



## The IFRS 17 data challenge and the technology solutions that insurers adopted to tackle it

### Foreword

Participants in the 2022 Global International Financial Reporting Standard 17 (IFRS 17) Insurance Survey confirmed that they expect the benefits of a level playing field in insurance reporting that come from IFRS 17 to emerge in 2023. Our first article on the survey noted that the high adoption rate of the European Union (EU) exemption from the annual cohort requirement is not expected to dilute that benefit.

In this second article of a four-part series, we focus on the technology considerations of the survey. The effort expended on the technology needed for IFRS 17 compliance was often more than initially estimated, but the expected benefits also appear to be greater. As the survey revealed, a much more transparent and agile finance capability is now possible because packaged software helps to capture new information and offers analyzes in ways not previously possible.

IFRS 17 programs were often reported to be more complex, to take longer than expected, to cost more than planned and to require more broadly skilled resources. And these results did not vary much for different business scenarios. Data capture and analysis was a recurring theme as insurers found that the requirement for additional data granularity and governance was a primary consideration as they integrated and tested packaged solutions. The need to build foundation capabilities to tackle these challenges has created new opportunities to better report and manage financial and operational information.

As confidence builds with integrated IFRS 17 solutions, we expect to see further plans that leverage these investments by automating workflows and applying artificial intelligence (AI). These further investments will lower costs and emphasize the need for business expertise as the time spent on administrative tasks continues to be reduced.

As many saw, when the industry dealt with the conversion to the year 2000, having the right talent is essential. Technically savvy professionals who understand finance and actuarial considerations are crucial. With a mandated deadline and demand for the same qualified resources from most insurers, having the right people has made the difference between simply complying versus building new capabilities and maximizing investment returns.

Economist Impact's survey and analysis have revealed some expected outcomes, but more importantly, new considerations for the future.

Please contact me, or the Deloitte IFRS Insurance leader in your local market, if you would like to discuss the technical considerations of this research.

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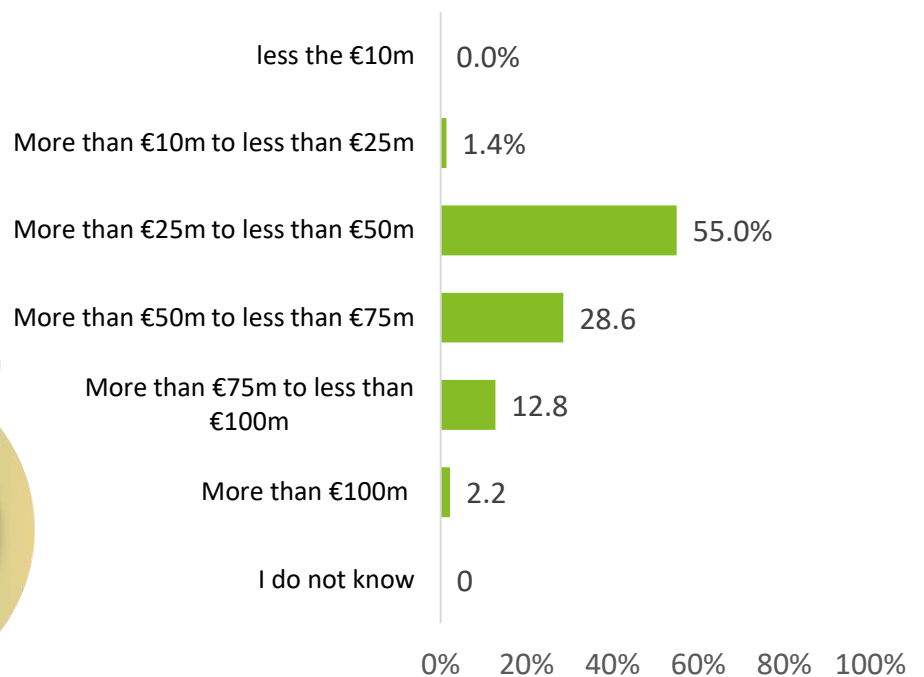
The race to ensure compliance with IFRS 17 has seen insurers spend significantly on technology transformation. This article examines the depth of this transformation and the challenges involved and asks what benefits—beyond compliance—insurers may stand to gain.

## Introduction

Ensuring compliance with IFRS 17, which is due to take effect in most jurisdictions on January 1, 2023, has cost the insurance industry billions of dollars in technology and operational improvements as it grapples with implementing the biggest accounting change in its history.

Our survey, which queried 360 executives in mid-2022, shows more than two-fifths of respondents estimated their firm had spent over €50 million on their total global budget for internal resources, new systems software and hardware, and external fees for professional services simply to become compliant (see Figure 1).

**Figure 1: What is your estimated total global budget (including internal resources, cost to buy new systems software/hardware and external fees for professional services) to meet the new IFRS 17 regulations? Select one.**



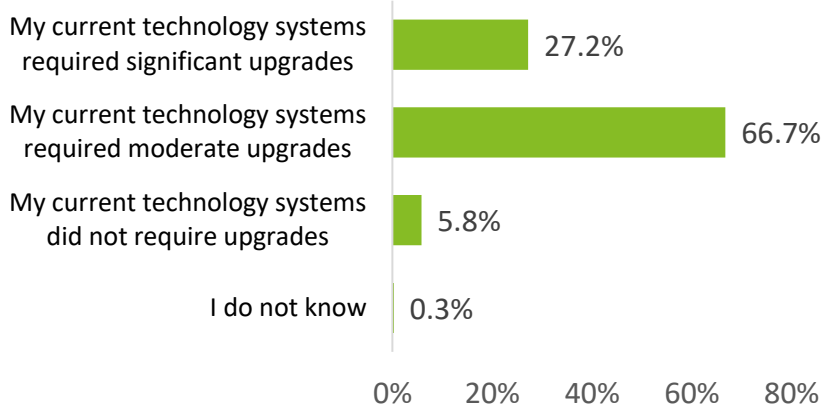
In 2013, just 7%percent expected to spend that much, with that proportion rising sharply to 35% by 2018.<sup>1</sup> (It is worth noting that, according to consultants like Deloitte, the actual costs are often higher than estimated.)

Also interesting is the extent to which firms felt their existing systems fell short: nearly 95% of respondents say their financial reporting, administrative and/or actuarial

systems needed upgrading to meet IFRS 17's requirements. While most required moderate upgrades, 27% say significant upgrades were in order (see Figure 2)—with the latter more common for life firms and larger firms as measured by net written premiums (NWP). (This is less surprising than it might appear given the industry's transformation recent experience in other functions such as underwriting and claims.)

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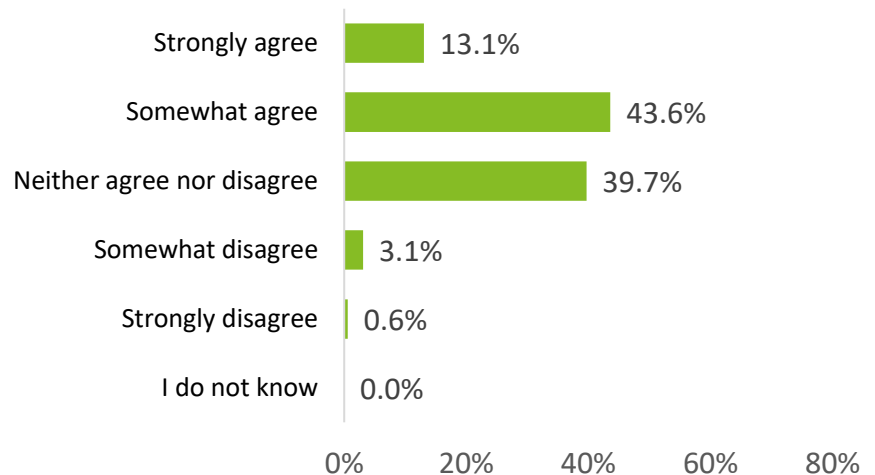
**Figure 2: To what extent do you feel your organization's current technology systems (financial reporting, administrative and/or actuarial systems) have changed to meet the requirements of IFRS 17? Select one.**



All of this raises an important question: Where did firms spend their IT systems-compliant budget? Around three-quarters of respondents say 20-40% of it went on internal resources to design, implement, and test technology solutions, while a similar proportion spent 20-40% buying hardware and software solutions, and nearly two-thirds did so on engaging external business consultants.

In short, insurers have spent large sums—and have spent widely. Significantly, when asked whether this was worthwhile, more than half of respondents felt the benefits of adopting IFRS 17 will outweigh the costs, a first for this survey (see Figure 3). Most of the rest were on the fence.

**Figure 3: Please indicate whether you agree with this statement: For my business, the benefits of adopting IFRS 17 will outweigh the expected costs. Select one.**



Among those in the second group is James Turner, Group Chief Financial Officer at UK-based insurer Prudential. While Mr. Turner says he is “not blind to the benefits” of the technology upgrades required, he is “not convinced that the benefits will outweigh the costs.”

In the other camp is Massimo Tosoni, Head of Group Accounting Policy & Reporting at Italy's Assicurazioni Generali SpA, and a member of the Financial Reporting Technical Expert Group of the European Financial Reporting Advisory Group. Generali, he says, took the opportunity of needing to become IFRS 17-compliant to introduce improvements to its systems framework, including in areas like process automation.

“The trigger for the improvements was compliance, but now we are going beyond,” Mr. Tosoni says. “This enables us to take further steps in the direction of being cloud-driven, digital and convergent with a higher degree of automation and innovation of our finance chain.”

Whether insurers feel positive, negative, or neutral about the need to upgrade to become IFRS 17-compliant, what almost all have in common is that they have expended immense efforts to ready themselves. And that raises two crucial questions: What technology-related and operational challenges did they encounter? And what additional capabilities has this brought?

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**Massimo Tosoni,**  
Head of Group Accounting Policy & Reporting, Generali

## The data challenge

The fact that it has taken years to become compliant is indicative of the challenges involved. One is that IFRS 17 in effect requires an overhaul of insurers' foundational data management practices—from the way they capture data to its analysis, reporting, and governance.

The data-related challenges do not end there, with insurers also required to collate information across business lines, geographies, and time. This explains why 36% of the 338 respondents whose technology solutions required moderate or significant upgrades say that data capture at the required level of granularity across sources like finance, actuarial and risk management was their greatest

technology challenge in the marathon to compliance. Notably, this was twice as common a challenge at smaller firms (€300-500 million NWP), where nearly 52% of respondents cited it, versus one-quarter at the largest firms (NWP €5 billion+).

For Prudential's James Turner, data capture was "definitely in my top three challenges." He cites the insurer's need to access and leverage data going back 20 years in one country to construct an opening balance sheet compliant with IFRS 17.

"Try to imagine going back through your email and getting out data you created for twenty years—and now we're going at it, policy by policy, and working out the cash flow for each

policy," he says. "And it's not even capturing data here—it's really accessing and leveraging it, and that has been, in some cases, very difficult."

While data capture was the most significant challenge in preparing technology solutions to support compliance, it was not the only one. Other challenges included the performance of such solutions, the end-user interface (reporting), calculation capabilities, and data storage/management capabilities (see Figure 4)—with the last cited by nearly one-third of life respondents versus around one-fifth of those at non-life insurers.

**Figure 4: Which aspects of preparing your technology solutions to support IFRS 17-compliance have given you trouble? [Respondents selected all that apply. Respondents were those whose firms' systems required significant or moderate upgrades (n=338).]**

Response	#	%
Capturing data inputs at the required level of granularity across data sources (i.e., finance, risk management, actuarial functions)	123	36.4%
Performance of technology solutions (i.e., speed/processing time of automation solutions)	112	33.1%
End-user interface	102	30.2%
Data storage/management capabilities	92	27.2%
Calculation capabilities	92	27.2%
Reporting interface	81	24.0%
Data quality	66	19.5%
Cyber-security	62	18.3%
Controls	45	13.3%
Other [Please specify]	0	0.0%
I don't know	1	0.3%

## Implementing new standards, new systems

Data is central to IFRS 17-compliance. That means solving the technological challenges around gathering, processing, and storing it are also crucial. When we asked respondents

to rank their top three challenges as their firm finalizes implementing its technology solutions, the most cited—by more than 40% of the respondents—was the quality of

packaged software. This was followed by budgeting sufficient resources for implementation, testing, and integrating operations (see Figure 5).

**Figure 5: What were the three most significant challenges? [Respondents were those whose firm's systems required significant or moderate upgrades (n=338).]**

Response	#	%
Quality of packaged software solutions (i.e., out-of-the-box functionalities were substantially inadequate for your organization's needs for IFRS 17)	144	42.6%
Budgeting enough resources (both internal and external) for implementing and testing IFRS-related technology solutions	128	37.9%
Integrating operations (i.e., finance, risk management, actuarial) to optimize the use of the new technology solutions	111	32.8%
Ability to provide sufficient staff time to deliver the implementation	89	26.3%
Ensuring adequate cyber-security (i.e., ensuring adequate data protections are in place)	82	24.3%

Selecting and implementing packaged software can offer many short- and long-term benefits, but there are many strategic choices to be made when implementing IFRS 17.

"The notion of packaged software implies an out-of-the-box solution, but in fact we had to work closely with the software firm to adapt their solution to P&C and Canadian regulation," says Louis Marcotte, Executive Vice President and Chief Financial Officer at Intact Financial Corporation, a Canada-headquartered P&C insurer. "It's not a question about the quality of the software, but rather the fact that it had to be built collaboratively between ourselves and the vendor while interpreting a new and extremely complex standard which also had regional differences."

Another challenge was that parts of the standard changed over time, with the International Accounting Standards Board announcing amendments that required firms to understand those impacts and determine what new data they needed.<sup>2</sup>

"There were no perfect packaged solutions," says Kirsty Ward, Chief of IFRS 17 Delivery at Prudential. "But, in fairness to software companies, requirements changed even after the standard was issued. They were dealing with a moving target."

Germany's Allianz Group avoided the difficulties of packaged software with a comprehensive project that was based on its own developed solution, and which was rolled out globally. The project, which concluded in 2021, saw the firm upgrade its actuarial calculation tools and databases that can process data up to the general ledger and the group accounting systems.

As a result, says Roman Sauer, Allianz's Head of Group Accounting and Reporting, "we were able to build it as we would like," adding that the firm has been able to conduct parallel runs for the past two years.

"And because we don't use the standard software, we were independent of the developments on the market and maybe the other difficulties of the standard software," Mr. Sauer says.

A typical implementation of a packaged software must meet the challenges of integrating with the requisite systems that will interface with it. On top of the integration of different systems, the architecture for IFRS 17 requires seamless interaction between departments—including finance, IT, actuarial, and accounting—and across geographies. Added to that, ensuring an IFRS 17 platform can be used going forward means it must also be agile and scalable.

"Implementing solutions has been by far the most difficult and most complex part of the program," says Prudential's Kirsty Ward. "The biggest challenge has been putting the various systems together and making sure the data flows appropriately through that [architecture]. This has been very intensive."

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Chief of IFRS 17 Delivery, Prudential

Meeting a deadline requires skilled staff who are limited in supply. While upskilling their existing workforce or hiring externally are alternatives, both require additional time. For that reason, it is not surprising that—as the go-live date looms—demands on finance, actuarial and IT-related staffing are rising: the proportion of respondents who say their firms employ 50+ full-time IT staff is at nearly 30% versus 19% in 2018, while those employing full-time actuarial staff in the 50 to 100 range climbed to nearly one-quarter from 20% in 2018.



Meanwhile, the proportion of part-time workers in finance, actuarial, and IT has also doubled—and in some cases tripled—since 2018, leading to a war for talent. Central to this is the nuanced skillset needed for compliance with the new standard. All of these data points have flagged the criticality of collaboration across large teams comprising a wide

spectrum of expertise, professional background and the degree of focus on the IFRS 17 implementation versus other parallel business priorities.

The emphasis on collaboration is not a surprise. As our 2018 survey report noted, firms are “trying to drive tighter integrations between finance, actuarial and other departments.”

Four years on, our 2022 survey found much the same—that successfully complying with IFRS 17 requires collaboration with others in technology design and risk management. Expertise in accounting, program management and leadership, strategic planning, and data management are also highly prized (see Figure 6).

**Figure 6: Which skills are most-needed for your organization to be successfully IFRS 17-compliant? [Respondents selected their top three choices. Respondents were all those questioned for the survey (n=360).]**

Response	#	%
Technology design and implementation	98	27.2%
Collaboration skills	85	23.6%
Risk management expertise	83	23.1%
Accounting expertise	82	22.8%
Program management and leadership	81	22.5%
Strategic planning	78	21.7%
Data management	77	21.4%
Specific packaged software expertise	72	20.0%
Communication	69	19.2%
Actuarial expertise	63	17.5%
Creativity	43	11.9%
Testing	38	10.6%
Other [Please specify]	0	0.0%
Don't know	0	0.0%

## Innovation brings new benefits

In preparing for IFRS 17, insurers have had to overcome an array of challenges. And while compliance was the key catalyst for insurers' technological upgrades, the journey also means they can realize numerous benefits.

Nearly half our respondents say upgrades brought capabilities ranging from a broad modernization of actuarial models and related technology to improved disclosure processes and optimized performance metrics. This is thanks to the post-implementation ability to

analyse vast swathes of data at a more granular level. These much-improved analytics capabilities will also allow the comparison of both financial and operational data.

“For us, it brought a greater comparison between actual and expected IFRS 17 results at the annual cohort level on which IFRS 17 calculations are performed,” says Prudential's James Turner. “The ability to access this level of data on a consistent basis across the business certainly has benefits.”

Allianz's Roman Sauer, meanwhile, says IFRS 17 is poised to bring a new perspective to several aspects of the insurance business, with financial leadership being able to use the more granular data to analyse the business better. IFRS 17 technology brings the possibility to drill down more easily from group-level key performance indicators to subsidiary level or portfolio level—rather than using a bird's eye view because of the more limited drill down capabilities pre-implementation.

“We invested in the calculation engines and in the database and analytic tools, which were more or less completely unharmonized... That is a huge step in terms of run-times, the control environment and, ultimately, stability.”

**Roman Sauer,**  
Head of Group Accounting and Reporting, Allianz

“We invested in the calculation engines and in the database and analytic tools, which were more or less completely unharmonized and really, on an entity-by-entity level, very different and running on local servers or local PCs, partly,” he says of Allianz’s previous system, adding that today those functions are on a central platform on the cloud.

“That is a huge step in terms of run-times, the control environment and, ultimately, stability—but to a certain extent also in terms of harmonization, data availability and processing, data quality and analytical capabilities,” Mr. Sauer says. “And that is all benefiting the finance function a lot, independently of IFRS 17.”

Although Allianz would eventually have accomplished that, he says, “packaging it together with IFRS 17 was a good opportunity.”

Our survey also shows more respondents now believe IFRS 17 will have a positive impact on their business than a negative one. Many also expect easier access to capital markets for M&A and other fundraising activities (nearly one-third of respondents), improved operational efficiency of finance and actuarial functions (29%, with smaller firms more likely to cite this) and financial statements that better reflect the results of business performance (29%) (see Figure 7).

**Figure 7: What benefits do you foresee for your organization once it is IFRS 17-compliant? [Respondents selected their top three choices. Respondents were all those questioned for the survey (n=360).]**

Response	#	%
Easier access to capital markets for mergers and acquisitions and fundraising activities	117	32.5%
Improved operational efficiency of finance, actuarial, and other functions	106	29.4%
Financial statements that better reflect the results of business performance	104	28.9%
Better cross-functional collaboration within the company’s functions	101	28.1%
Greater transparency in IFRS financial reporting than currently	92	25.6%
Improved internal controls over financial reporting	82	22.8%
Improved forecasting and planning	79	21.9%
Better risk management	59	16.4%
Improved technology systems	57	15.8%
Lower cost of capital	53	14.7%
Other [Please specify]	0	0.0%
Don’t know	0	0.0%
I don’t foresee any benefits	0	0.0%



## Conclusion

With firms broadly ready for IFRS 17's implementation, and with their technology upgrades finalized or nearing completion, the face of the industry presented through their financial reports is set to change. Insurers will be able to convey greater volumes of financial information to investors and their stakeholders in general—and to learn more about their own strengths and weaknesses, and that of their peers because of the enhanced comparability.

"At the moment, it's still a lot of additional work until things are up and running. But in the long run, we're in a better environment," says Allianz's Roman Sauer.

Though many of the challenges have been—or soon will be—overcome, others remain. For nearly one-third of respondents, a top-three expected challenge of implementing IFRS 17

will be aligning local regulatory frameworks with its requirements. Other challenges include the unbundling of non-insurance components packaged in an insurance contract and the restatement of previous published numbers to the IFRS 17 amounts to be reported in the opening balance sheet of the comparative column of the first set of IFRS 17-compliant financial statements. For calendar year reporting entities, the opening balance sheet of the comparative period is 1 January 2022.

What connects the challenges of the recent past with those going forward is, of course, data. As insurers test solutions with real data, the issues surrounding them are extenuated: data capture, management, reporting, governance, and quality will be crucial to executives. Around the world, CIOs and CFOs speak of a renewed push for automation: that, as core IFRS 17 requirements are met,

they plan to automate more business processes, enabling greater data analytics capabilities and calibrating financial planning and analysis tools to the IFRS 17 logic in order to get the most out of the additional levels of granularity that the standard requires for external reporting.

In short, with more voluminous, accessible, and granular data, and with automation and even artificial intelligence tools available to leverage that, greater productivity improvements are likely to be found.

Having reported on the views of the survey participants around technology and data, our next article will set out how IFRS 17 has created a new financial language for insurance companies, how insurers must adapt how they communicate with stakeholders, and how firms can leverage these new metrics to explain their business performance.



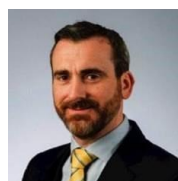


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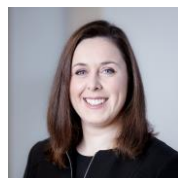
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## End notes

1. See: <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Financial-Services/gx-fsi-global-ifrs-ins-survey-2018.pdf>
2. See: <https://www.ifrs.org/projects/completed-projects/2020/amendments-to-ifrs-17/#final-stage>



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