Top Issues

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All eyes on the customer

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Insurance carriers have invested a great deal in digital capabilities in recent years. While these initiatives reflect a genuine need to be more efficient and profitable, it can be difficult for management to maintain a clear perspective on strategy in the face of what amounts to generational change.

Accordingly, whether you’re embarking on a digital transformation or just making targeted improvements, there are a few important things to keep in mind.

- The first is the customer. Without a customer-focused mindset, any changes are unlikely to make much if any difference in the company’s trajectory.

- The next is operationalizing that mindset. Putting the customer at the forefront can be challenging in an industry that’s typically prioritized products, but new technologies are making it easier.

- The last is the impact these changes will have on organizational culture and talent. Do you have the talent you need and, if not, how can you obtain and develop it?

Insurers have been hearing about “the customer” for years. What’s different this time?
The customer

Insurers have been hearing about “the customer” for several years. What’s different this time?

While most carriers are moving away from being product-focused organizations with siloed functions, they have to cope with forces from outside the industry that are profoundly shaping and influencing customer expectations. When customers interact with an insurer, their benchmark isn’t one carrier versus another, it’s their experience with online retailers and service providers (e.g., video streaming). This has resulted in customers expecting a much faster, transparent, and more intuitive experience than they’ve ever had before. Not only has this resulted in a different customer mindset, it also means that every level of the marketing and sales funnel has the opportunity for – and challenge of – a much higher level of engagement.

Intermediaries aren’t going away, but offering a seamless experience across channels is only increasing in importance.
Operationalizing customer-centricity

Historically, carriers have relied heavily on intermediaries, namely agents and brokers. While intermediaries aren’t going away, offering a seamless experience across channels is only increasing in importance. The key is to determine how direct and intermediary channels can best work together to create an integrated and productive experience for both the customer and carrier.

That said, creating awareness in the particular market segment with which you want to engage – at the right time, in the right channel, and with the right offer – hasn’t been easy. For example, marketers traditionally have been limited to low frequency, generalized, and low touch mass media type campaigns. What’s so different now is that, through the proliferation of data, analytical tools, and marketing technology, marketers can target much more effectively in the campaigns they run, as well as when, where, and how frequently they run them.

Moreover, insurers can touch customers in much more than just sales. It’s now possible to link everything from product research and purchase, to billing and issuance all the way to claims, and get quantifiable customer data at each step. The companies that can do this best will increase customer retention and lifetime profitability, as well as decrease their cost of service. Considering the increasing sophistication and disruptiveness of new market entrants and InsurTechs, this is an especially urgent priority for established carriers.

The digital workforce

Like other components of the business, the workforce of the future also is shifting to digital. For established players, this represents a cultural change and thinking and working differently than in the past. As a result, there’s a lot of tension in the system. Carriers do need to bring in new, digitally savvy talent, but they’re realistically not going to replace their entire workforce. Embracing new technology and ways of doing business also means properly training your existing employees and making them comfortable with new digital tools and practices.

As far as attracting digitally skilled employees is concerned, insurance typically isn’t the industry of choice for most millennials’ if they want to do digital, customer-centric work. In response, to attract that talent, some carriers have made creative investments in off-site innovation labs (or “garages”) that have a completely different look, feel, work environment, culture, and dress code.

But, even hiring new employees and upskilling existing ones isn’t likely to meet all talent needs. Accordingly, it’s become critically important for carriers to understand what type of talent they need to have in-house versus what they can “rent.” With that understanding, they can form partnerships that provide different types of skills they may not need in a full-time, in-house resource but only in specific instances.

Digital transformation isn’t a start-stop effort. It’s a continuous improvement program.
What makes for a successful digital transformation?

Even if you know what needs to change in your organization, making it actually happen is another challenge entirely. In our experience, we’ve observed some common attributes of successful digital transformations.

Initially, a successful digital journey has to start with the full support of senior executives. It then needs to link directly to business value. If you can’t meet these two baseline requirements, then you’re setting yourself up for failure.

Moreover, prescient companies aren’t just keeping up with the Joneses. Insurance is often an imitative or fast follower industry. Too often, carriers react to what’s going on in the marketplace instead of dictating change themselves. When they see their peers make investments in certain areas, they tend to follow suit. But, they don’t always contextualize the relevance to them and if what they’re doing will actually result in the same business value. Companies that can identify their own, unique circumstances and goals and create a bespoke way forward can avoid a lot of unproductive – and often counterproductive – copycat activity.

Once you’ve defined your vision, goals, and objectives, it’s important to get a couple of quick wins early on. Carriers that have done this have significantly increased their success over the long haul. For example, what are some things you can put out in the marketplace in year one that don’t rely on cumbersome legacy technology? Figuring this out can help you build momentum and credibility for the program early on and provide some equity when you start tackling more complex, time-consuming initiatives.

We’ve seen quick improvement in a couple of areas in particular:

1. The first is process improvement. This is usually a good place to start because it tends to be very quantifiable. For example, in personal lines, auto claims tend to be low-hanging fruit. Considering the clunkiness and redundancy that typifies the process and its underlying technology, it’s often possible to get some quick wins and quantifiable value reflected in the bottom line.

2. The second is the market-facing experience. Almost every company has opportunities to deliver a better customer/agent/broker/adjuster experience. Improving here even incrementally will help you better attract customers and help partners and intermediaries do their jobs more effectively.

Lastly, digital transformation isn’t a start-stop effort. To succeed, it has to be a continuous improvement program. That’s a very different way of thinking for most carriers. In the past, plans for specific initiatives rarely exceed a three-year period. But, business strategies in the digital age are continuous improvement efforts that go on for much longer. You can certainly make meaningful improvements early in a transformation, but don’t expect to run out of ways to improve.
Driving change with InsurTech

As PwC’s annual CEO Survey notes\textsuperscript{1}, insurance industry leaders have lost much of their initial trepidation about InsurTech and now view it as a driver of positive change for their businesses.

Reflecting a growing maturity linking technology and strategy, existing and new players are increasingly focusing on distribution channels and how carriers interact with policyholders and employees in order to create a “beautiful,” brand differentiating experience. As a result, and in a clear break with previous technology cycles, InsurTechs are investing much less in core areas like policy, billing, and claims but in the periphery.

Cloud capabilities offer much more than just getting rid of internal data centers and switching to cheaper shared services.

\textsuperscript{1} Available at: https://www.pwc.com/gx/en/ceo-agenda/ceosurvey/2019/themes/insurance-trends.html
Heads in the Cloud

Insurers have been heavy users of technology since the beginning of the Digital Age. Twenty years ago, they cobbled together and integrated utilities. Ten years ago, they embarked on the age of the monolithic platform (i.e., large policy, billing, and claims packages). As the technological environment has matured over the last decade, Cloud and micro-services are now enabling more effective solutions that simply weren’t available in the past.

For many, “Cloud” simply means getting rid of internal data centers and switching to shared services to reduce costs. That’s just a small part of it. Cloud and micro-services are increasingly focusing on the small, bite-sized pieces in the digital and integration layers that are the most differentiating components. In turn, this is substantially shrinking the core.

Moreover, there are new development techniques and architecture components that allow users to leverage on-demand computing environments to increase agility and speed to market, which is increasingly vital to carriers’ competitiveness. It’s traditionally taken six to twelve months to release a new product or service and modify back office systems. Now, it’s possible to use a micro-service component in the Cloud, adjust it, employ it, and then adapt if for future use, as needed. These components fit easily into existing systems, and carriers can make changes to and measure them in hours and weeks instead of months and years.

Technology platforms: Where to invest

Where to invest primarily depends on the size of the carrier.

Most start-up and smaller carriers are looking for “insurance in a box.” They usually aren’t interested in creating a bespoke system and making a correspondingly large investment in internal IT capabilities. They instead want to focus on products and service and growing their book of business. Fortunately, there are systems available that can create new processes quickly and easily with a minimal need for customization.

However, for larger carriers – and especially the very biggest ones – technology is at the forefront of their business. A one size fits all approach won’t work. They need to actively engage with wider technological change, including the entire Internet of Things, AI, and the many other new technologies in the market. They have to be able to react to these developments using their own technological capabilities and create bespoke capabilities that focus directly on the customer and provide a consistent, user-friendly experience. This will entail integrating the digital layer, leveraging cloud technology, and minimizing the core.

While start-up and small carriers don’t necessarily need a bespoke technology platform, it’s hard for larger insurers to develop a differentiated capabilities without one.
Integrating strategy and technology

We know that considering, implementing, and adapting to new InsurTech options, third-party data, and architectural and product concepts can be challenging. Getting it right remains more an art than a science, especially when you still have to keep your legacy business running smoothly. As you consider what to do next, there are some common traits of successful companies to keep in mind:

1. They’re not copycats or fast followers. They know that, just because peer organizations pick a certain product or solution, there’s no guarantee it will work for them (or anyone). Before they choose a solution, they draw a line that connects technology to what their business is trying to be.

2. Moreover, they carefully consider their particular market focus – both now and what they’ve planned for the future – and how technology can enable it. More specifically, they choose solutions after they’ve determined if, for example, their future is in commercial lines or personal lines, in new markets or in being the best in an established, competitive segment (e.g., auto and property). Then, they connect their goals to how they’re going to use better data and new analytics to drive underwriting and the pricing process.

3. Lastly, and just as importantly, they know that, to really make a difference, their technology stack has to enable the entire business, not just certain parts of it. They don’t limit technology strategy and execution to just the front or back office. They instead use it to tie everything together, thereby enabling the company to be insight driven and more effectively serve the end customer.
Most insurers are making investments in data analytics to gain better insights into all aspects of their business and the market. That said, insurance by its very nature has always been a data-driven industry. What’s different now?

For starters, many carriers are reimagining their core markets and product sets in order to find the right customers, use the right channels, and make the right offers, all at the right time. They’re keenly focusing on knowing their customers—internal staff, agents and advisors, employers, and retail—and using the most relevant available data both to improve the user experience and create stronger relationships with and among all customers. And, while such a personalized approach is still fairly new in insurance, the companies that are able offer on have lowered acquisition costs, increased customer satisfaction, and gained a corresponding competitive advantage.

A personalized customer approach is still fairly new in insurance, but the companies that are getting it right have lowered acquisition costs, increased customer satisfaction, and gained a corresponding competitive advantage.
This need to provide more bespoke service is the result of consumer experiences with online retailers and service providers. Customers now increasingly expect that insurers will know something about them at the first point of contact – before they’ve had to fill out a fifty-question application – and be able to quickly suggest a variety of products and services that improve their quality of life. This has put considerable pressure on carriers to make the buying experience less cumbersome, easier to understand (i.e., in plain English), and much quicker. Building a prototype, testing it in focus groups, refining it, testing it again, and then finally releasing it just isn’t feasible anymore.

Fortunately, insurers have much greater access than ever before to customer data, effective analytical tools, and useful marketing technology. This is enabling them to reach customers and deliver a personalized message on a regular basis, with a clear line of sight into what’s working and what isn’t. They’re increasingly able to quantify the pain points that cause a customer to leave – a true “moment of truth” – and use this data to improve the customer experience. Moreover, it’s now possible to do all this in real time and at low cost, and with the flexibility to experiment with messaging to a particular segment within a particular channel or with a particular offer.

New data analytics are helping carriers to quantify the pain points that cause a customer to leave – a true “moment of truth” – and thereby improve the customer experience.
Despite notable progress at many carriers, we realize that learning curves vary, budgets aren’t limitless, and no-one can make every single one of the changes and improvements they’d like. However, there are some basic considerations for getting the most from recent advances in data analytics:

- The first is clearly defining a) the customer segments and interactions that are your top priorities, and b) the insights you need – and when and where you need them – to drive the experiences that result in new business and better customer retention.

- The second is that, although insurers typically possess copious amounts of data, third-party data – both structured and unstructured – is increasingly complementing internal resources. Many carriers are trying to identify the right types of third-party data, understand its value, how much they should pay for it, and how they can integrate it into their own systems and processes. This typically requires a separate operating model and dedicated team to effectively institutionalize external insights and build them into in-house operational processes.

- The third is taking a holistic approach to data-driven decision making and pushing it out to the edges of the organization so everyone can make better, faster decisions. Establishing a culture that respects the value of data insights is likely to transform the way your organization works. To facilitate this process, we recommend developing pilots that allow you to test what works and what doesn’t. For example, you could deploy AI chatbots and experiment with them internally. This sort of test and learn environment can help you gain practical and practicable insight, as well as help develop a culture that understands the power of data.

- The last is modernizing your foundation to make it agile, flexible and reusable. You’ll need to determine the type of architecture that can take you into the near and long-term future, as well as the data governance that promotes data quality and usefulness. You’ll also need to develop the integration architecture that will make data relevant for your employees and easy for customers to interpret and use.
The relentless pace of the digital age continues to change insurers’ strategies. However, for more than a decade, two constants have been the need 1) for a customer-oriented mindset and 2) to adapt quickly to an increasingly fast-paced world.

As carriers have tried to come to grips with new ways of doing business, one of the biggest recent developments at the corporate level is Experience Design owning a seat at the table.

Why?

For starters, Experience Design has hard-won expertise and plays a vital role in the customer experience and brand architecture. In addition, Experience Design teams are good at problem solving and often have experience doing so in multiple industries. Instead of trying to figure out after strategy planning what the future could be, involving Experience Design will help carriers define it from the outset.

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Building on existing strengths

Although some industries are further ahead in digital capabilities, design, and customer experience than insurance, most insurers do have some real strengths. First and foremost, they tend to have a very solid understanding of their customers. Moreover, they have extensive experience adapting products and services to changing market conditions.

However, digital has profoundly changed the way carriers interact with customers and how quickly and frequently they need to act. New technologies have amplified the need to listen more closely to customers and respond to their needs in weeks and months instead of months and years. Almost all carriers can do a better job taking the insight they possess and quickly turning it into something actionable, such as more flexible and adaptive products and more frequent and meaningful interactions with customers (and on their terms).

Recognizing that work gets done but is never really finished is a major shift in thinking for the insurance industry.
Always on

What makes this change in focus difficult for most insurers is that they’ve historically operated in a very stop-start, point A to point B manner. But, in a digital environment, constant improvement is now the rule of thumb. Recognizing that work gets done but is never really finished is a major shift in thinking for the industry.

In response, leading carriers are no longer looking for a big launch but are incrementally improving products, even if they evolve into something quite different than their originally form. This continuous cycle of launch, learn, adapt, and relaunch is where Experience Design excels and can add real value to the organization. And, as carriers increasingly involve creative solutions and get better at working in the always on business cycle, their product offerings and relationships with customers will likewise improve.
As we noted in last year’s edition of Top Insurance Industry Issues, commercial insurers are finally making significant investments in the digital space. Historically, the market was largely free from disruption – overlooked, in fact – so there wasn’t much incentive to change. However, because small commercial insurance is a large and profitable market for carriers who understand it, it’s now attracting a great deal of attention – and pressure to modernize.

Improving the customer experience

Both established players and new entrants realize there’s still too much manual work, inefficiencies in distribution, and inconsistent levels of customer service and interaction. Fast movers recognize that, if they’re able to overcome these shortcomings, they’ll be more efficient, attractive to customers, and profitable.

There are a few key areas in which digital capabilities are helping commercial carriers modernize. There is considerable innovation taking place in claims. As personal lines started doing over a decade ago, small commercial carriers are now investing in capabilities that make it easier to manage a claim online, thereby expediting the process and increasing customer satisfaction and retention. In addition, increasingly comprehensive and comprehensible third-party and in-house data is simplifying online research; understanding of complex products, individual customer and broader customer categories’ needs; and the quote and sales process.
Because of the importance of the user experience and the need to more efficiently and profitably serve the market, the small commercial operating model will continue to change the most at the front end. Investments in digital capabilities will continue apace and the direct channel will slowly grow in importance. But, because small business owners’ insurance needs are often bespoke and require a human touch, we expect that independent agents will continue to be the primary distribution channel for small commercial into the foreseeable future.

AI is promoting an increasingly consistent approach to underwriting risks on a day-to-day basis, as well as greater understanding of and control over underwriting decisions.

**Digitizing underwriting**

AI is playing a huge role in changing underwriting. As a case in point, most personal auto policies are now priced automatically. Digitization has simplified the underwriting process to the point insurers can avoid asking too many questions of the customer, who’s just trying to get a quote. There’s enough internal and external data to automate most of the process.

However, in other segments of the market like small commercial, an underwriter – a human – still has to look at the risk that a carrier underwrites. At least for the time being, human judgment is still going to be important, even if models increasingly inform decisions. Accordingly, digitization – in this case, AI – is more about 1) enabling humans to quickly and effectively collect the information they need to adequately assess and underwrite risk and 2) defining the technologically augmented process they need to follow to underwrite that risk. This is resulting in greater underwriting discipline; there’s an increasingly consistent approach to underwriting risks on a day-to-day basis, as well as greater understanding of and control over underwriting decisions.

We expect that independent agents will continue to be the primary distribution channel for small commercial into the foreseeable future.
Underwriting talent

Talent – and especially underwriting talent – is the lifeblood of an insurance company. Carriers spend a great deal of energy trying to attract the most qualified people. As carriers consider the underwriting workforce of the future and how to evaluate their underwriting talent, they’re looking at not only existing underwriting acumen but also how to develop it.

For example, and to add color to what we’ve noted above, as AI and data digitization are becoming more prominent, carriers are devoting considerable attention to helping underwriters use models and AI driven tools to supplement their knowledge. In this way, underwriters are becoming increasingly comfortable marrying what they’ve learned from personal experience with insight from models to make the most informed decisions possible.

Carriers also are training experienced underwriters to document and transmit their lifelong expertise to more junior underwriters. This is where digitization is playing a major role. It’s converting the knowledge that resides within an insurer to make it more permanent and available to new generations of underwriters. Making this knowledge institutional creates a better connected and informed workforce, which helps makes existing employees happier and attracts new ones. More importantly, it helps the insurance company itself be in a better position to profitably grow.

In sum – and in line with what optimists have been saying about the positive effects of AI and automation – small commercial is a proving ground for people and machines working together to create a better outcome for carriers, their employees, agents and customers. While the segment is fairly early in the modernization process, the companies out in front are already benefitting from augmenting their front and back end operations. Digital advances in claims processing; underwriting; customer service; and workforce systems, processes, and knowledge are already resulting in improved efficiencies, a more connected workforce, lower costs, and happier customers.
The evolution of model risk management

Model risk management 2.0
Model risk management (MRM) is relatively new as a formal, structured undertaking in the insurance industry. A survey we recently conducted in the US indicated that among the 58 respondents, which included the major players in the life and P&C sectors, the first formal MRM program was established in 2010, less than ten years ago. At the end of 2016, nearly 60% had a program in place. And based on participants’ survey responses we expect the number is now over 85%. Though the survey included some companies with head offices in other jurisdictions, progress in other parts of the world varies. In Europe for example, the emphasis has been on Solvency II internal models, with some initiatives among larger insurers to expand to other model types.

Despite this recent rapid growth - or perhaps because of it - insurers continue to refine and improve their MRM capabilities. Four trends that we expect will shape model risk management’s future define this evolution:

1. Revisiting the definition of “model,”
2. Shift to validating new models,
3. Rationalizing the three lines of defense, and
4. Seeking cost efficiencies.
Before we explore the trends leading to MRM 2.0, let’s take a look at key characteristics of the first level, MRM 1.0. The programs that insurers have developed over the last few years share a number of things in common:

- An MRM leader has been identified and an operational team has been established. This team is almost always part of the ERM function.

- The organization has developed and agreed upon a framework for MRM, including policies and procedures. The framework usually includes a standardized validation approach illustrated in a template validation report or a validation playbook. The validation approach typically covers models end-to-end, from data and assumption input; through methodology, soundness, and calculation accuracy; to output transmission and proper usage.

- There is an inventory of models. For most US insurers, the inventory is universal and covers models from all parts of the company. Models in the inventory are sorted in terms of their riskiness to ensure timely and extensive assessment of high risk models.

- Early validation efforts focused on existing, legacy models. Many MRM functions have completed assessing high risk models and are well on the way to looking at the lower risk ones. Some models have been through a second validation. With this experience in hand, insurers have developed practical perspectives on what works well and what doesn’t. This practical perspective is shaping how they are refining their MRM programs.

There have been some recent changes in the regulatory landscape in the US. The three former non-bank SIFI insurers no longer subject to Federal Reserve Board oversite, and they accordingly have considered how best to reflect this change in many parts of their operations, including MRM. Other insurers that have not been directly impacted by these regulatory developments are observing the progress and effectiveness of these operational changes.

Lastly, we note that the types of models insurers use continue to evolve. In particular, insurers are making more extensive use of advanced analytics throughout their operations.
Moving to the next level: Fitting model definitions to emerging circumstances

Changing model types is a significant factor in insurers revisiting their definition of a model.

The Federal Reserve Board’s Supervisory Guidance on Model Risk Management (SR 11-7) provides a relatively precise definition: “a quantitative method, system, or approach that applies statistical, economic, financial, or mathematic theories, techniques, and assumptions to process input data into quantitative estimates”. Many insurers use this definition as a starting point and tailor it to fit their organization’s circumstances. At the other end of the spectrum, we find that some insurers use a different starting point and a more expansive definition, for example, “algorithms used to make business decisions.”

With the advent of advanced technologies such as robotics, predictive modeling, big data, and enterprise-wide automation, insurers are now looking to de-mystify the technologies’ black box reputation and enhance their model definition and practice of model risk management as necessary.

The key questions that insurers need to address in this changing landscape are:

- Does the company have a clear definition of model risk? This could aid in moving from placing sole reliance on the current model definition and include other models under the MRM umbrella (e.g., robo-advisors, call bots) that pose other types of risk, such as litigation, reputational, etc.
- Does the board understand and support these new types of models and their associated risks?
- How much reliance does the company place on the models’ results and what weight does it carry in making strategic decisions?
As insurers conducted the first validation of the models in their inventory, they often encountered models with little or no documentation. Moreover, the documentation that was available was often incomplete and varied considerably in design and detail from one model to the next. Documentation seldom addressed conceptual soundness.

When these legacy models were built, it is likely some calculation testing may have taken place using an independent checker model. However, this testing work was seldom recorded and the results verifying the calculation’s accuracy usually have been lost (or never existed in the first place).

Faced with these shortfalls, the model risk management department has had to undertake work that typically would fall to the model developer. Some minimum amount of model documentation had to be completed in order to establish a meaningful description of what was being tested in the validation. MRM typically had to invest time and effort in guiding model owners through the documentation development process and assisting them with the work. Where calculation checking was not recorded, it typically fell to the validator to re-do and document this work.

However, for new models, the validator and developer can better influence how calculation checking should be completed. Normal practice would be for the model developer to conduct testing to ensure the model calculation code is performing as expected. There is no need for the validator to completely re-do this testing. Instead, the validator should establish and agree with the developer on the type and amount of testing the developer should complete. Then the validator would confirm testing was conducted (and documented) and undertake any additional follow up checking that might be warranted.

The same is true for conceptual soundness. For new models, developers should undertake and document their selection of the methodology, describing other options they considered, and explaining why they chose the option they did. The validator should be reviewing – not re-doing – this work.
Coordinating the three lines of defense

As the model developer and validator find themselves sharing tasks, it becomes necessary to plan how they will work together. And this planning also can include coordination with the third line of defense: internal audit and, if appropriate, external audit.

For best results, planning for new models should occur at the start of the model development process. With a clear perspective of what the validator is expecting, the model developer can organize development testing and documentation to fit those expectations. For large modelling initiatives, it often makes sense to seek interim validation feedback so that the model developer is assured that the model stays on track with little chance of significant cost and effort to redo non-conforming work.

Similarly, some natural ordering of activity can be built into the model development plan. For example, it typically makes sense to establish the concept and confirm conceptual soundness before proceeding to code and checking the calculations. Developing a validation test plan appropriate to the model under development can promote effective planning of activity order and allocation of work across the three lines. In this way, tasks and timing of deliverables, such as interim reports, can be agreed on ahead of time.

Close cooperation and coordination across the three lines does raise the need to manage and maintain appropriate independence. For example, validators, especially when delivering an interim report, should not take it upon themselves to decide how to fix any shortfalls.

Focus on cost efficiencies

Building and working through the inventory at the outset, from identifying models, collecting information on each, and validating them, is a one-time activity. That this set-up activity need not be repeated should have a favorable impact on costs.

Better coordination across the three lines of defense also should reduce cost by eliminating unnecessary overlap and duplication. For new models, building in interim feedback can reduce overall modeling costs by minimizing the need for excessive re-building to correct shortfalls.

Some insurers have found that, by taking a closer look at their inventory of models, they are able to identify some models they no longer actively use. They often identify other models that perform essentially the same task but in a different way. Insurers have found it worthwhile to establish a single, core “best practice” approach with a lower cost than maintaining multiple duplicative versions.

Similarly, companies encounter multiple platforms where the modeling component is essentially the same but multiple operating systems that conduct the same modeling activity magnify ongoing resource requirements and operating costs. Transforming these multiple versions to a single modernized operating platform can reduce both costs and model risk.
The elimination of SIFI imposed obligations further highlights the need for MRM to add business value. We believe that a transition to MRM 2.0 provides an opportunity for insurers to increase their MRM effort’s value to the organization while reducing costs.

To take advantage of this opportunity insurers will need to:

• Remain current on their model definition, inventory, and risk rating, and focus on models where the risk of error represents significant financial and reputational damage.

• Address and clarify the roles of their three lines of defense related to MRM. In particular, they should look to eliminate duplication and overlap while maintaining effectiveness and independence consistent with adding business value.

• Especially for new models in development, specify how developers and validators should coordinate their efforts.

• Establish an effective model risk management culture throughout the organization that seeks to reduce risk in a cost effective manner.
Aligning LDTI and IFRS 17

LDTI and IFRS 17 implementation synergies
The August 2018 issuance of new reserving requirements for USGAAP reporting (“LDTI”) has a timeline that aligns with IFRS17 implementation. Because both FASB and the IASB approaches address similar considerations, companies that need to dual-adopt are finding opportunities for synergies as they refine their approach to implementation. They’ll be able to align policy decisions while simultaneously adopting both standards without needing to worry about two full implementation plans.

**System synergies**

Both the IASB and FASB standards rely on best estimate cash flows (or probability weighted cash flows) that may be similar or equivalent for projection purposes. A key area of focus in the planning stages is identifying the extent to which cash flows can be leveraged for dual purpose. In particular, for best estimate assumptions that generally represent the mean of a company’s experience – and where data indicates symmetry in the distribution of the assumption – companies will be able to leverage a common assumption set for LDTI and a common cash flow set for projection purposes.

An example of this is the setting of a mortality assumption. Most studies will indicate a symmetrical distribution and most companies will set their best estimate as the mean of the experience. The resultant cash flow projection for mortality purposes will be appropriate both for IFRS17 and LDTI modelling purposes. Depending on the asymmetry of the risk profile, other, similar assumptions can include lapses, morbidity, and premium persistency. In this context, asymmetry identifies situations where the distribution of the assumption is not symmetrical, which indicates that a mean assumption may not (though it could) be the same as management’s best estimate assumption.
For insurers designing system solutions for use post-transition, they should strongly consider the use of a reliable database solution to store the cash flows at the seriatim projection level so that one projection can be used for multiple purposes, such as for IFRS17, LDTI, or planning. Definition at the seriatim level will allow companies to combine the results in whatever way necessary for any particular analysis. This drives the second large potential synergy, which concerns the definition of “unit of account.” LDTI prescribes a unit of account no less granular than the issue year of the contract; this is similar to the IFRS17 unit of account, which also proscribes crossing issue year. IFRS17 further subdivides the unit of accounts by portfolio definition. In order to minimize effort, implementation plans should ensure that the IFRS17 unit of account can be combined easily into the less granular LDTI level. Flexible data solutions will allow this combination of cash flows to the relative unit of account and minimize the amount of rework needed to support the new standards.
Reporting synergies

Under the new frameworks, we expect that management reporting requirements will increase because of the demand for additional insights. Furthermore, the new required roll-forward disclosures will increase the amount of analysis and the number of model runs. Analyzing these disclosures and determining a management reporting framework will allow actuaries to design, automate, and minimize the number of runs needed to perform these roll-forwards and analysis. For example, LDTI prescribes that the assumption unlocking should occur at the beginning of the quarter, when an assumption is unlocked. Under IFRS17, the order of operations for roll-forward are not prescribed outside of CSM amortization. As such, in order to minimize the number of runs required, companies should determine if assumption unlocking for IFRS17 also should occur as of the beginning of the quarter. Similar synergies would exist for updates for actual experience; ensuring a consistent order of operations will be vital to minimizing the number of required runs.

Some synergies will be limited in scope due to the fundamental differences in the standards. For example, because of differences in contractual terms, contract boundaries will be fundamentally different between IFRS17 and LDTI. However, there is still an opportunity for synergy, in particular where cash flows are the same but the boundary is limited due to repricing or other features. In this case, companies should be able to modify LDTI cash flows to become IFRS17 cash flows using modifiers in a database rather than separate model runs or new model runs. There will be similar considerations for cash flow elements that are part of one standard but not another. For example, although maintenance expenses will not be part of the LDTI best estimate cash flow stream, an optimized model may consider including maintenance expense assumptions and loading them into a central database because they would be needed for IFRS17 and planning purposes. A modifier could be applied in database form in order to capture the LDTI cash flows needed.

Other Approaches

This system agnostic process map graphically summarizes synergies:
LDTI Synergies with IFRS 17/9

While the requirements are significantly different between the accounting changes proposed by FASB and IFRS 17, the impacts on the technology architecture have similarities. All of these changes will likely require updates to existing systems, data, and processes.

Items like input data, projection modules, and reporting elements all can be leveraged on a combined basis to maximize the impact and minimize the cost of implementation. Other items we’ve already mentioned, in particular data warehousing and aggregation, are particularly open to consolidation since so many data elements are common across the regimes.
Conclusion

Companies should take a hard look at their implementation plans to determine if they’re taking advantages of the many ways to optimize implementation. The key goal is to implement these new standards in a cost-effective fashion, limiting the amount of reworks and time needed to reconcile the results of the two standards.
Insurance taxation

2018 Impacts of the Tax Cuts and Jobs Act
The Tax Cuts and Jobs Act (“the Act”) is the most sweeping piece of US tax legislation in over 30 years, particularly for insurance companies. Although most of the Act’s provisions were first effective in 2018, it already is having wide impacts on insurers’ operations. As was the case in late 2017, the Act also has been central to many business decisions in 2018, not just in tax departments but also in other functions, including the C-suite.

Just as insurers spent 2018 adapting and complying with the Act’s new provisions, the IRS and Treasury Department proposed an impressive volume of guidance under the Act. We anticipate that the IRS will issue much of the final form of its guidance during the first half of 2019.

We describe in detail elsewhere the Act’s technical details and will continue to address what insurers need to do to comply with it as its implications become clearer. On a broader level, and as we describe below, the Act has clear business impacts that go far beyond tax.

Although the reduced corporate tax rate may be a long-term benefit to most insurers, application is uneven across the industry.

The sweeping tax rate cut from 35% to 21% reduced cash tax rates over time, but also reduced deferred taxes recorded on insurers’ balance sheets. The industry (and life insurers in particular) experienced a reduction in deferred taxes for NAIC Statutory accounting purposes. Decreases to admitted deferred tax assets resulting from the decrease in the tax rate generally resulted in a reduction to regulatory capital and created some stress on risk-based capital (“RBC”). While the tax rate decrease might be considered to be a net win for companies over time, the timing difference of writing down deferreds today that provide a cash tax benefit in the future has a significant impact on RBC for some insurers. Those hardest hit have included companies with large deferred tax asset balances and those that lack excess capital.
The NAIC published “Interpretation of 2018 Life Risk Based Capital Results” to help regulators understand the expected impacts on RBC of tax reform in several scenarios. While the guidance does help explain the anticipated impacts of tax reform on RBC, companies still must contend with reduced capital levels. The NAIC released SAB 118 in 2018, granting companies a one year window to complete their tax accounting calculations associated with tax reform. In addition, the NAIC is considering additional changes to SSAP 101 guidance and has published such guidance in the form of two exposure drafts. These changes should help clarify how some of the pre-reform tax accounting principles apply in a post-tax reform world. Public comments are due June 12, 2019.

Analysts, rating agencies and regulators will continue to work through how to interpret the industry’s after-tax income and capital results. Executives should work with their tax teams to familiarize themselves with any possible questions that may raise.

Changes in the regime for taxing US corporations on offshore business and foreign corporations on US domestic business have had varying effects and, in some cases, unintended consequences.

Many of the tax reform provisions and subsequent IRS guidance have impacted both foreign insurers doing business in the US and US insurers with global operations. The Base Erosion & Anti-Abuse Tax (“BEAT”) in particular had a significant effect on foreign-parented companies and made it more difficult for multinational groups to manage capital. Many companies responded by repricing products and bringing business onshore.

In addition, the potential application of the BEAT to claims and other payments on inbound reinsurance changed the economics of existing structures and ran counter to the stated policy of the provision. Companies are anxiously awaiting the next round of guidance in this area, which may not come by the June 22, 2019 deadline, and therefore may not be retroactive to the date of tax reform. The outcome of this guidance will affect planning for transactions, the launch of new products, and selecting an overall business model. Insurers should continue to monitor ongoing developments in this area.

The Global Intangible Low Taxed Income (“GILTI”) provisions had some unexpected effects, and appear to have the greatest impact on insurers when capital markets trend downward. GILTI is effectively operating as a minimum tax for companies and will need further consideration now that Year One of the rule has passed. Because most companies elected to treat GILTI as a period cost, anticipating the future impacts in projections and product pricing could prove challenging.
There are many other international provisions insurers must contend with post-reform that will impact how they project net income, capital, and free cash. They should be mindful that some provisions that operate on a controlled or consolidated group basis for Federal purposes will operate under a separate company approach or entirely different rules for state tax purposes. As a result, keeping abreast of how post-Federal tax reform affects the state tax landscape will remain a priority for the industry.

**Other changes in the taxation of insurance companies also had significant impacts beyond the tax function of many companies.**

Perhaps the most important domestic changes in the Act were a 40% reduction in the corporate tax rate, from 35% to 21% and the repeal of the Corporate Alternative Minimum Tax (“AMT”). The refund of prior-year AMT credits and Treasury Department determination that those credits would not be subject to sequestration were welcome relief for insurers’ treasury functions.

The benefit of these items was reduced and in some cases offset by a number of provisions that broadened the tax base against which this rate applied. Three insurance-specific base broadening provisions were especially important to insurers: deferred acquisition costs (“DAC”), reserves, and proration. Many companies have felt the impact of these provisions across the entire organization because they affect product pricing, investment decisions, gross margins on business, and capital planning.

DAC represents an amount that is capitalized up-front, when amounts are received under life insurance, annuity, and other “specified” contracts. The Act generally increased the capitalized amount by 20 percent and extended the period over which amounts are deducted from 10 to 15 years. Even though DAC impacts only the timing for deducting acquisition costs (e.g., commissions), it sometimes is analyzed as a tax or an up-front assessment for purposes of product pricing.
Reserves and claims are typically the largest tax deductions for an insurer. The Act’s changes to the computation of tax reserves likewise resulted in a renewed emphasis on product pricing, and as a result increased insurers’ reliance on company actuaries. For life insurance reserves, the Act’s change will greatly simplify the computation of tax reserves, especially in cases where statutory reserves are principle-based, by increasing reliance on the assumptions used for statutory purposes. For nonlife reserves (such as property, casualty, and health), the Act changed both the interest rates and loss payment patterns for most lines of business. Regulations proposed in the fall of 2018 were controversial, and had the greatest impact on longer-tail lines of business. Together, these changes could affect product pricing, asset and liability matching, and treasury decisions.

Changes in the rules for net operating losses apply differently to non-life insurance companies than to life insurers and other corporate taxpayers. The changes to NOL provisions have introduced a new level of complexity and are causing both the IRS and companies to consider how to account for them. Although no operational changes result in the short term, the learning curve is steep, and incorporating these rules into projection tools can become cumbersome. In the longer term, companies may take a closer look at their tax status and structure to determine what efficiencies they may gain. In addition, these rules impact after-tax value of target companies and should be factored into determinations of purchase price.

Finally, some provisions of the Act have affected some insurers’ investment decisions. For example, a sharp decrease in marginal tax rates affects the decision of any company to invest in taxable versus tax-preferred assets. The disparity between higher individual tax rates and lower corporate rates also has made it difficult for insurers to compete with individual buyers on tax-exempt bond pricing. For insurers, a concept known as “proration” also somewhat limits the benefits that otherwise would be associated with tax-preferred investments such as tax-free bonds and corporate stock that pays DRD-eligible dividends. Changes in proration rules for life insurance companies has greatly simplified compliance but also has affected companies in different ways. Changes in the proration rules for nonlife companies preserved the pre-Act effective tax rate on tax-preferred investments. Moreover, the Opportunity Zone Fund, a new investment vehicle, has enabled some insurers to defer the capital gains they’ve realized on other investments.
Final IRS guidance will be a primary focus in 2019

The IRS published a record volume of guidance during the first year after the Act’s passage, including on the BEAT and other international provisions, changes in the rules for life and nonlife insurance reserves, and changes to other items such as interest expense. Three factors account for the push for guidance.

1 First, the IRS and Treasury naturally prioritize guidance under any significant tax legislation, and this is reflected in the annual “Priority Guidance Plan.”

2 Second, during the partial government shutdown of 2018-2019, many employees worked exclusively on guidance under the Act because that work had its own funding.

3 Third, the IRS and Treasury will be allowed to apply regulations under the Act retroactively only to the extent they are finalized by June 22, 2019.

We expect that the IRS will continue to publish guidance at a record rate throughout the first half of 2019, and insurers will continue to focus on and adapt to it. The post-tax reform “limbo” that companies will linger even though more guidance is forthcoming in the near term. Companies that have taken action in the first year post-reform may need to consider longer term strategies once the additional guidance becomes available. Business executives and transaction executives should stay close to their tax departments in order to ensure they incorporate the latest perspectives into the business strategies they consider.
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Aligning LDTI and IFRS 17

LDTI and IFRS 17 implementation synergies

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