the entity for the provision of services, subject to non-financial risk, in the current period
 - Expected cash flows
 - Released risks adjustment for non-financial risk and
 - Released CSM
 - Insurance service expenses the actual cost of providing the services
 - The effect of reinsurance contracts held, either in one line or split in income and expenses
- Gains or losses subject to financial risk presented in the financial result either as insurance finance income or insurance finance expense, depending on the sign of the aggregated amount and
- Any amount which is not subject to any of the above, i.e. any payment to the policyholder which do not represent the provision of a service, e.g. investment components,

premium refunds or payments and repayments of policy loans, to be explained in the notes.

This differentiation of the movements of the liability and ultimately of the premiums fundamentally enhances the information value of the income statement. It allows, in contrast to traditional insurance accounting, the identification of that part of premiums which is actually a remuneration for services, particularly coverage, rather than being simply a savings process. The IASB believes that this enhancement of information value justifies the severe effort needed to achieve the differentiation of amounts. It is also this differentiation of amounts which allows the application of the hybrid accounting approach, with different yardsticks for measuring financial and non-financial risk. Premiums do not appear in the income statement. The premiums received are disclosed in the notes.

While in traditional accounting the amount of revenue, be it from premiums or changes in the liability, allocated to a period is normally based on historic assumptions (locked-in assumptions), IFRS 17 requires a periodical review of assumptions for allocating the premium not yet presented as revenue to the current and future periods. The differences between the expected cash flows – as disclosed in the notes – and the actual cash flows accordingly represent the deviation from the expectation at the end of the prior reporting date. The notes disclose as well explicitly the amount of changes of estimates for future periods compared with the estimate for the same future periods at the end of the prior reporting date. That enhances the understanding of the stability of the estimates.

The expected and actual cash flows in the insurance service result include only costs which are directly attributable to the fulfilment of the contracts. Other cost incurring, e.g. general overhead, are not anticipated in the measurement of the insurance contract and the actual costs are presented outside the insurance service result. The insurance service

result – the remaining margin in the premiums after fulfilling the contracts – is the contribution of the insurance operation to covering overhead. This is, on a risk-adjusted expected present value basis, ultimately the CSM. The user of the report is enabled to differentiate which cost are specific to the fulfilment of the contracts and which cost, arising as in other industries, are to be financed by the remaining margin.

The notes provide additional insight into the effect of new business, particularly the amount of initial CSM respective of any loss component arising from new business. This information is similar to the value of new business as provided in some forms of embedded values. Under the Premium Allocation Approach, the disclosures are very limited, particularly where no value of new business is included.

IFRS 17 adds two lines in the financial result of the P&L, insurance finance income/expenses and reinsurance contracts held finance income/expenses, depending on the sign of the total net amount, and the same again in other comprehensive income (OCI), if the entity chooses to present changes in the measurement of the contracts due to financial risk in OCI.

The total insurance finance income/expense represents:

- The change in the effect of time value of money based on the discount rate of the prior period
- The release of the adjustments for financial risk as expected in the prior period
- The effect of changes in financial risk related to future periods as observed at the end of the current period, i.e.:

- Changes in the applicable illiquid risk-free yield curve and
- Changes in the adjustments for future financial risks

Entities may choose, similar to the possibility to present changes in the fair value of financial instruments in OCI, to present that part of the insurance finance income/expense in OCI which is due to changes in financial risk. That allows the identification of the profitability on the basis of a stable financial situation and the identification of the effects of market changes separately.

The prospects of IFRS 17

IFRS 17 changes insurance accounting fundamentally – a change which is seen by some practitioners to be as drastic as the change due to the move to embedded values or to Solvency II. The enhancement of the information provided in the income statement is a big step forward. Time will reveal whether the new concepts bring more light into the black box of insurance accounting and whether they help to understand the complex actuarial approaches and to identify the judgment inherent in so many assumptions. The additional insight provided may motivate the entities to explain their approaches transparently and to try to establish common methods on an industry-level to achieve comparable assumptions among the entities. If this is achieved, IFRS 17 will be counted a success; otherwise it will be only another way of presenting a black box. In any case, there will be demand for the IASB to do ongoing housekeeping of IFRS 17 to eliminate unnecessary effort and incomprehensible solutions which remain up to now as residuals of more than two decades of discussing and exploring different ways.

About the author

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Leader's Role Set to Change

Leading change in times of uncertainty

by Ulrich Geuther, business coach, trainer and consultant, based in Lisbon, Portugal

About the article

Seen through the lens of the coronavirus crisis, it becomes clear that a paradigm shift is taking place within leadership in the 21st century and that it is being accelerated by the crisis. The role set of senior managers has expanded and the core of leadership has changed. The following article explains this expansion of change management in businesses and the impacts it has on the leadership role.

Was there ever a time when change and change management did not play a defining role in our businesses? Probably. But it must have been a long time ago.

In the first two decades of the 21st century, change has become a key concept for businesses in almost all industries. The conviction that, in times of constant change, successful change management is the only thing that guarantees future business success has become deeply rooted in the consciousness of business owners.

At the same time, a shocking number of organisations have discovered that it is extremely difficult to implement carefully planned changes within organisations and to guide change management projects to a successful conclusion.

John P. Kotter wrote his famous article on 'Leading Change: Why Transformation Efforts Fail' 25 years ago.¹ He identified eight factors governing the success or failure of change projects.² In addition to these factors, however, Kotter claims that it is vital to have **leadership** guiding the process. Good management is by no means sufficient. The difference between management and leadership was already established (see below), yet many senior managers had not yet internalised the vital distinctions between the two.

Although managers understand the difference between management and leadership much better today than they did 25 years ago,³ the importance of leadership for the successful implementation of changes is still severely underestimated.

Now, at a time when far-reaching upheavals all over the globe threaten to derail businesses and entire societies, we can see as if under a magnifying glass what is really meant by leadership and leading change.

That is precisely what this article is about.

Managers and leaders

Our investigation starts by differentiating between management and leadership. Managers and leaders have the following in common: both of them want the people who work in the organisation to achieve its set goals together. But apart from this, there are profound differences between the two, which are often described as follows:

- **Managers** structure and organise processes, are responsible for the budget, set short-term targets with a time frame of no more than one year, and monitor target achievement.
- **Leaders** work to a very different time frame. They think in longer time units of 5 to 50 years and, consequently, develop visions to motivate managers and employees to find ways of turning the company's vision into a reality. Their main role is to get people to support them and the vision and to get everyone focused on the common goal (alignment).

The first person in the Western Hemisphere to provide an evidence-based description of the fundamental differences between the roles of manager and leader was Abraham Zaleznik,⁴ an American scholar at Harvard Business School. He discovered



that the focus of **leaders** is on **change** and development; while **managers** focus on predictability and **stability**.

Leaders are those who foster a willingness to change in others and take everyone – managers and employees alike – with them on a shared journey into the future.

The more disruptive the changes, the more confusing the situation, the more uncertain the future, the more people and businesses need leadership. This is the case today, a time of great uncertainty and massive upheavals.

Does this make management redundant? By no means. It is managers who take care of creating new structures and setting up new processes. Ensuring that new structures and processes are set up in such a way that they have a chance of surviving is a management task.

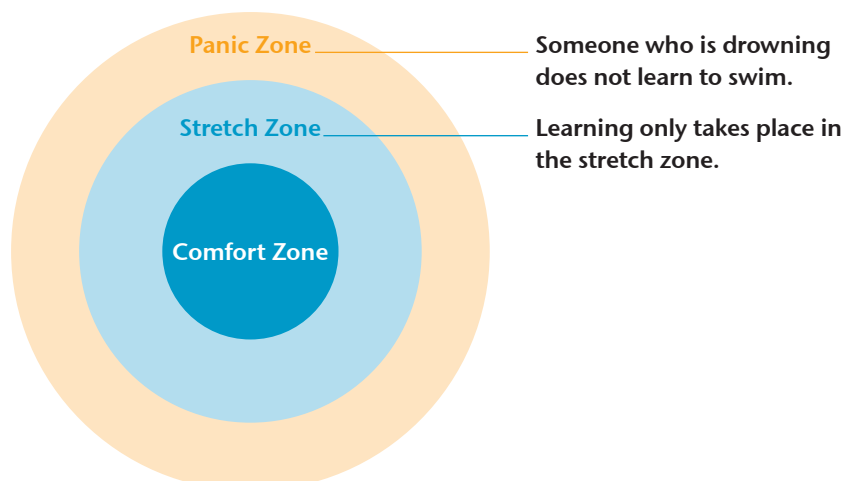
But how can people be won over in favour of change and further development? And how can you ensure they are on board as you set sail into an uncertain future?

Leadership and the relationship between change and stability

Senior managers need to know how people function. We are all, by nature, equipped with an opposing pair of motives that guide our actions:

- a need for safety and
- a pronounced sense of curiosity.

Figure 1: Zone model for learning



Which of these sides gains the upper hand, curiosity or safety, depends on ourselves, our personality and our environment.

Experience shows us two key things:

1. There is a constant alternation in our lives between curiosity and safety, between change and stability. Neither side is intended to be a permanent status.
2. Without feeling a minimum level of safety, curiosity cannot make itself felt as a need. This is illustrated very clearly in the comfort zone model (Figure 1)

This model teaches us that someone who is in the panic zone, does not sense any need for new experiences. That person wants only one thing: to get back to the zone that guarantees safety – the comfort zone. People only want change when they feel sufficiently safe.

Giving people and organisations a feeling of safety is the role of leadership! Leading people out of the comfort zone and into uncertain situations is also a role of leadership. Otherwise, how could we imagine growth and development?

Today, however, in this time of serious upheavals on almost all markets, combined with uncertainty about the consequences of the coronavirus pandemic, the greatest demand is for safety and stability.

Preventing people ending up in the panic zone in times of great uncertainty

is possibly **the most important task of senior managers at the moment**.

Ensuring safety and stability for everyone in the organisation is the passport to all necessary adaptation and change processes – at any time, but particularly today.

However, this explains only one aspect of the importance of leadership in times of uncertainty. What does leadership need to look like to make businesses a place where people feel safe and, as a consequence, where their willingness to change is awakened? And what qualities are needed by the leaders who are to achieve this?

A few years ago, looking for an approach that could guide change projects to success for a change,⁵ I came across the leadership framework of the Massachusetts Institute of Technology (MIT). It has helped senior managers in a large number of projects complete change processes successfully. Of all the known models that attempt to explain what constitutes effective leadership, the MIT leadership framework appears to me to be the one that most clearly teases out the core of leadership in organisations. It was developed exclusively for leadership in change processes.

The MIT leadership framework

At the beginning of the 21st century, the Leadership Center of the Massachusetts Institute of Technology (MIT) developed a model that is designed to provide senior managers with pointers for mastering the huge challenges that are looming for companies in all industries, particularly in times of uncertainty and upheaval.⁶

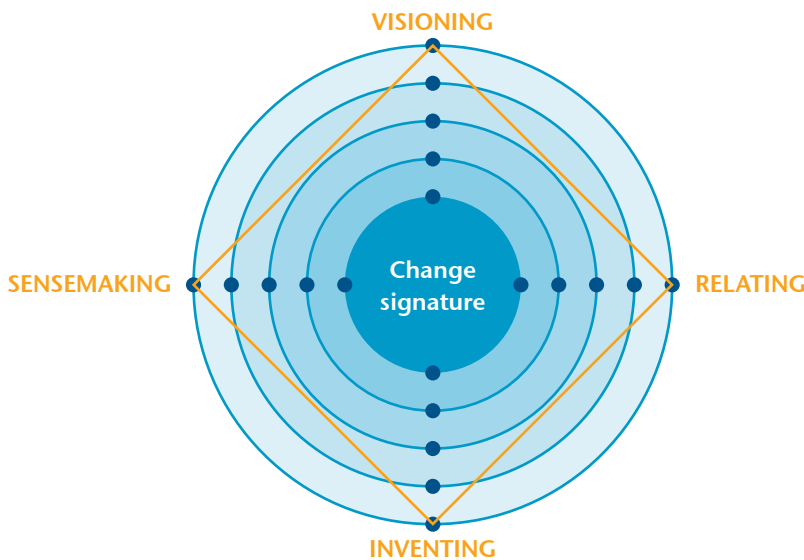
The model is based on four complementary dimensions: SENSEMAKING, VISIONING, RELATING and INVENTING.

Two things are worth noticing in this model:

1. The basic assumption is that leadership is not restricted to the function of the CEO, but should permeate all levels of an organisation.



Figure 2: The MIT leadership model
Leadership qualities in times of uncertainty



2. Anyone who takes on leadership in a change process must develop their own change signature geared to the requirements of the change situation. Depending on the situation then, priority is given to ‘sensemaking’ when it comes to imbuing the actions of those involved in the change project with a sense of purpose and meaning. Another time, the focus will shift to ‘relating’ in order to get everyone on board and create trust in the project. And so on.

Let us take a closer look at the model (Figure 2).

SENSEMAKING

As soon as we enter unfamiliar territory – as we are doing in the current crisis – the process of interpreting what we are experiencing begins. For leaders, the task is to keep an eye on a range of criteria that have proved key to sensemaking:

- a) Leaders must evaluate as many sources of data as possible.

It is by no means sufficient to restrict oneself to one’s own observations or selected statistics. A multi-perspective view is called for.
- b) It follows from this that many other people and their perspectives should be involved in sensemaking.
- c) A common cause of failure in completely new, unfamiliar situations,

is that we take our old interpretation frameworks and simply overlay them on the new situation. Creative solutions often become possible only when we overcome the functional fixedness of things, as illustrated in the candle problem.⁷ “If all you have is a hammer, everything looks like a nail”⁸ is another way of describing this mistake.

- d) Images, metaphors and stories are particularly effective in sensemaking because they possess emotional qualities and are therefore more deeply rooted in our consciousness. This leads to storytelling as a key skill of effective leadership – at all times, but especially in uncharted territory.

How many change management projects have failed simply because those in charge did not manage to shake the interpretation of ‘unreasonable demands’ and ‘we’re the ones making sacrifices again’ and create new interpretations of the changes that made sense to employees? For this, leaders need to listen very closely to what the workforce is saying!

RELATING

It is only when we succeed in creating a connection with someone that we have the possibility to influence them. This applies to every one of us, in every communication situation. For leaders, whose job is to influence

The MIT leadership framework encourages leaders to develop their own leadership signature in change processes.

others to achieve the desired results, the 'relating' dimension is the key to getting people in the organisation to move in certain directions.

The focus is as much on empathy as on the ability to develop and expand networks in the organisation.

If we think back to the importance of safety in highly uncertain situations (see above), then we can see how vital the relating aspect is for successful change projects. And, in a crisis, the quality of human relationships in a company can make all the difference.

VISIONING

What should we be guided by when the world and our businesses change abruptly? What gives us stability in situations that leave us at a loss?

The power of a compelling vision of what our future should look like is one of the fixed stars in our firmament when goals and strategies set and defined in the present no longer apply.

The reason for this is easy to explain:

- The vision is the future version of our identity.
- The vision is what we are now plus what we want to be in the future.

A compelling vision of the future always builds on what we already are, and is enriched with what we can still become (our potential).

The vision includes all our values, convictions and capabilities. It represents important desires. This is what gives it its incredible power.

For unusually complex situations and in times of great uncertainty, the shared vision is often the only thing that keeps people together and makes it possible to establish benchmarks for decisions appropriate to the situation.

INVENTING

When many things that used to apply cease to apply, when conventional approaches and methods can no longer be employed, the task is to find, create and initiate new paths,



new structures and new processes. Both leadership and management qualities are called for here.

The management task is to find out step by step how the vision can be implemented. Finding new, practicable routes and translating these into reliable processes calls for management qualities.

The focus is on leadership when it comes to integrating the new structures and processes into the visioning and sensemaking processes. It is these that connect senior managers to the other people in the company (relating) and make alignment possible in the first place.

The MIT leadership framework encourages leaders to develop their own leadership signature in change processes. This results in the four dimensions taking on different characteristics, depending on the organisation, the situation and the management level within the organisation.

As a frame of reference, however, the model enables all managers involved in change processes at all levels of the organisation to speak one 'language'

and understand one another and to adjust the emphasis given to the individual dimensions.

Leadership and coaching: The rise of a new leadership role

We started our analysis of leadership in times of uncertainty by comparing the roles of manager and leader.

As we have seen, the two roles complement each other, thereby illustrating part of the complexity within which senior managers strive to keep their organisations on course day by day.

However, leadership in the 21st century has given prominence to a third role alongside manager and leader: the role of coach, which has risen in importance from 'nice-to-have' to 'must have'.

The exploding complexity in all areas of our lives, but especially in business, has long called for the abolition of a concept that is still deeply rooted in most of our minds: that of leader and follower.

The reasoning behind this paradigm is that it is the task of leaders to create followers so that together they can achieve the goals that have been set.

However, today the role of leaders is to **produce leaders** in order to strengthen

leadership throughout the organisation and dramatically improve the company's chances of embarking on the right path in uncertain times.

In line with the MIT leadership framework, which requires leadership at all levels, organisations can no longer rely exclusively on the wisdom and skills of a single leader in these times of upheaval.

The paradigm shift from leader-follower to leader-leader shines the spotlight on leadership personalities who systematically empower others to develop their leadership qualities and become leadership personalities themselves.

All agile leadership concepts are based on leaders' ability to step aside and pass on responsibility to others, especially teams.

Does this make the strong leadership personality redundant?

As someone who issues instructions – yes.

As a guiding figure – no.

Of course, the role of leader has changed. Leaders are now frequently taking on the new role of coach.

As such, they are first and foremost enablers, developers and empowerers. As David Marquet demonstrated,⁹ they move the decision-making authority to where the information is, throw all chains of command overboard and practise leadership by intent.¹⁰ In doing so, they become coaches for the leaders they have developed.

Concluding remarks

A world that was already volatile, uncertain, complex and ambiguous (VUCA) before the coronavirus pandemic, needs a **different kind of leadership** if it is to successfully survive the never-ending crises.

Based on

- a shared powerful vision of the future,
- emotionally robust relationships between the people in the company,

- a shared interpretation of what is happening and
- agile approaches to implement the vision, models¹¹ like the MIT leadership framework help us to introduce and anchor this different kind of leadership in organisations.

However, the model needs to be expanded to encompass the new leadership role that is taking centre stage, particularly in the current crisis.

The leader as coach changes profoundly the self-concept of leadership.

The attitude of a coach, who listens and supports, who places himself or herself in others' positions and challenges, whose priority is the further development of colleagues' abilities, is light years away from the old-school command-giver who has to keep his followers going using a combination of carrot and stick and huge amounts of effort.

Seen through the lens of the crisis, it becomes clear that a paradigm shift is taking place in leadership in the 21st century and that it is being further accelerated by the pandemic. The role set of senior managers has expanded and the core of leadership has changed.

The question remains whether all three roles – manager, leader and coach – can be successfully performed by one person. Let us not deceive ourselves – hardly anyone is brilliant in all three areas. However, it behoves leaders of the 21st century to recognise where their own capabilities are not sufficient to perform the required role effectively and to appoint another leader to this role.

Even being aware that all three roles are indispensable, particularly in times of great uncertainty, can be a huge step forward for our businesses. Let's seize the opportunity!

Endnotes

- 1 John P. Kotter: Leading Change: Why Transformation Efforts Fail. Harvard Business Review May/June 1995
- 2 The factors are: creating a sense of urgency, forming powerful coalitions, developing vision and strategy, communicating the vision, removing obstacles, creating short-term wins, consolidating gains and anchoring change in the corporate culture.
- 3 For instance, in the mid-2000s, half of managers in our seminars were still not clear about the difference between a manager and a leader. This situation has improved considerably over the past ten years.
- 4 A. Zaleznik: Managers and Leaders: Are they different? Harvard Business Review May/June 1977
- 5 "We know... that 70 percent of change programs fail to achieve their goals" (McKinsey).
- 6 See e.g. Deborah Ancona: Leadership in an Age of Uncertainty. MIT Leadership Center 2005
- 7 The candle problem is a cognitive performance test introduced by German Gestalt psychologist Karl Duncker (1903–1940) and made famous by Dan Pink in his TED talk. The challenge is to fix a candle to a wall and ensure that no wax drips on the floor. The task can only be solved by emptying the supplied box of drawing pins, fixing the base of the empty box to the wall with a few drawing pins and placing the candle in the base of the box. Uncoupling things from their functional fixedness makes it possible to discover new approaches.
- 8 American aphorism of unknown origin.
- 9 David Marquet was commander of the US Navy nuclear submarine Santa Fe. He implemented the paradigm shift from leader-follower to leader-leader on his submarine and described the process in striking detail in his book entitled Turn the Ship Around.
- 10 Intent-based leadership gives responsibility to those who have the necessary information and invites them to consider what should be done in the given circumstances and what decisions should be taken. Instead of waiting for instructions, the crew suggested to the captain what was to be done ("Captain, I intend to submerge the ship!")
- 11 See also the solution VUCA with the leadership tasks 'Visioning', 'Understanding', 'Clarity' and 'Agility'. The similarity between this solution VUCA and the MIT leadership model is no coincidence. One flows seamlessly into the other.

About the author

Ulrich Geuther is an international leadership trainer and coach based in Lisbon, Portugal. He has been assisting leaders and organisations with change projects for over 20 years.



Change Management in Times of Uncertainty

Practical Tools

by Oliver Röhrich, management trainer and coach, Lisbon, Portugal

About the article

The world has changed – and is going to keep changing. Nobody knows what the next challenges will be or how long they will last. Even if COVID-19 goes away, there might be new (virus) threats in the future. We have to face it: we live in a VUCA world', a world which can change fast from one moment to the other. So, the question is, how can you work with something if you don't even know when it will happen?

The objective of this article is to present four practical change management tools that can be useful in a world in which drastic change might be the “new normal”.

Here is an overview of the tools:

1. Use **Aggressive Scenario Planning**
2. Create a **SWAT team**
3. Create **Crisis Plan** for intervention and communication
4. Train people in **Crisis Management**

1. Become flexible in your planning: Use Aggressive Scenario Planning

Yes, we don't know what is going to happen. But we might give some educated guesses. Taking the information that we have and the trends that are already visible, we can develop different scenarios: Plan A, B, C, D, E.

Scenarios based on existing data and analysis of tendencies include:

- Scenario A = the best case scenario
- Scenario B = the base case scenario
- Scenario C = the worst case scenario

Scenarios based on “aggressive” assumptions:

- Scenario D = the disruptive scenario (e.g. new innovations from competitors hitting the market)
- Scenario E = the total lock-down scenario (e.g. we lose 95% of our clients)

Now why did I call it “aggressive” scenario planning? Well, I guess nobody would have thought in December 2019, that literally 95% of all planes would be grounded in April 2020. By that yardstick, an aggressive planning means that at least one of your scenarios takes into account the most dramatic situation.

Using aggressive scenario planning will help you prepare better for the future and to identify necessities and critical issues, which might be good to address anyway.

It is also a good tool to sensitize everyone on your team/organization to the possibility of disruptions that might happen.

Where to start?

- **Do your research.** A lot of the big strategic consulting companies already do the job of providing research you will need. For example, they publish analyses of trends in a given market. Get all of them. But also do your homework by talking to experts on the future of the market and global disruptions that might happen.
- **Brainstorm with your team on what different scenarios they see.** Be flexible in your business approach: Look for opportunities in the dark. Brainstorm about what can happen to the business in a future



crisis; e. g. what if we will never be able to talk to our customer in person again?

- **Ask your team to break down in detail** the different scenarios and the impact they might have on your team/department/organization.
- **Share your insights** with other teams and get their input.

2. Be able to act quickly in your implementation: Create a SWAT crisis team

The term SWAT team comes originally from U. S. law enforcement.² It originally referred to a special unit that comes in when the situation gets difficult. These people are specially trained for critical situations.

As for the company, a crisis SWAT team is an effective, agile task force of six to eight people for managing a crisis. They will be responsible for working out the details of the crisis intervention plan (see below) and coordinating the implementation of this plan. They will be in direct contact with the leaders of the organization to give them feedback and communicate to them the needs and risks that they identify the company is facing at the moment.

You need a special group of people for a special situation. A crisis needs people that can act fast and get things done. Not only will it get your company to be more stable earlier, it will also give people a feeling of trust if they know that a special team will take care of the situation.

Where to start?

- **Start the crisis team before the crisis is already there;** fire fighters are not selected and trained when the house starts burning. Try to create a team that will be ready from the first moment and continue on an ongoing basis during a crisis. Note: People on a SWAT team will keep doing their normal job from the moment they're appointed to the SWAT team. In the non-crisis mode, the time investment will be low for the SWAT-involved people. Once the crisis hits the

company, however, they will be fast getting up and running because of the up-front investment into training the team – much faster than if they had no training. It is a wise investment into the future.

- **Identify people with the right profile.** People in the SWAT team should pass the stress test. They should also be proactive and good organizers, have advanced planning and project management skills, score high on emotional intelligence, remain calm in critical crisis situations, be good communicators and well-known in the organization, and ideally have good networking skills and strong persuasion skills.
- **Give them a trial run.** Once every six months, hold a trial run for a crisis. Let them work together for a day to figure out how they will react.

3. Create a Crisis Plan for intervention and communication

A Crisis Plan should contain all organizational interventions needed because of the crisis, as well as the communication activities.

In the COVID-19 scenario, the organizational interventions might have included: at what point teams will start up and how they will work together from a home-office; when they will come back to the office and how they will work in the new scenario; what health security measures will be necessary, etc.

Crisis communication coordinates the “What”, “When”, “To whom” and “How” messages sent before (at the first sign of trouble), during and after a crisis. The communication plan is meant for employees, clients, suppliers and shareholders. In the COVID-19 scenario, some companies have been sending a communication every week to inform their people about the status and about any changes. Some companies hold a weekly virtual Q&A with the CEO to answer the most critical questions.

The uncertainty of a crisis creates a need for clarity and openness in the communication of the company. People feel unsafe. They need to see a clear operational plan, that answers all their questions. Companies are perceived as “strong” by their employees if they lead the crisis proactively, create a plan fast and communicate clearly (“This is what happened ... This is what we are going to do,...These questions are still open...”).

Where to start?

For an organizational intervention plan, you might consider the following points, depending on the crisis:

- **Organizational factors:** Process changes, HR changes, logistical changes, etc.
- **Health/Security related factors:** Access to building, hygiene factors in the office, code of conduct in the office, etc.
- **IT factors:** Remote access to company, access to sensible information outside the company, security code of conduct

For the **communication plan**, keep the ideas below in mind:

- **Define your audience.** Who are the main stakeholders you want to address in your communication?
- **Identify the messages and the timings for these messages.**
- **Choose the right channels.**
- If necessary, **contract an external PR company** for crisis communication outside of the company.
- **Create a Crisis Q&A** which sums up all questions that employees in the company have about the crisis and update the list every week (or whenever there are changes).

4. Develop people before the crisis: Train people in crisis management

Train people in **all** departments in crisis management. A crisis can be incredibly stressful for people. Crisis management

should therefore include emotional management strategies, recover strategies, re-balancing, resilience – in one word, everything you need to get back quickly to a new stability level.

The more people are trained in crisis management, the more these people will experience the crisis in a calmer manner. This might also help so that these people can have a positive influence on others in the organization when the crisis comes up.

Where to start?

- Working with HR on the training plan, develop a basic crisis management course that is tailor-made to your organizational needs and can be available to everyone online. The course should give practical tools and easy to follow steps.
- For the managers in the organization, develop a course on leading others through crisis moments.

Final thoughts

The world has changed – and might change even faster and more drastically. The objective of this article was to introduce four practical tools that might be useful for the new world order:

With an awareness of potential risks, continuous and **aggressive scenario planning** might help to sensitize the organization and anticipate necessary actions to plan for crisis situations.

When crisis situations come up, a special task force, e.g. a **SWAT team**, can help to stabilize the company as quickly as possible.

This team can elaborate the **crisis intervention plan**, as well as the communication plan and coordinates the planned activities.

Finally, in order to make people in your organization even more competent in dealing with a potential crisis, **crisis training** for people in the different departments can help.



While not all ideas might be applicable to your specific case, my hope is that at least one of them might inspire you to put it into practice in your organization. For this endeavor I wish you all the best.

For further reading

For those interested in having a more extensive look at the different ideas, please find below a list of books that can help you to go deeper.

Scenario Thinking: Preparing Your Organization for the Future in an Unpredictable World (George Cairns and George Wright)

Manager's Guide to Crisis Management (Jonathan Bernstein)

Promoting Emotional Resilience: Cognitive-Affective Stress Management Training (Ronald E. Smith and James C. Ascough)

Endnotes

- 1 VUCA stands for Volatile, Uncertain, Complex and Ambiguous.
- 2 SWAT stands for "Special Weapons And Tactics"

About the author

Oliver Röhrich is management trainer and coach, based in Lisbon. He is the author of four books in the area of motivation, emotional intelligence and recruitment.



Lessons Learned from the Pandemic – Human Resource Development in the Insurance Industry in the COVID-19 Era

by Mirko von Haxthausen, Head of Gen Re Business School, Cologne

About the article

Gen Re has set up a decentralised, global, interdisciplinary team to support its business partners with digital advanced-training solutions in these challenging times of the coronavirus pandemic. The article shows that digital trainings and educations are valuable elements of human resource development.

Smartphones, laptops and tablets have become an important cornerstone in our daily life. Whatever Internet-connected device you have at hand right now, I invite you to imagine how many people in how many places around the world were involved in the value-creation process, consisting of development, design, manufacture and marketing.

After visualising those locations, draw imaginary lines between them. No doubt in your mind's eye you now behold a complex global network – a snapshot or map of how our economic system works. Even if you haven't gotten every single one of the geographical "origins" of your device, this visualisation exercise makes it clear that our economic system is characterised by its interdependencies and the international flow of goods and expertise. This inference applies to consumer goods first and foremost, but also to financial services, including insurance products. Summing it up succinctly, the German cognitive psychologist Professor Christian Stöcker refers to the global network as having "decentralised complexity".¹

Now visualise the options your device gives you. Sketch in your mind an imaginary map of those options, with your device at its centre. Your mind map will certainly include such functions as communication and collaboration, procurement and development of information and consumption.

Depending on the device, however, this list could be long, maybe even have no limits. Items – such as data analysis, photography and even programming – can even be added to it.

A summary so far: lessons learned from COVID-19

Both of those thought experiments underline what we have already learned from the pandemic: a novel virus occurring on a local level initially can grow into an extremely difficult

worldwide challenge due to the complexity of our global economic system. Even in January 2020, few realised how significant COVID-19 would be to providers of Life and Total and Permanent Disability insurance. And the daily flow of new reports on coronavirus research seems almost impossible to stem – an indication that the complexity of today's globalised world could not be summed up in a traditional textbook.

On the other hand, digitisation enables us to practise social distancing during the pandemic without the value chains of the insurance industry collapsing. The opportunities of digital solutions have instead become even clearer in the last months, as if placed under a magnifying glass. For Life insurers, this examination has revealed the potential of digitisation and its full range, from the fully digitised application process and add-on services offered by a wide range of HealthTech providers to advanced training online for employees.

The challenges facing digital training

Digitisation is here to stay, and it has exciting implications for human resource development. So far, however, digital training has failed to supplant traditional training methods in insurance.

Carry out the following (and final) thought experiment: Close your eyes and think back to your time at school or in training. What subject interested you most? Out of everything you learned, what can you still remember today? It is very likely that you remember a specific subject as well as a person. This phenomenon occurs because a successful, lasting transfer of knowledge is often tied to the enthusiasm of the teacher for the subject and how that person interacted with students. This example shows that we have mainly experienced "teacher-centric" learning situations in our educational background

and illustrates what benchmarks are often used to evaluate digital solutions.

Recipes for success for digital training solutions

Just as a profitable digital sales channel depends on a modern online retail shop, so too Learning on Demand depends on an online learning platform that has been designed to provide an intuitive learning journey. Developers and training experts in insurance as well as other fields are being challenged to provide course material in such a way that the right material can be accessed intuitively anytime and anywhere.

Digital advanced-training solutions also require training experts to focus completely on the didactic principle of “student-centred-learning” when they structure the subject. With the given physical distance between the trainer and participant, successful pedagogies require the students to interact with the material actively and with its final, business applications in mind. This is a necessary deviation from the (traditional) teacher-centric approach and underlines why face-to-face and distance learning must be assessed using different terms.

It also goes without saying that the feedback of training experts and specialists (we’re especially looking for enthusiastically positive feedback) is still an important stage of the learning process. Therefore, successful digital models must include asynchronous communication solutions, i.e. ways to exchange technical knowledge that do not require someone to be present at a specific time or in a specific place.

Additionally, if training experts are able to work with insurance specialists to filter and analyse the steadily growing flood of information and process it for specific target groups and media quickly, digital advanced training solutions will hold all the cards in our industry. For providers of Life and Total and Permanent Disability insurance, this means the training solutions could contribute directly to reducing complexity in an environment characterised by an unprecedented level of uncertainty and volatility.

COVID-19 has changed how we socialise with one another and has created new challenges for the insurance industry. We have set up a decentralised, global, interdisciplinary team to support our customers and business associates with digital

advanced-training solutions in these challenging times. We leave it to you to evaluate the success of our recipe in digital learning.

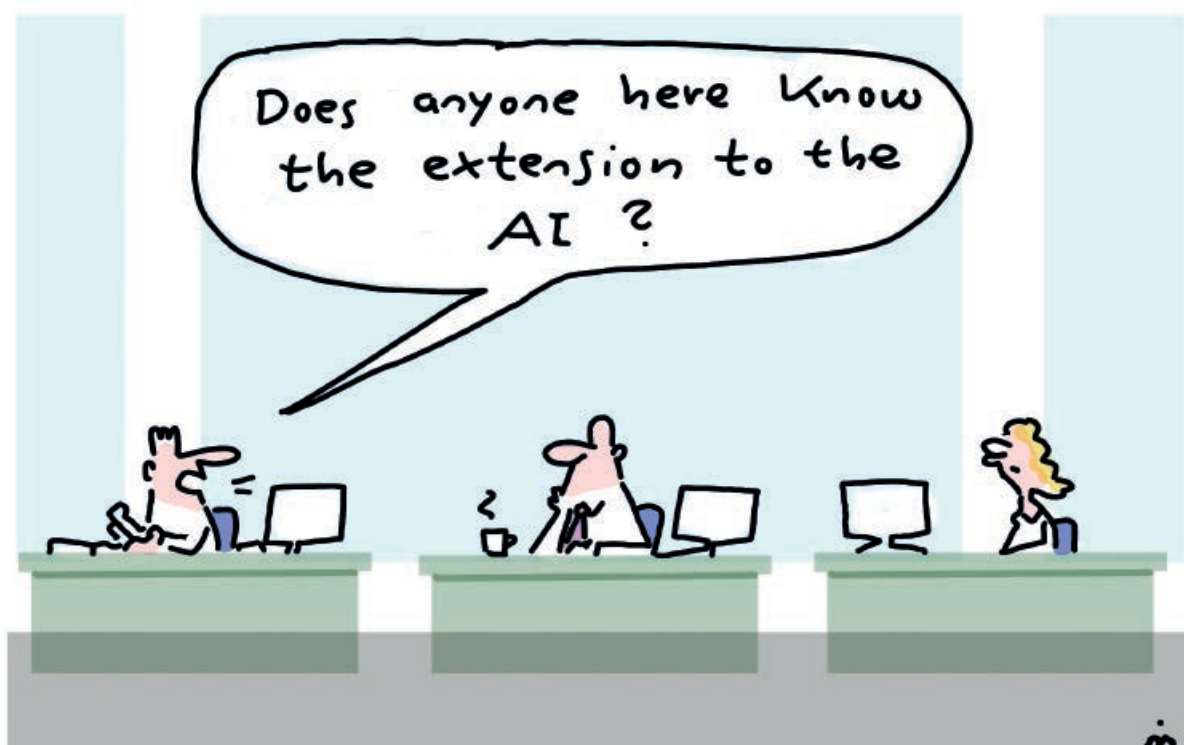
In any case, we believe that digital training solutions are a valuable element of human resource development and more than just a temporary means of providing advanced training in the insurance industry.

Endnotes

- 1 <https://www.spiegel.de/wissenschaft/mensch/globalisierungsangste-zurueck-in-ein-gestern-das-es-nie-gab-kolumne-a-ae54668f-6caf-4b47-8958-ec3d48e8caee>

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Mirko von Haxthausen joined Gen Re in 2010. He heads the Gen Re Business School within the Research & Development unit. His team supports Gen Re’s clients by developing and providing seminars, web-based-trainings and publications to meet the various needs of professional education. The product offer ranges from soft skills to target group specific technical topics.



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