Risk publications

Using data and innovation to drive business insights

How banks can develop unified finance and risk solutions to drive innovation, operational excellence and productivity

Survey report

AsiaRisk

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Contents

About the report

This report examines how the finance and risk areas of banks in Asia-Pacific are currently able to use data for business insights and to react to rapid changes in the regulatory environment. It looks in detail at the degree of alignment and communication between the two functions. The report also considers the ability of various functions to access and share data, how banks are using technology in their finance and risk functions, and their plans for spending in these areas.

The report reveals the areas senior executives believe need the most improvement and offer greatest potential for productivity gains. It outlines the innovative solutions forward-looking organisations are using to modernise their finance and risk processing and enable increased focus on strategic value-adding activity.

This report was prepared by *Asia Risk* in collaboration with Oracle. The quantitative survey of banking executives was undertaken between November 2018 and January 2019. The in-depth interviews were also conducted during this period, by David McDonald.

A word from Oracle

Nothing matters more to leaders in any business – particularly banks – than the ability to move confidently into the future. For banks, the ability to see, know and balance the way they are performing, and how they are complying with regulations, is mission-critical to their current operations and every decision and action they take to move forward.

Oracle has partnered with *Asia Risk* to understand how banks in the Asia-Pacific region (Apac) are modernising their finance and risk processes and using data for business insights. This research highlights how banks in Apac are struggling to overcome challenges around cost, risk and complexity.

Cost – Overcoming increasing performance spend

- Achieving significant operational cost reductions without affecting performance impact to advance into the future with certainty
- Clearly visualising results across the whole organisation to achieve more holistic, cost-effective business outcomes with certainty
- Moving beyond process optimisation to automate mundane tasks that free up staff to focus on higher-value work with certainty.

Risk – Ensuring adherence to regulations and compliance with deeper, easier reporting

- Enhancing risk management in ways that help – rather than hinder – business performance, with the certainty that everything undertaken is secure
- Creating a 'risk culture' that ensures risk mitigation and future performance enhancement are maximised at the same time
- Applying an agile finance approach to provide the confidence to navigate changing business and regulatory landscapes, identify new opportunities and drive future growth.

Complexity – Better aligning talent, culture and behaviour to advance digital finance strategies

- Establishing a forward-looking, constantly improving digital finance working culture that will help your organisation move into the future with certainty
- Empowering your workforce with the analytical tools required to operate with certainty as *ad hoc* financial data scientists
- Automating data analysis so the entire business can respond, scale and advance as one – building the organisation a brighter future with certainty and consistency.

By uniquely integrating finance and risk data – the two most vital functions of the bank – Oracle enables chief financial officers (CFOs), chief risk officers (CROs) and the organisation as a whole to see, decide and act with total clarity, and to step into the future with certainty as a next-generation bank.

Facing the future

Since the financial crisis of 2007–08, banks have been discussing the need to better integrate finance and risk. A survey conducted by Oracle in 2011 found a lack of integration between finance and risk functions and a clear acknowledgement that change was needed.

Eight years on – at a time when the need for high-quality finance and risk data is at a premium due to regulatory pressures, increasing complexity and the pace of technological change – there remain substantial gaps in banks' abilities to generate the insight needed to support more robust bank-wide decision-making, and a worrying mismatch in aspiration, perception and collaboration between CFOs and CROs.

The presence of a single data source for risk, finance and accounting enables banks to perform timely analysis and reporting based on current and future scenarios to deliver the following:

- Key risk-adjusted performance metrics relevant to financial services such as risk-adjusted return on capital and risk-weighted assets
- Capital utilisation and management
- Margin management, including liquidity pricing
- Forecasting of the balance sheet and income statement, incorporating risk and behavioural profiles
- Consistency in management and financial reporting through a complete and highly interactive reporting and analysis process.

This constitutes a significant enhancement of current reporting, allowing financial institutions to perform risk and financial calculations for financial, management and regulatory reporting concurrently from a single, unified source.

From an operational perspective, the financial close process becomes more stable – despite manual interventions – to better support aggregation and consolidated base reporting. Financial institutions can support regulatory requirements and provide checkpoints for each critical step of the financial reporting process.

As banks prepare for a future in which some envisage managing teams comprising 50% humans and 50% machines, and where agile competitors are circling, time is running out for banks to bridge these gaps, agree priorities and move forward with certainty.

" Finance and risk teams in banking today are at a crossroads. Do they continue to maintain a 20th century approach to managing finance and risk processes, data and outcomes, with multiple islands of data and many manual activities and bespoke systems driving a higher data and reputational risk potential? Or do they take advantage of modern integrated and best-of-breed finance, risk and treasury systems to simplify their processes and drive better information outcomes to all stakeholders? The size of the prize is significant, bringing with it agile response to internal and external events, the advantage of continuous technological innovations such as robotic process automation and machine learning, lower cost of operations and improved ability to support bank customer and balance-sheet strategies

Stuart Houston,
banking innovation advisor, Oracle

Key findings

While responses varied between functions and regions, three key issues emerged from the survey and one-to-one discussions with senior bank executives:

- An increasing regulatory burden – and the amount of manual intervention required to deal with it – is a common problem among banks. Fewer than one-third of Apac respondents (30%) believe their organisation can readily react to changing regulatory requirements.
- A lack of alignment and an inability to share data across systems limits the insights that can be gained from the ever-increasing amount of data available to banks. Only 37% of respondents reported that finance and risk were fully aligned, with full collaboration on data.
- Operational silos and poor communication between finance and risk functions – as well as between different divisions within banks – are hampering performance and the ability to use data to drive profitability. More than half (51%) of respondents reported that a single view of data to improve predictive power was their greatest priority.

Background

As part of this research, *Asia Risk* and Oracle conducted a quantitative survey of bank executives. There were 117 respondents from the Apac region and a comparison group of around 50 executives from the more developed markets of the US and Europe.

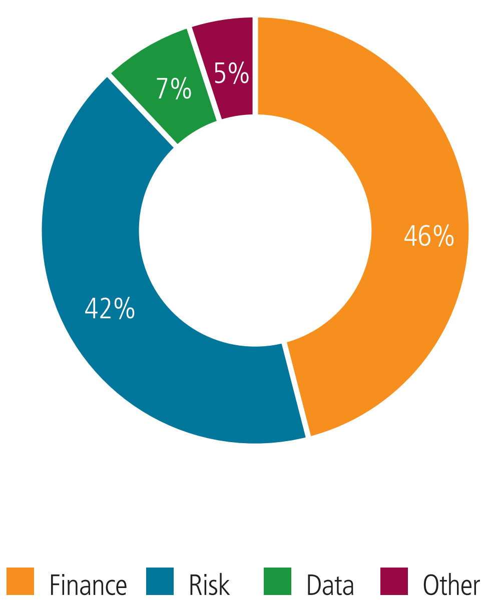
Survey respondents were split almost evenly between finance and risk roles, with a further smaller number in the data function of banks (figure 1).

Issues examined in the quantitative survey included:

- Integration, communication and data sharing between functions in banks
- The technology used and the ability to easily access and share data
- Regulatory demands and banks' abilities to cope with rapidly changing regulations
- Areas in which improvements can be made and the benefits this would bring
- Spending trends on technology and plans for future spend
- Staffing and expertise, and issues with access to suitably qualified people
- Use or consideration of artificial intelligence (AI), machine learning, cloud and other newer technologies.

In addition, we spoke with senior executives in finance and risk functions in banks across the Apac region. This allowed us to gain a more in-depth understanding of the issues they face and the solutions they seek.

1 Respondents' main functional role within their organisation



The drive for insight and innovation

Under pressure from agile competitors – and struggling to reduce costs and transform operating models, systems and processes – these are challenging times for banks. With access to the right data, and the time to exploit it, senior finance and risk executives have the opportunity to provide the strategic insight to the business to support better decision-making, drive innovation and help secure competitive advantage into the future. But often they find themselves running to stand still, and these higher ambitions are overwhelmed by everyday 'keeping-the-lights-on' tasks and responsibilities.

> "Banks would like to build systems where a regulation implemented today can be put into effect tomorrow. Unfortunately, the systems and processes don't work like that and many associated processes require changes
>
> CFO of an Apac-based global bank

The drive for insight and innovation

A key issue raised by survey respondents and mentioned by every executive interviewed was the increasing regulatory burden for banks. Managing regulatory requirements and dealing with various regulators has become a major task.

One Association of Southeast Asian Nations (Asean)-based CRO told us: "Sometimes I feel like I am CRO for the regulator, not for the bank."

A common issue raised by the executives spoken to in person was the need for manual intervention and data manipulation to answer these requests. It seems few banks have a system that can easily and automatically generate the required reports for regulators and cope with changing demands and new requests.

Only three in 10 Apac respondents (30%) believe their organisation can easily react to changing regulatory requirements. This compares with 46% in the comparison group in North America and Europe.

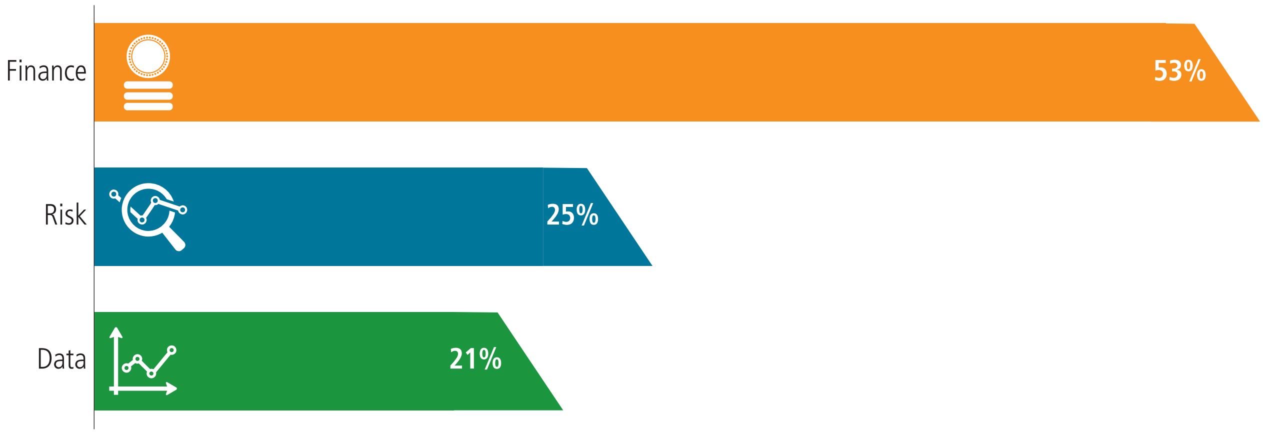
Finance executives were more confident than risk executives in their organisation's ability to cope with new regulations. Around half (53%) of finance executives said they can cope easily. This compares with only 25% of risk executives. Some 16% of finance executives said their organisation's response varies, tending to create tactical solutions for each new regulation, but this rises to 36% for risk. These results suggest a possible lack of communication between the functions or perhaps finance executives having access to a wider range of data (figure 2).

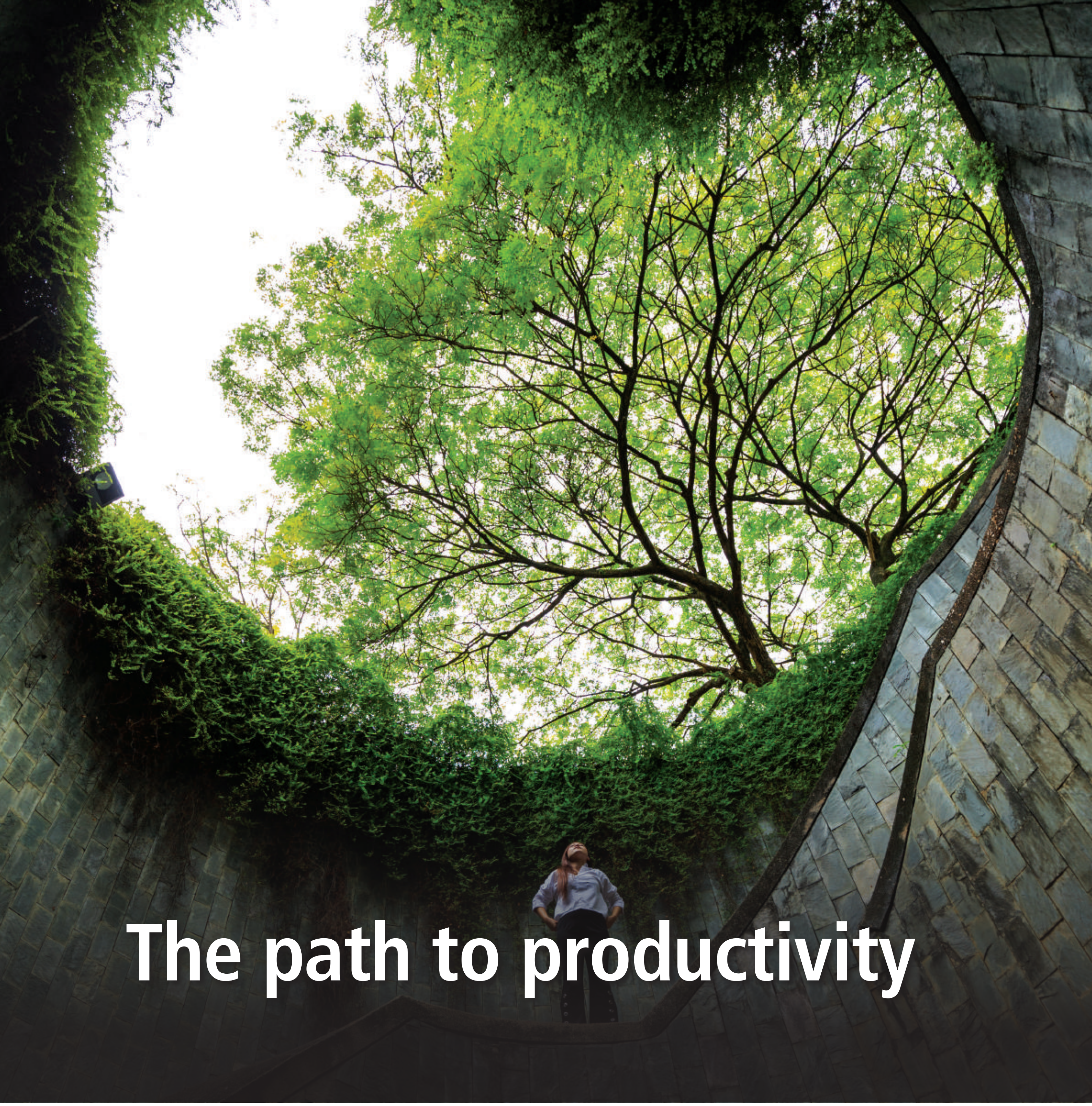
The in-depth interviews confirmed the extent to which spreadsheets and other manual solutions are still commonplace. Some respondents expressed concern at the lack of control and understanding of regulatory data supplied by automated systems. They still felt more "in control" when relying on time-trusted manual methods. Given the importance of 100% accuracy for regulatory data, there is a need for users to understand how automated data is being produced so they can develop confidence in using it.

One of the key drivers in this regard is the trend for many regulators globally to move towards demanding raw data rather than bank-prepared reports. As the frequency of requests rises, those still relying on manual processes will be placed under increasing strain.

> "Banks are more focused on short-term cost-cutting and using Excel. If they don't invest in the latest risk mitigation tools they will not be able to calculate everything as more complex regulatory requirements are introduced
>
> CFO of a mid-sized Indian bank

2 Executives agreeing with the statement "We adapt to new or changing regulations easily"





The path to productivity

While regulation is a burden, it also presents finance and risk teams with the opportunity to improve productivity, turning a cost drain into a potential profit centre by allowing more time to focus on higher-value strategic activities.

Generating data for regulatory reporting is a must, but – produced in silos or without wider collaboration – often its full potential for greater insight is untapped. For example, regulatory focus areas such as balance-sheet management from a cashflow and credit risk perspective produce valuable data to inform decisions around International Financial Reporting Standard (IFRS) 9 accounting for loan losses and credit risk provisioning. The same data can be used to predict increasing risk of customer default, enabling banks to take pre-emptive action.

Similarly, better analysis and leverage of asset and liability account attributes at the most granular level impacting baseline and stressed cashflows can help banks better manage margins and reduce liquidity risk. Identifying and addressing liquidity gaps can shave a few basis points off funding costs, delivering an immediate impact to the bottom line.

Just over one-third of survey respondents were able to report that their organisation has alignment between finance and risk functions with full collaboration on data usage (figure 3). There were, however, significant differences between the views expressed by the different functions. Finance executives were more optimistic, with 47% thinking the functions are fully aligned, compared with risk (35%) and data (13%).

The one-to-one interviews emphasised that most banks still have data silos and lack integration or a common data foundation that all can access. A senior risk executive from one very large bank even stated that individual divisions of the bank operate almost as separate institutions with no common datasets or interaction.

Only one of the executives interviewed was able to describe a well-integrated setup, with a shared data warehouse that is accessible by most functions within the bank. Even then, the executive was not totally happy, with areas such as customer relationship management still unable to work with the data warehouse.

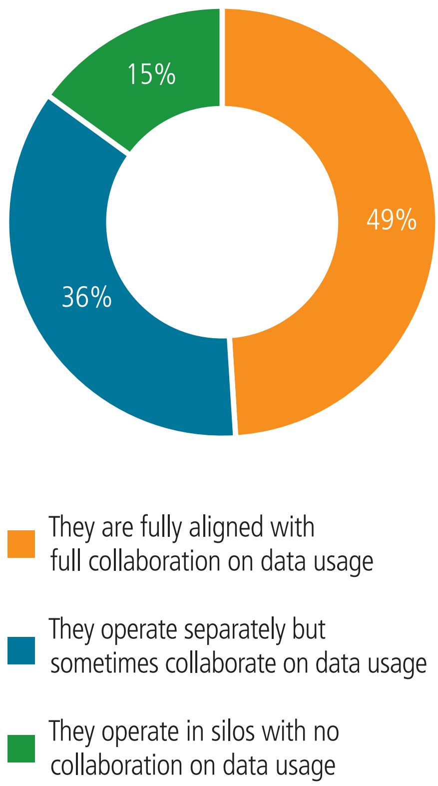
Here again, the difference between smaller and large institutions is notable. Only 25% of banks with more than $500 billion in assets say they are fully aligned. For smaller banks, 50% believe they have full alignment between the finance and risk functions.

Also, as in other areas, it appears banks in the Apac region are lagging behind the best practice seen elsewhere. Around 20% of respondents in our core regions report being siloed, compared with only 2% in our comparison group from the US and Europe.

Executives recognise the value of better alignment, with almost 70% rating it as either critical or very important. This is to be expected and reflects regulatory and market realities around credit risk, cashflow and accounting under guidelines such as the Basel Committee on Banking Supervision's standard number 239, Risk Data Aggregation and Reporting framework and IFRS 9.

Even here, though – supporting the theme that finance executives seem either happier with the functioning of the bank or perhaps are less aware of issues faced by

3 How well do you consider your organisation's finance and risk teams to be aligned?



> Today, integrated finance and risk involves a fair degree of intervention at the human level. There has to be quite a bit of advancement to enable it to innovate and take advantage of the rapid strides in digital technology

Madhivanan Balakrishnan, chief technology and digital officer, ICICI Bank other areas – risk executives rate this as a higher priority than finance executives. Twenty-eight per cent of risk executives rate this as critical compared with 16% of finance executives.

Executives see two key areas where better alignment between functions would benefit their business (figure 4):

1. Improving the ability to meet regulatory requirements
2. Providing greater confidence in decision-making and improving business insight.

Despite lagging in areas such as shared data access and ability to react to regulatory change, only 34% of executives in our core region see the opportunity for improved insight and clarity, compared with over half (52%) of executives in more developed markets. This realisation may only come with time, but suggests there is real potential for Apac banks.

Finance places more value on improved decision-making (44%) and speed/agility (23%) compared with risk (33% and 13%). A CFO at an Indian bank emphasised that finance teams had a greater need to access clear, efficient insights using aggregated data for this purpose, whereas risk teams will want to dig into the detail (figures 5 and 6).

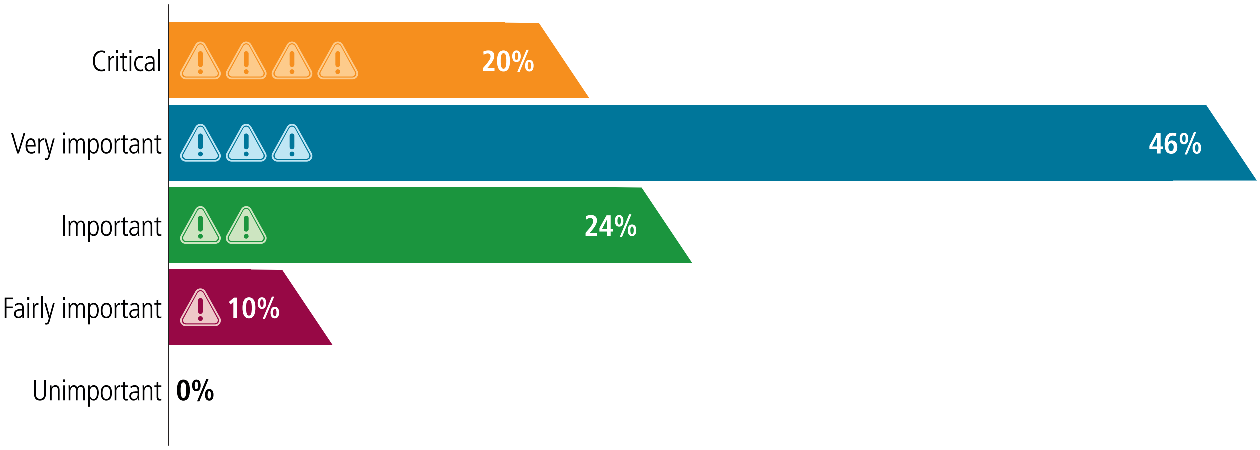
The largest cost component of most regulatory initiatives is data provisioning – delivering the right detail at the right frequency with the right governance and control certification. The consistent observation is that ease of regulatory compliance is a by-product of unified finance and risk data. Unified data is a first step, but banks need an overall data strategy and to incorporate newer technologies, such as AI and robotic process automation, to better manipulate the data in a transparent and controlled manner.

4 For which priority tasks would improvements in finance and risk tools and processes be most useful?

1st	Regulatory reporting	237
2nd	Strategic decision-making	164
3rd	Management reporting	133
4th	Stress or scenario testing	131
5th	Gap analysis	103
6th	Predictive capability	84
7th	Non-general ledger enterprise resource planning tasks, such as budgeting	54
8th	Innovation planning and future-proofing	42
9th	Firm-wide communication	36
10th	Event monitoring	21

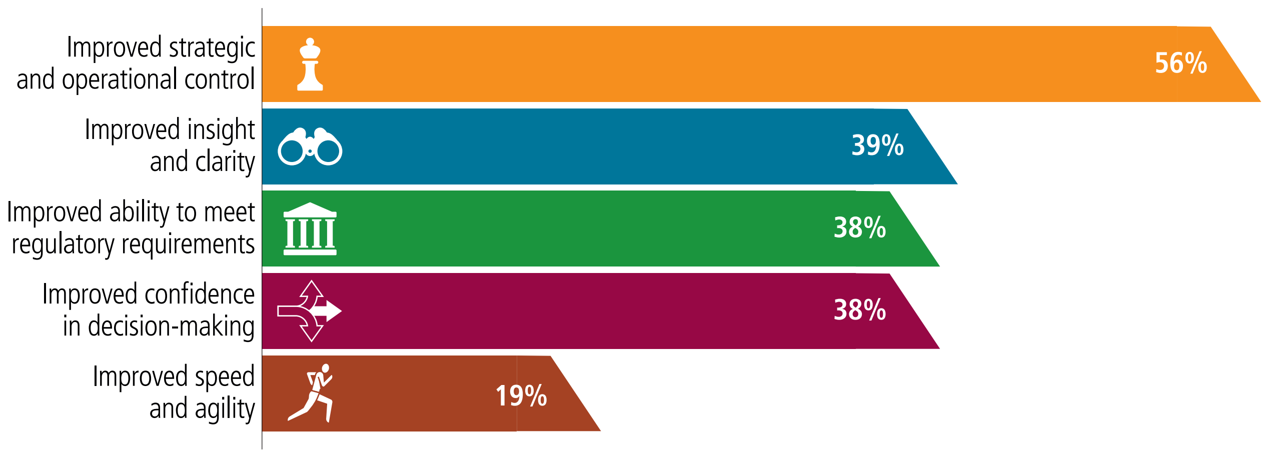
> "Planning and budgeting, asset-liability management and finance control are areas where data has a very important role to play
>
> Audit manager of an Indian bank

5 Importance of aligning financial performance data with risk data within your organisation



The opportunity is for institutions to deliver an end-to-end finance and risk data pipeline, with platinum governance and control from source systems, which can number in the hundreds or thousands for larger institutions, through the management and financial accounting processes and delivering regulatory, statutory and management reporting with complete transparency and lineage available.

6 Benefits of closer alignment of finance and risk data



Operational excellence and investment in technology

Aligned to the right operating model, technology such as cloud computing, machine learning and robotic process automation can help deliver a step-change in efficiency, transforming many of the manual processes involved with core keeping-the-lights-on activities such as close of books, monthly reports and reconciliations, and simplifying XBRL filing for regulatory reporting.

Cognitive computing offers a significant opportunity for agile finance and risk functions to accelerate and transform their insight capabilities. AI can be used to identify underlying patterns in data, and machine learning can be used to predict scenarios, which is of increasing importance in a world defined by significant disruption and volatility.

Budgets for technology and capital expenditure on systems are generally increasing, but cost pressures remain strong. Only a very small percentage of respondents said capital spending on IT had decreased. Despite this, most executives interviewed described a need to "do more with less". Increased spending to cope with the increasing compliance and regulatory requests often had to be offset by trying to improve efficiencies in other areas.

Sridhar Kaylan, industry consultant and former CRO of an Apac bank suggested that "regulatory change will drive technological change to cope".

In another sign that banks in the Apac region are 'playing catch-up', only 18% report their budget spend on technology had stayed the same, whereas 44% of our comparison region reported a stable budget spend – suggesting they already have a setup they are happy with.

Some see technology as the answer because of an increasing data load and competition for/lack of qualified staff. One CFO pointed to technology as the "backbone of any successful organisation". However, even those using newer technologies such as machine learning suggest they are at an "embryonic stage".

Framework for an agile finance operating model

Leading banks are using digital transformation to evolve their operating models through automation at scale, re-engineering of legacy processes and deployment of advanced analytics tools, with a clear view of which data has the greatest value.

Framework for the agile finance operating model

Source: Oracle, *Agile finance unleashed*, 2019

Why is take-up so slow? One explanation could be that finance and risk need to build understanding of the potential these technologies offer and the specific use cases that relate to strategic priorities.

> "There is no … collaboration in these teams because the departments work separately. Their policies are different, key responsibility areas are different, mandates are different, reporting is different. They don't work in a collaborative way, they work in silos…
>
> CFO of an Asean bank

Interviewees mentioned credit cards and smaller personal loans as examples of where machine learning can add value, with the potential to handle larger volumes and make better decisions than human analysts in tasks such as approving credit limit increases.

Peter Deans, CRO for the Bank of Queensland, said his bank is making some use of software robots in the lending process and sees this as providing a quick payback for the expenditure.

Over half of the executives surveyed rated the need for a single view of data as their highest investment priority to align finance and risk.

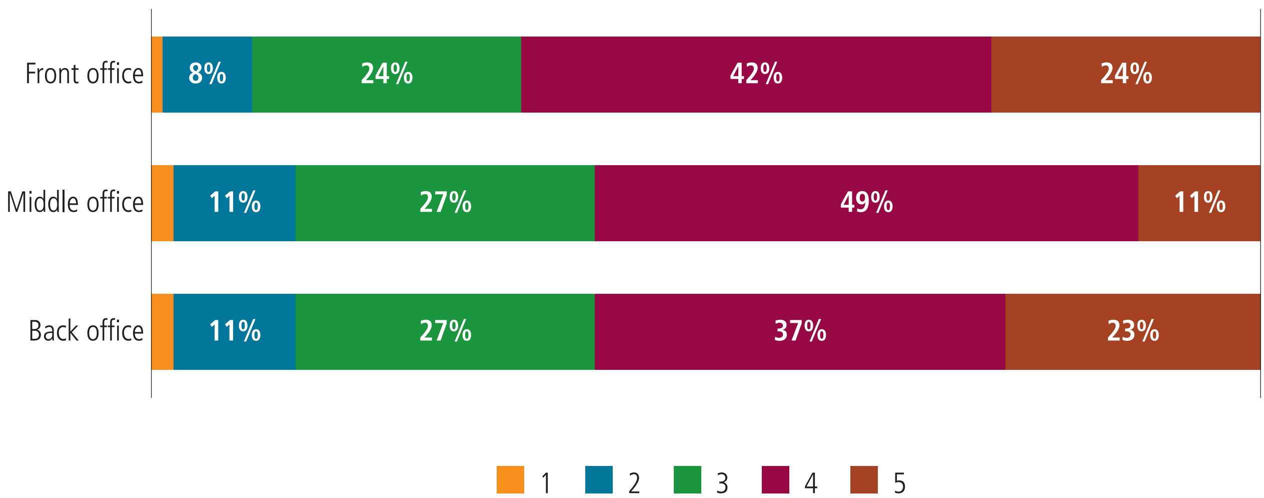
When asked to rate the different parts of their organisation for digital maturity and customer-focused strategy, executives scored the front office relatively highly but gave a poorer rating to both middle- and back-office functions.

While spend has been increasing and is expected to continue to increase, so far front-office functions have been given higher priority. It is important that systems in middle- and back-office functions are not neglected to ensure integration and better ability to use data across the bank.

> "Automation equals higher costs. Hence, what banks need is an overall strategy, and not piecemeal fixes
>
> A senior executive at a large Indian bank

"Data in the front office is being leveraged for front-office outcomes," says one senior executive at an Indian bank. "But challenges exist in delivering a single source of truth cutting across finance, risk and business" (figure 7).

7 Front, middle and back offices rated in terms of digital maturity and alignment to a customer-focused digitisation strategy



Votes were cast using a scale of 1–5, where 1 denotes "poor" and 5 "excellent"

Barriers to progress

Investment decisions

Resistance to change is high in our core survey region. Banks need guidance and outside assistance to move to new technologies, which will become more vital as datasets grow rapidly. Successful adoption of machine learning and robotic process automation in finance and risk domains is currently limited, and an increasing focus in this area is likely to reap significant benefits for early movers.

Agreeing priorities is also seen as a key barrier to decision-making for core region respondents. One executive at a New Zealand bank suggested a lack of knowledge among board members can make explaining projects and getting approval more challenging. This is a particular challenge for risk and indicative of a lack of strategic vision to guide development.

A business case that drives competitive advantage from regulatory spend will be needed as banks look to leverage the high ongoing cost of regulatory compliance (figure 8).

New skills needed

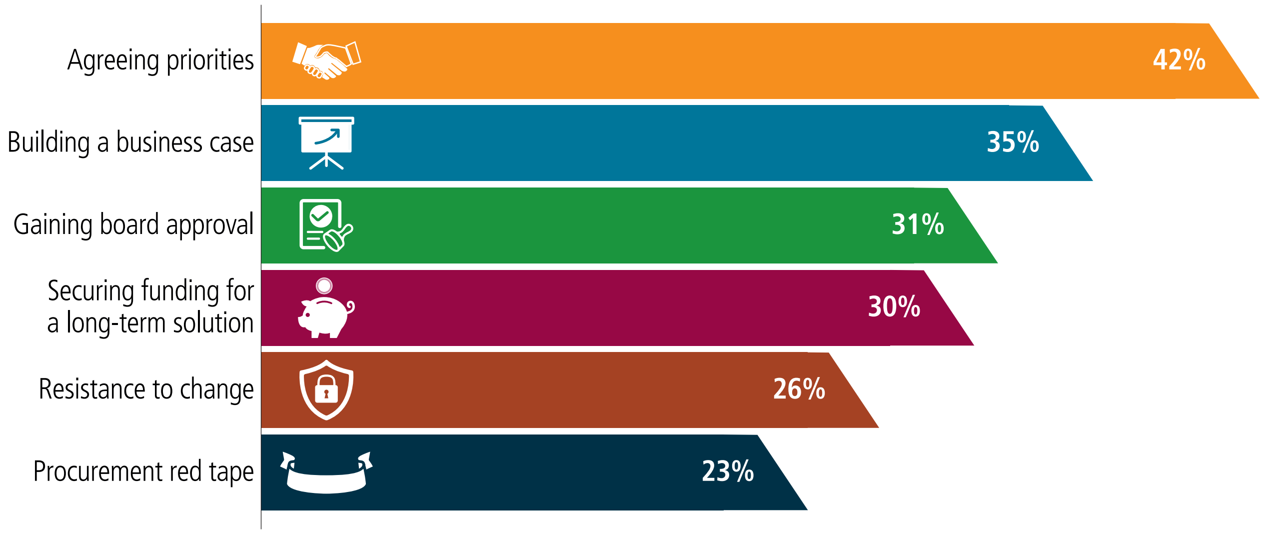
Competition for skilled staff is also high, and banks are struggling to attract, retain and motivate the strongest candidates, particularly when younger recruits have higher expectations around the level of digitisation and user experience across finance and risk processes.

This is also true of regulators, according to one CFO at an Indonesian bank. Other respondents pointed to a lack of technology skills and understanding at board level when requesting approval for projects or understanding where banks needs to act.

> " Banks, and specifically finance teams, have to get comfortable with data-leveraging visualisation tools. Technology vendors have to ensure that user experience for finance professionals is as important as customer experience in the front office. Otherwise spreadsheets will continue to prevail

Harshal Setalvad, technology head, corporate centre, ICICI Bank

8 Main barriers to investment decisions around tech and data



Given the difficulties with finding and retaining skilled staff, there is widespread belief that technology such as AI, machine learning and robotic process automation will be needed to overcome this and to help meet growing demands to manipulate and analyse data.

"In the future, I envisage having two teams," says a CRO of an Australian bank, "a cold-blooded team of machines to manage data and make some decisions, and a warm-blooded team of people to interpret the data."

Security concerns

Data privacy and cyber security were also pinpointed by several participants as key areas of concern, with a vast number of attempts every day to access systems.

The same CRO told us his bank receives between 40,000 and 50,000 attacks and malicious emails every day, and processes around 20 billion data events daily.

Several executives pointed to the growth of consumer data and the need for its protection to ensure the reputation of the bank as well as the security of the client.

One Malaysia-based respondent described a recent data breach in Singapore relating to sensitive medical information as a "real eye-opener" for Asean banks, whose systems and processes are typically less sophisticated than those in the control group. "There will be huge investment in data analytics and technology to curb data leakages," he concludes.

> "In the future, I envisage having two teams: a cold-blooded team of machines to manage data and make some decisions, and a warm-blooded team of people to interpret the data

CRO of an Australian bank

> "Attempts by outsiders to infiltrate systems and access data are a given – everyone is dealing with that

Carlette Pama, CRO, Philippine National Bank

Conclusion

Improvements are needed in communication and collaboration between finance and risk teams – collaborative finance and risk environments leveraging modern workflow and collaboration tools embedded into core processes.

This was an area of strong agreement from survey participants, with a desire for improved datasets and systems that allow easier interaction. Systems that allow easier response to the growing regulatory burden would save costs and allow more productive operations.

The key requirements listed by executives in both the finance and risk areas were the need for more data and the tools to use it. Both groups emphasised a desire for a unified platform and were actively looking for partners to work with.

A technology partner that can provide a unified solution would improve efficiency and allow greater strategic insights for senior bank executives. Senior professionals from finance, data and risk functions all agree that their most important objective is achieving a single view of data to give them greater predictive power. However, there is a need for CFOs and CROs to take the lead and drive the change needed.

A unified platform that allows all to access data and the tools to analyse that data is vital. Around two in five (41%) executives in our core regions are aiming for integrated infrastructure – platform, processes and tools. Similar to the trends in other areas, a unified infrastructure is favoured by risk executives in particular (42%), compared with finance executives (32%).

Across several key markers, Apac banks lag those in the comparison group in the US and Europe – less alignment between functions, more difficulty coping with changing regulations, less ability to gain insights from data.

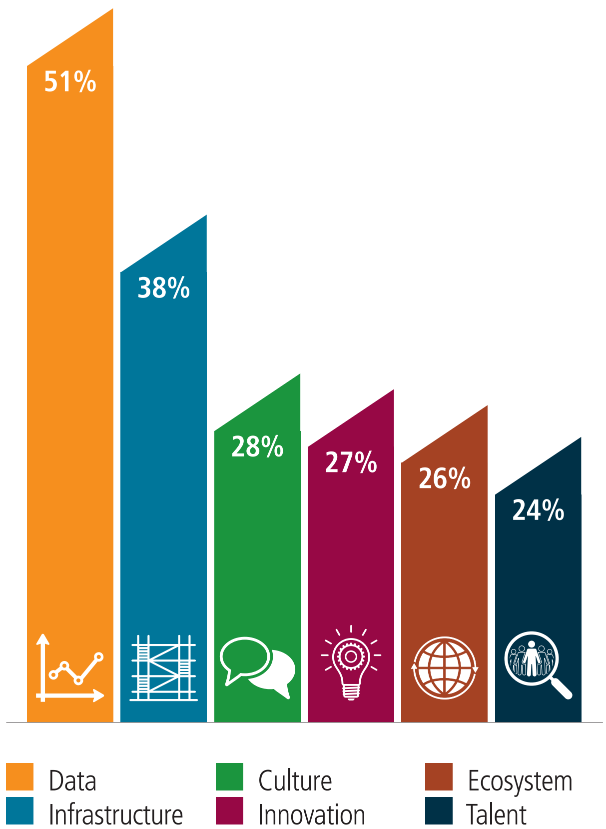
Data governance and regulatory compliance are where executives see the greatest priority for improvements from better tools and processes. Banks are looking for an integrated 'plug-and-play' system, which only a few select providers can deliver.

A fully integrated solution can help with balance sheet management, risk asset allocation and regulatory compliance, and ensure costs can be better controlled – thus boosting the bottom line.

New players in the technology space are starting to appear on the scene and are potentially challenging the existing larger players, but their offerings are generally targeted at niche areas such as customer-facing systems.

A more holistic view is needed, according to those interviewed. Many would welcome help to bring together internal functions and move away from an approach that is too siloed and task-focused (figure 9).

9 Investment priority to better align finance and risk



Next steps for finance and risk

Through better collaboration and a shared vision around data, forward-looking banks are changing the dynamics of regulatory spend and turning their finance and risk functions into key drivers of added value and competitive advantage.

CFOs and CROs share similar primary concerns. Do they have the information they need to make the right decisions? Are the results present and correct? Are they ready for an unexpected event, whether a forced organisational restructure or the next financial crisis?

Focusing on these key concerns should help set the direction and prioritise actions.

- A single view of data is essential for management, strategy decisions and understanding key drivers of the bank.
- Improving technology and data access now can assist with compliance and risk management.
- Use data as a strategic weapon: digital leaders place an economic value on data and look to monetise it, not just manage it.
- A single view of data can boost profitability, provide better insights into capital and help banks maximise the all-important return on capital.
- A top-down executive mandate is needed to adopt a customer-first approach to business that permeates every organisational function.

A global technology partner can bring in best practices and industry-wide experience and ensure the latest developments are applied to enable a profitable and efficient bank, but senior finance and risk executives need to take charge and ensure they drive the necessary changes in their bank.

Learn more

For further information, visit *https://bit.ly/2FpdJfP*

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