

Toward Analytics Automation in Asia Pacific

IDC InfoBrief
August 2021

IDC doc# AP241263IB



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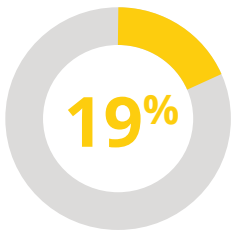
Executive Summary

A Market Need

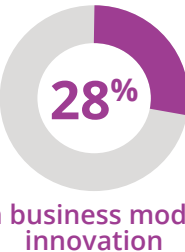
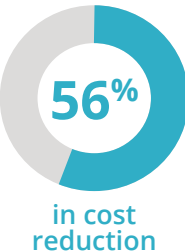


of line of business (LoB), IT, and digital transformation (DX) leaders agree that data analytics are important for their organizations, or their areas to stay performant.

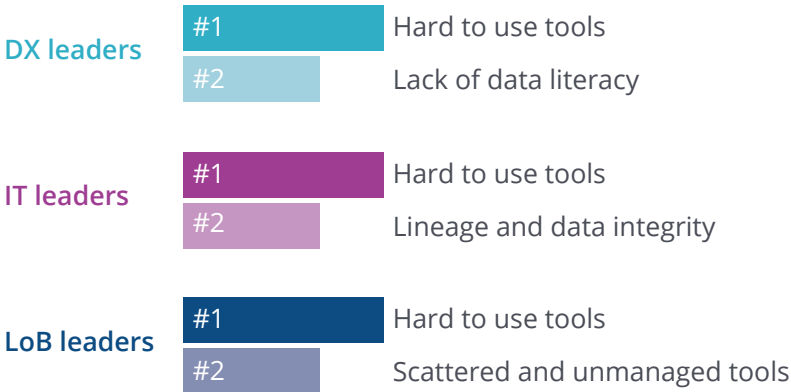
Only 19% of Asia Pacific companies are analytics experts.



Analytics experts are more likely to exceed their peers by



However, challenges like **hard to use tools, lack of data literacy, lineage and integrity**, as well as **scattered and unmanaged tools** are only getting more acute. Hence, analytics automation is becoming a necessity to remove friction, in order to accelerate the scaling out of data analytics across the entire organization.



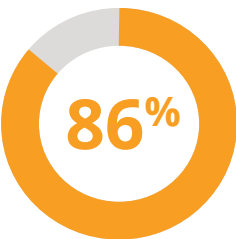
Source: IDC-Alteryx Asia/Pacific Analytics Automation Survey, 2021 (N = 500)

A Technology Solution

IDC's analytics maturity framework has four key dimensions: **strategy, data, workforce, and process**. In aggregate, these dimensions represent the organization's ability to create value from their data and analytics initiatives.

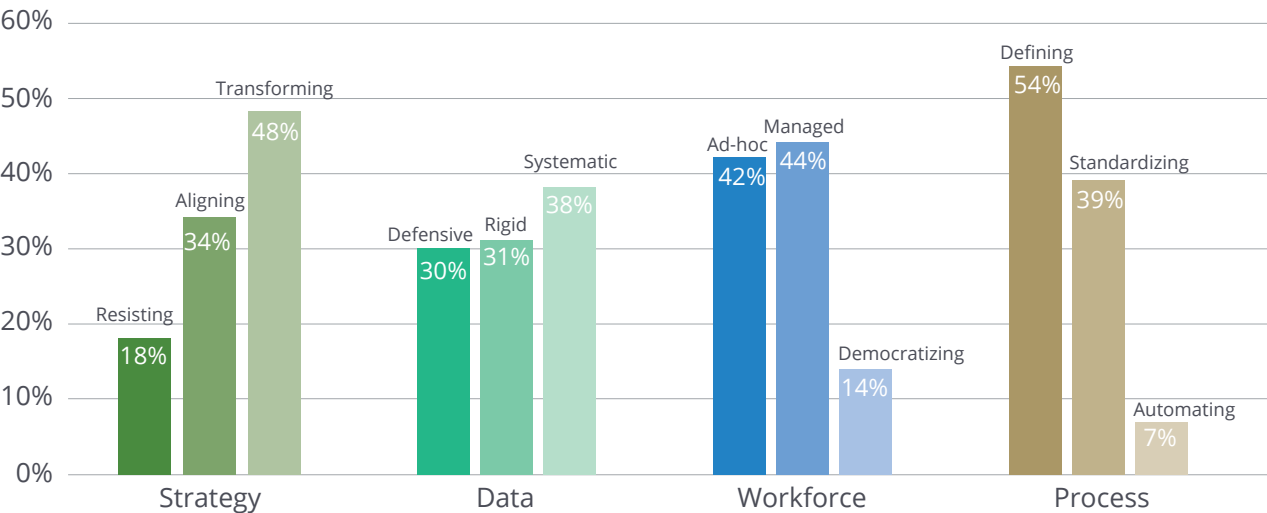
Survey data suggests a natural progression to becoming an analytics expert, from strategy to data to workforce to process. But it is the process capabilities that are slowest to mature and the biggest roadblock.

Process weaknesses can be mitigated with analytics automation.



At least 86% of organizations can benefit from analytics automation tools.

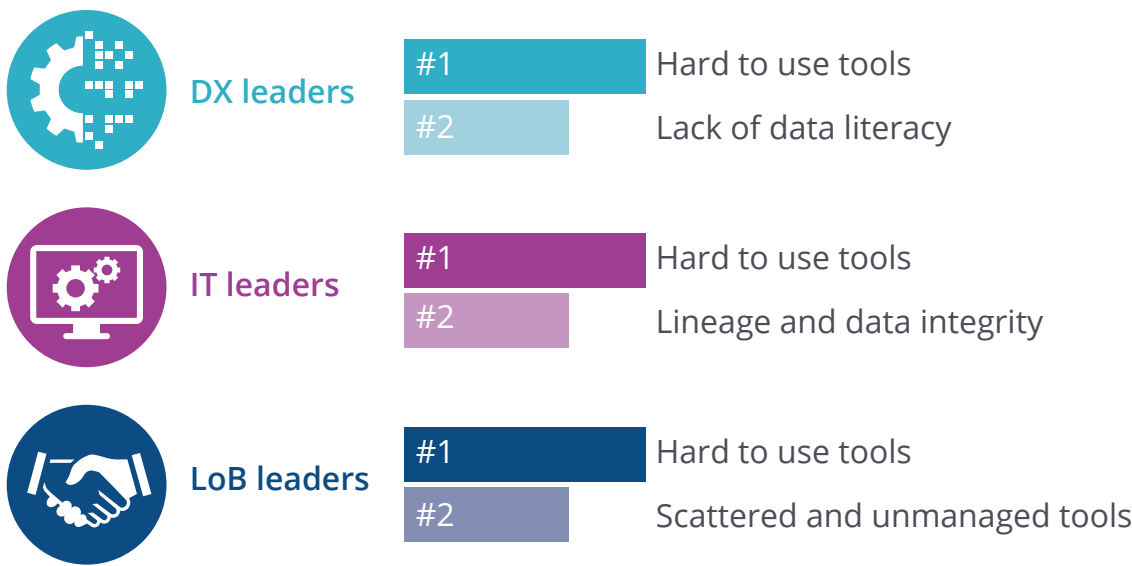
Organizations' Dimensional Distributions



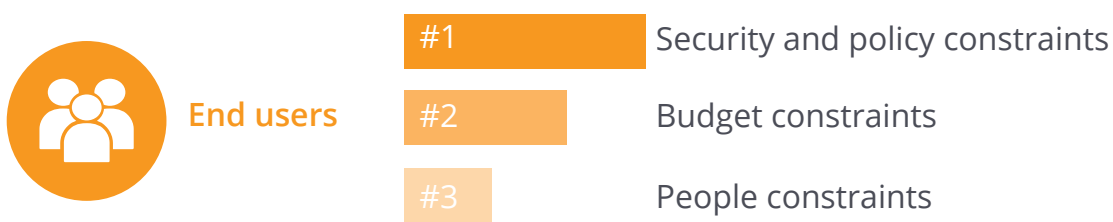
Data analytics is important for businesses to stay performant, but it involves various challenges

DX, IT and LoB leaders agree that data analytics are important for their organizations to stay performant. However, different roles struggle with different challenges to make it work.

“Hard to use tools” is the number 1 challenge for all executive roles.



Security, budget, and skills are constraints faced by end users.



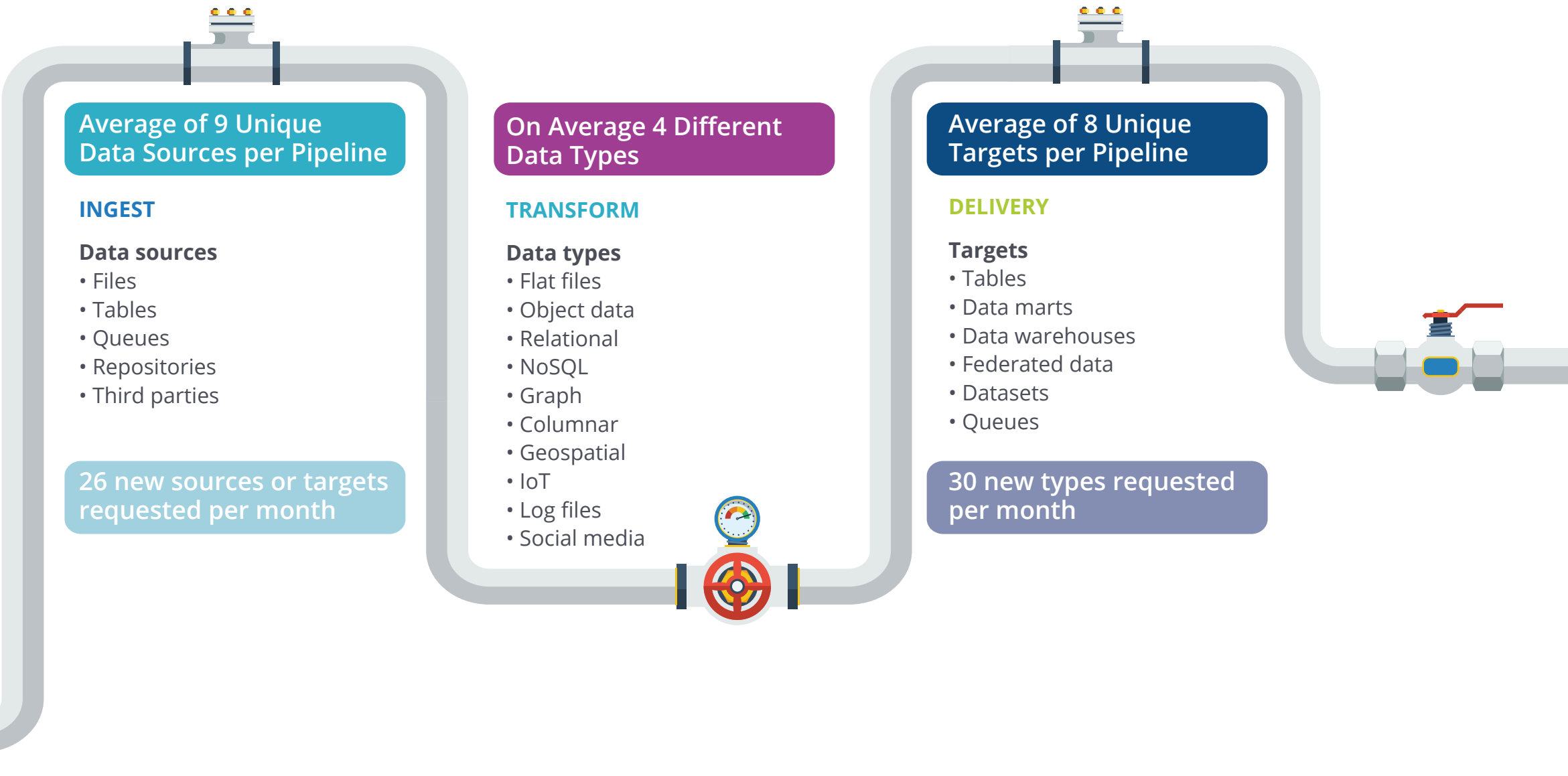
Source: IDC-Alteryx Asia/Pacific Analytics Automation Survey, 2021 (N = 500)

The challenges are exacerbated by the increasing complexity of analytics and data products

Analytics and data products are increasingly being consumed at a faster pace, in a larger scale, and with higher complexity.

The demand for a faster and more trustworthy service delivery can only be achieved via data analytics pipelines – driven by automation.

- More data, more data types, more data products are consumed ever faster
- Data pipelines are the life blood of modern enterprises.

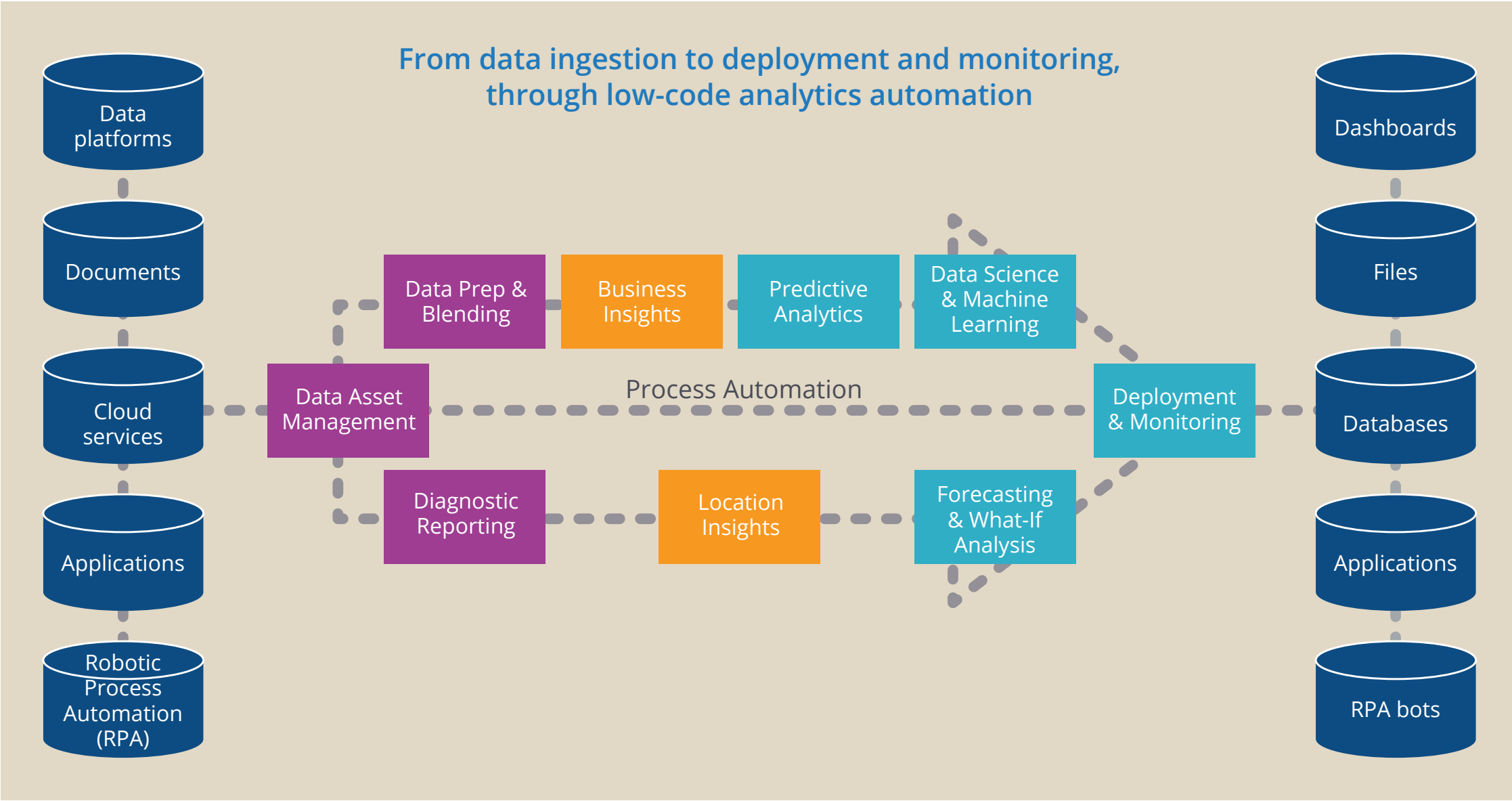


Source: IDC's Data Integration and Integrity End User Survey, 2019 (n = 300)

The role of analytics automation

The automation of analytics and data-driven business processes can add business value.

- Many challenges are removed by analytics automation.
- Automation of these pipelines are a major trend within the data engineering and analytics space.



Benefits of analytics automation

These directly address the top challenges in data analytics for DX, IT, and LoB leaders.



“It empowered the users to automate their own and their colleagues BAU tasks, where a simple process provided insight to the rest of the team, saving them time going through tedious Excel modeling and analysis of different web reports.”

- RAN Analytics and Automation Lead,
Vodafone New Zealand

“We often deal with huge data sets that take such a long time to process with Excel. Before, even when working on a small task, I rarely had enough time to take a break. Now, when I put together data analyses and reports at the request of our top management, it only takes a few days to finish what used to take two or three weeks. Although it was a short-term trial, I felt that I just can't return to the previous environment.”

- Business Promotion Department,
Nippon Caterpillar Japan

Readiness for analytics maturity in Asia Pacific

In aggregate, the four key dimensions – strategy, data, workforce, and process represent the organization's ability to create value from their data and analytics.



Strategy dimension looks at where changes start. Without a carefully planned data and analytics strategy, the interdependencies among stakeholders responsible for different initiatives will become a stumbling block in generating consistent returns from analytics investments.



Data dimension looks at where changes accelerate. The rate of acceleration very much relies on how data, the raw material, is systematically governed across the organization.

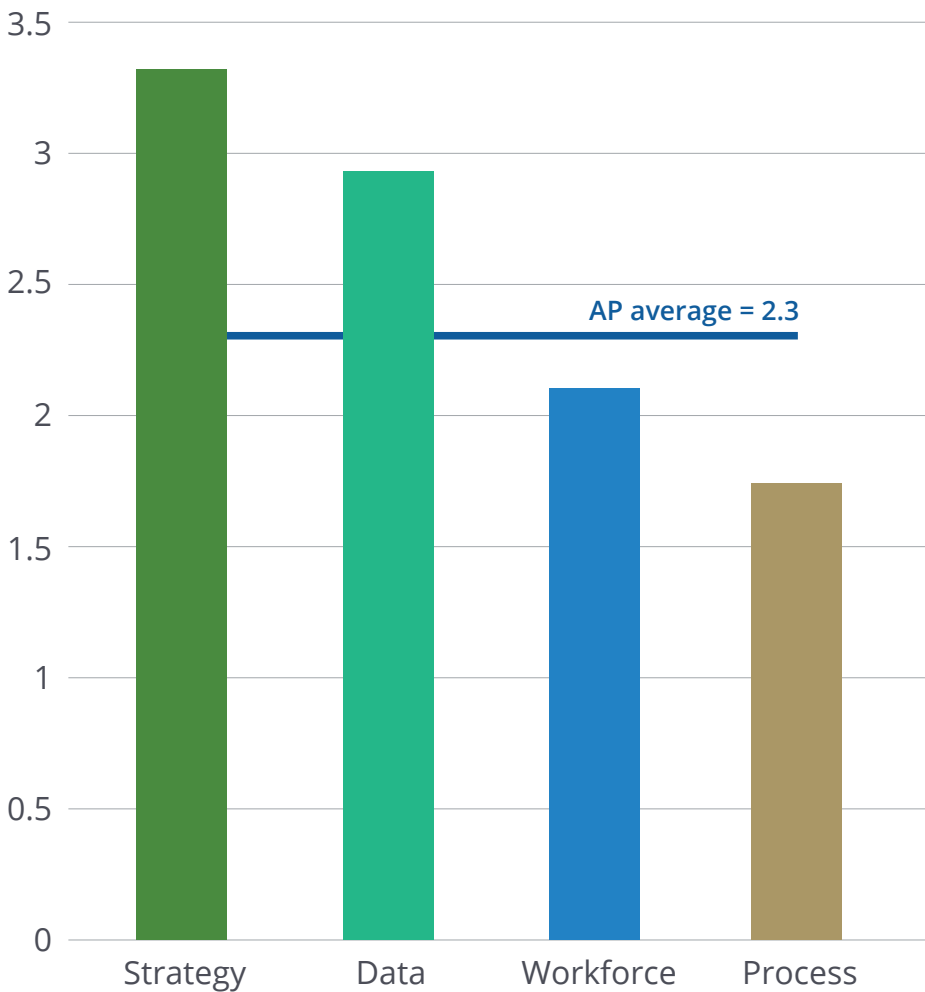


Workforce dimension looks at where changes receive momentous support. The point of productivity tools and automation always falls back to the enablement and empowerment of people, allowing them to do their jobs better, faster, and with less effort.



Process dimension looks at where changes scale. Definition, standardization, and automation are the three steps to improve analytics process management.

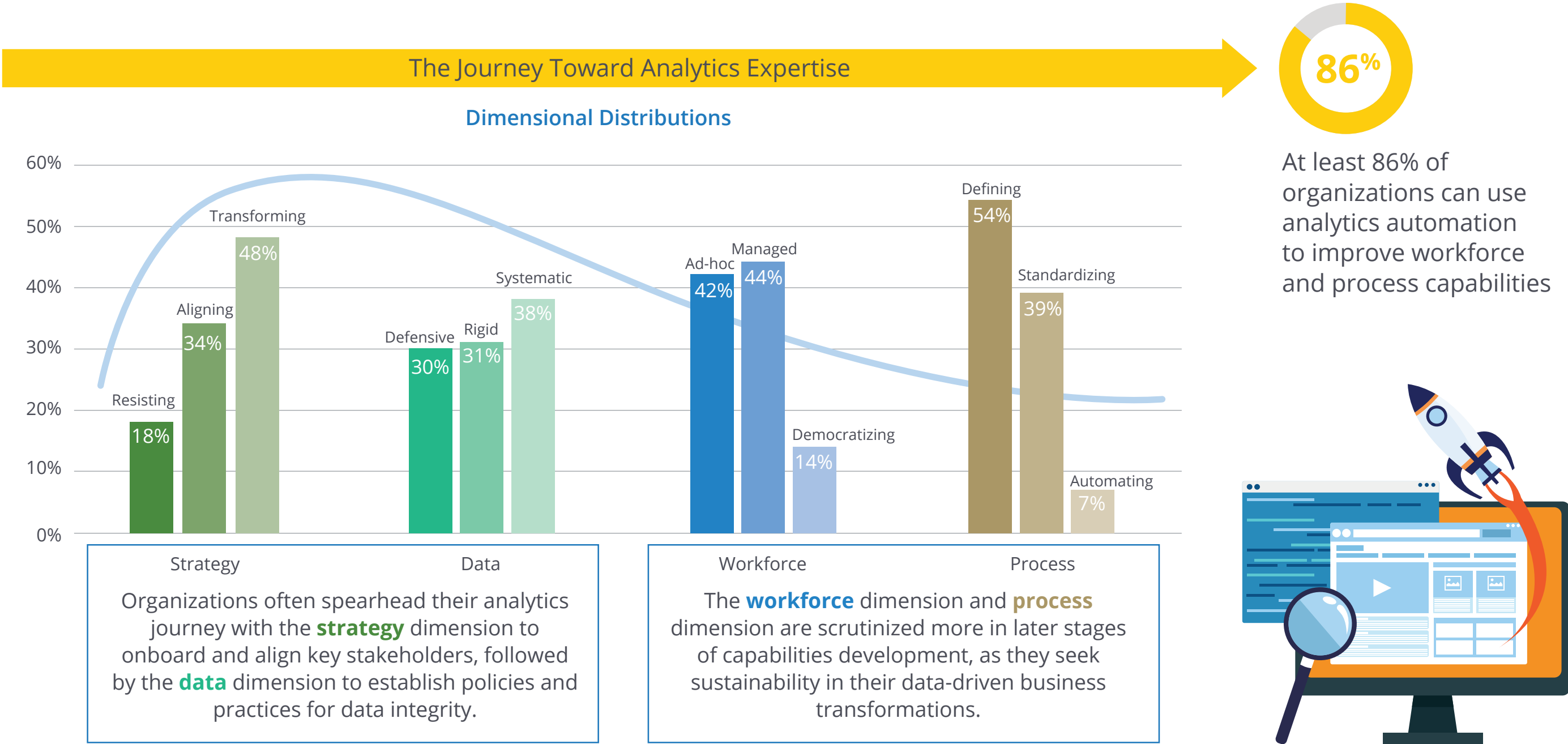
Across all respondents, “strategy” and “data” outperformed the other two dimensions.



Source: IDC-Alteryx Asia/Pacific Analytics Automation Survey, 2021 (N = 500)

Note: On a scale of 1-5, with 5 being the highest

Analytics workforce and process capabilities take more time to mature



Source: IDC-Alteryx Asia/Pacific Analytics Automation Survey, 2021 (N = 500)

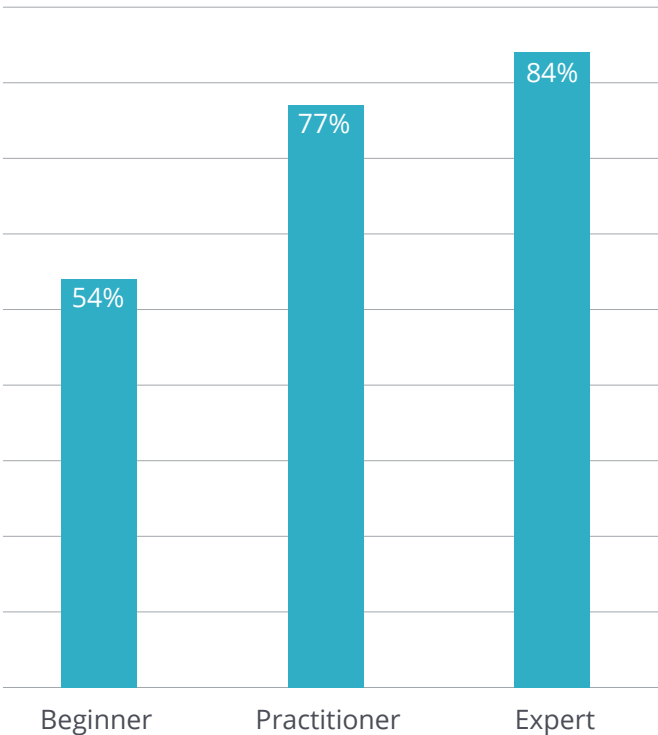
Analytics experts have an edge on their peers across a wide variety of business performance areas

What is an analytics expert? These are organizations that have a data analytics strategy aligned with enterprise-wide digital transformation. Data is well governed and ready to be consumed consistently and at scale. Data roles are supported centrally with protocols, platforms, and tools to work effectively across teams. Data and analytics management processes are defined, standardized, and supported by enterprise productivity or automation tools.



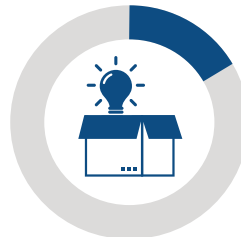
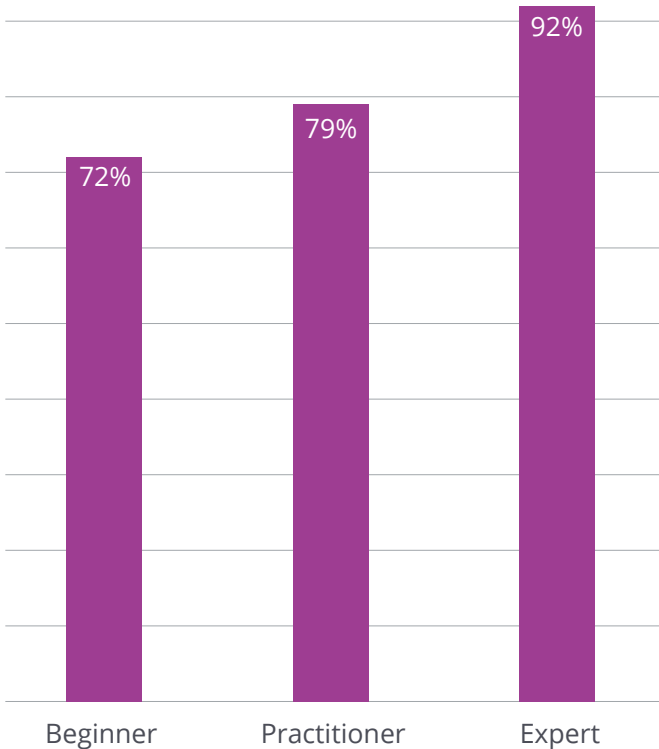
Cost Reduction

56% more likely to stay on par or exceed their peers than beginners.



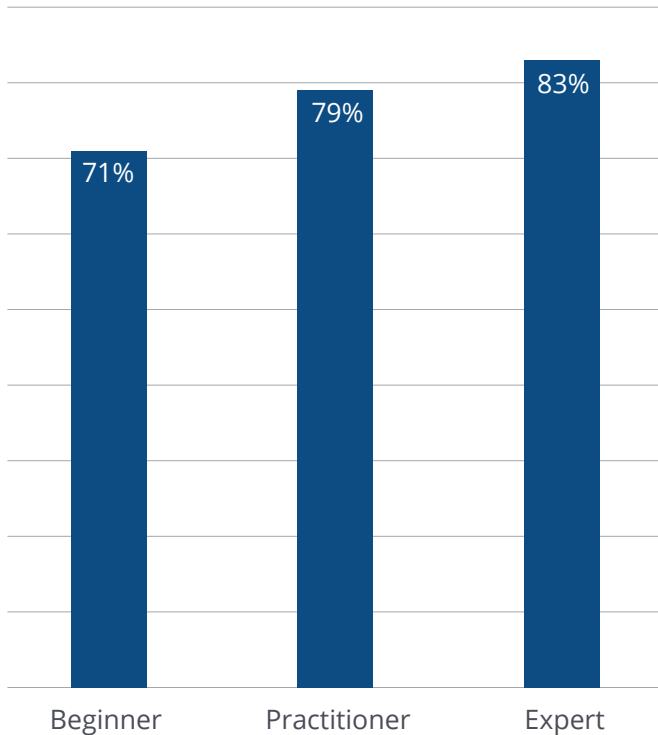
Business Model Innovation

28% more likely to stay on par or exceed their peers than beginners.



New Product Development

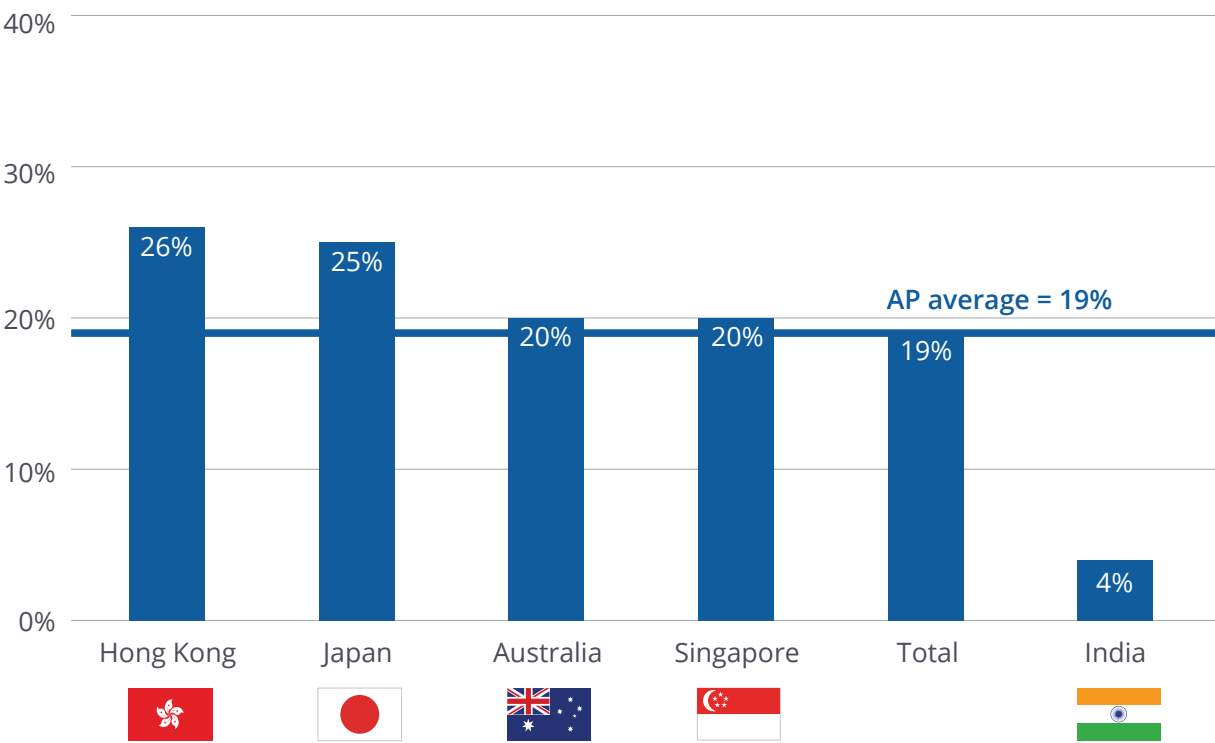
17% more likely to stay on par or exceed their peers than beginners.



Source: IDC-Alteryx Asia/Pacific Analytics Automation Survey, 2021 (N = 500)

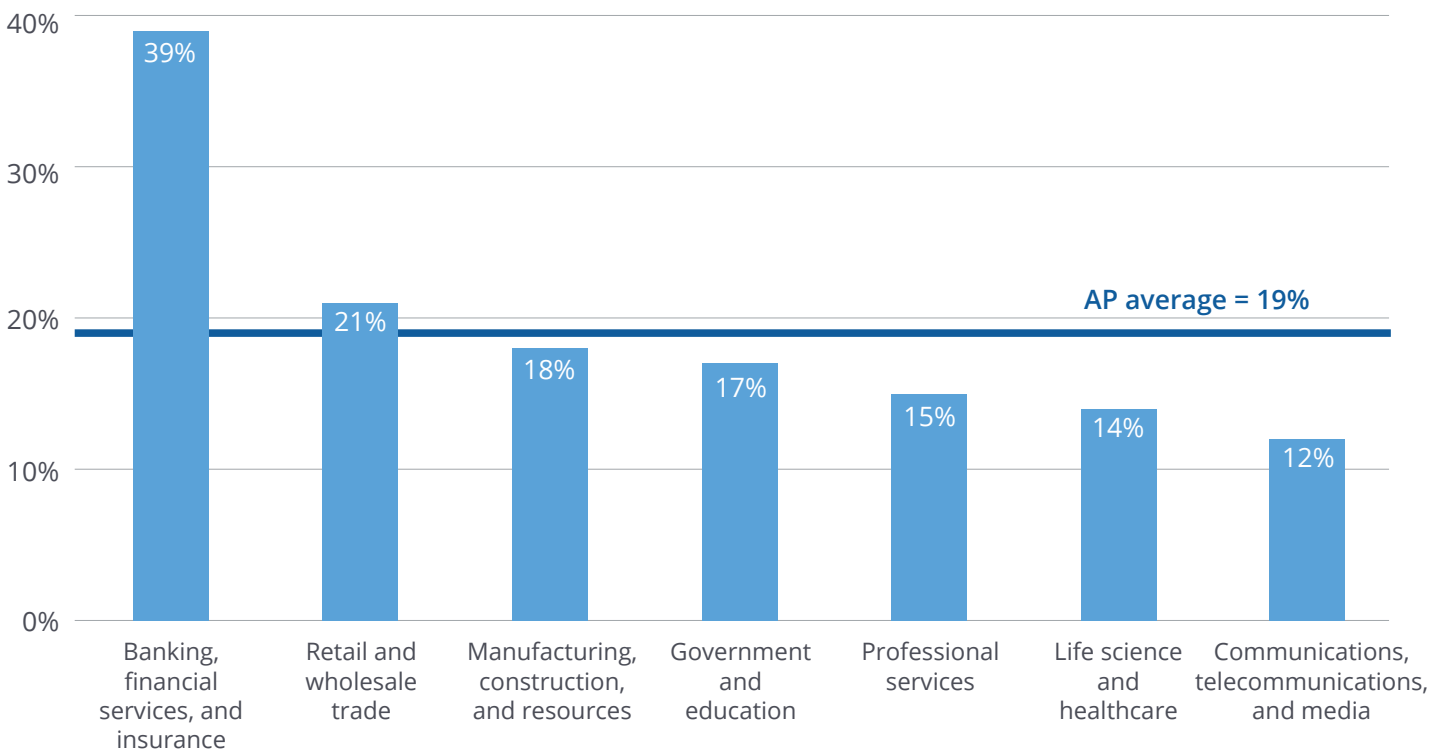
Only 19% of Asia Pacific companies are analytics experts

Analytics Experts by Country



- Hong Kong has the highest number of analytics experts among the five countries, with India having the least.
- 4 out of 5 countries are above the AP average of 19%.

Analytics Experts by Industry

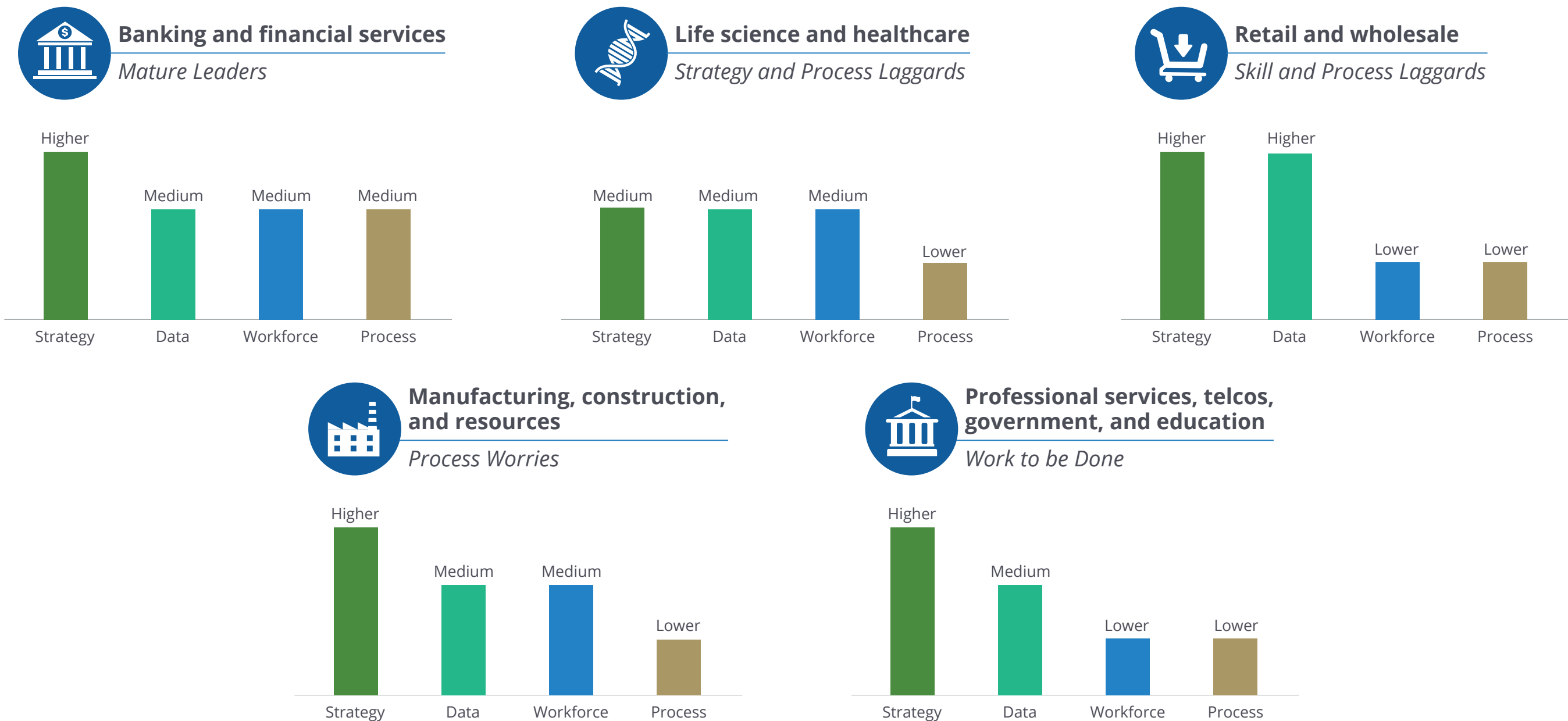


- Banking, financial services, and insurance (BFSI) has the highest number of analytics experts among the industries, with communications, telecommunications, and media as the least.
- Only BFSI and retail and wholesale organizations had more analytics experts than the average.

Source: IDC-Alteryx Asia/Pacific Analytics Automation Survey, 2021 (N = 500)

Notable industry characteristics

In Asia Pacific, different industries show various progressions in their strengths across the four dimensions of data analytics expertise.



Source: IDC-Alteryx Asia/Pacific Analytics Automation Survey, 2021 (N = 500)

Prioritize data pipelines to manage productivity and risk in Australia



In Australia, the major gaps between business priorities and business performance are:



Productivity enhancement

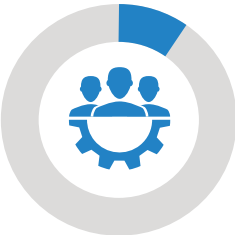


Risk mitigation



Cost reduction

Understandably, Australian organization typically have a relatively high-cost workforce with extensive regulations.



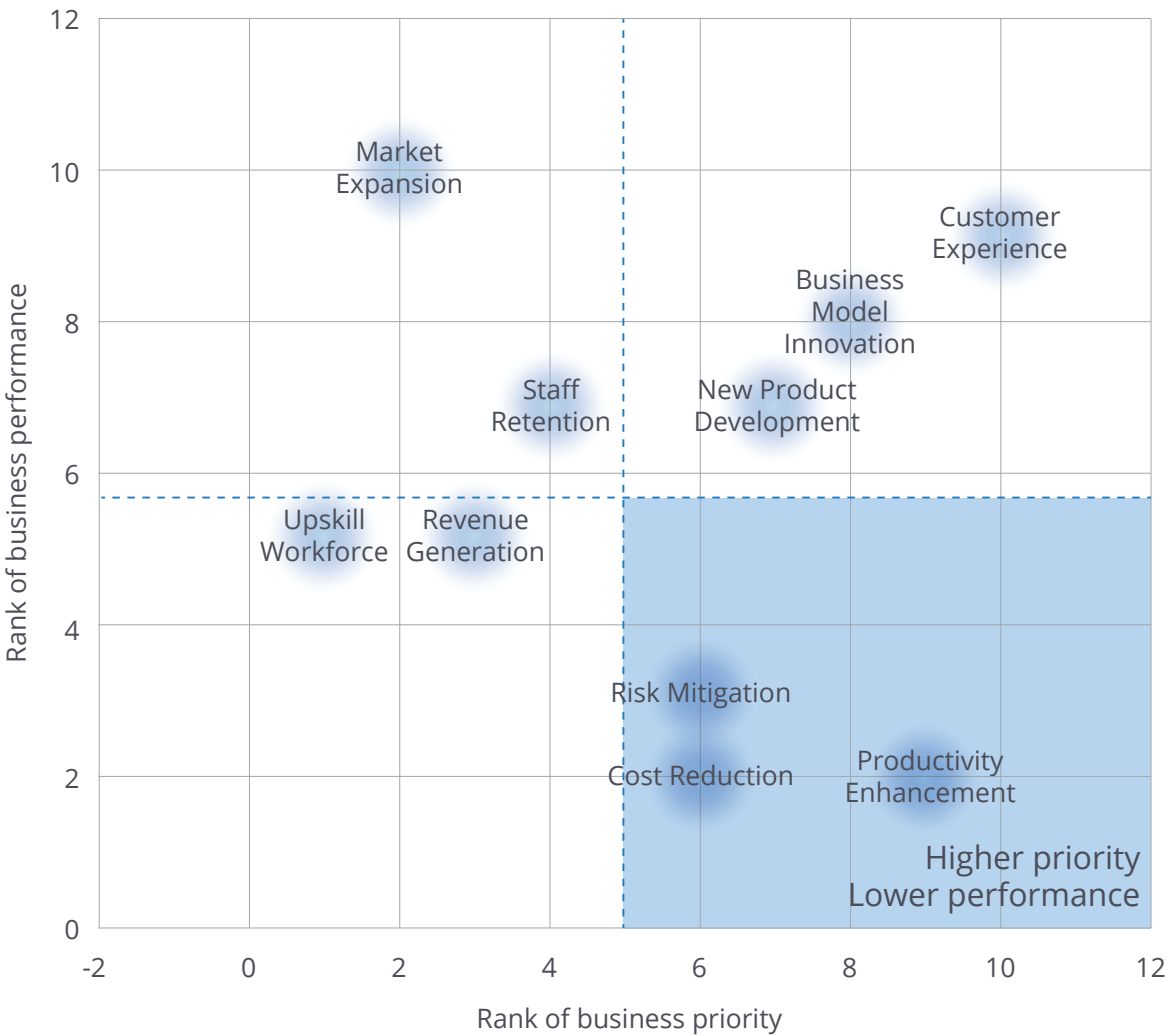
Only **10%** of Australian organizations have reached the “democratizing” stage (i.e., expert) of the **workforce** dimension.



15% of companies surveyed in Australia are from **retail and wholesale**. They are on the lookout for measures to reduce the risk, the cost of operations, and with relatively less advanced data literacy.

Australian organizations should use analytics automation for data pipelines and limit manual interventions (decreasing operational risks) and augment the analytics skills of their users.

Priority Rank Versus Performance Rank



Source: IDC-Alteryx Asia/Pacific Analytics Automation Survey, 2021 (N = 500)

Prioritize actionable and scalable data for insights to **scale and expand** in Singapore



Singapore’s major gaps between priorities and performance are:



Revenue generation

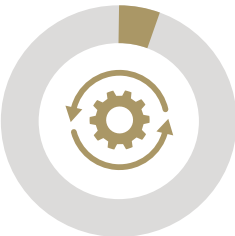


Cost reduction



Market expansion

Singapore is a highly skilled market but it is also small and expensive. Therefore, companies are hungry for economies of scale and market growth.



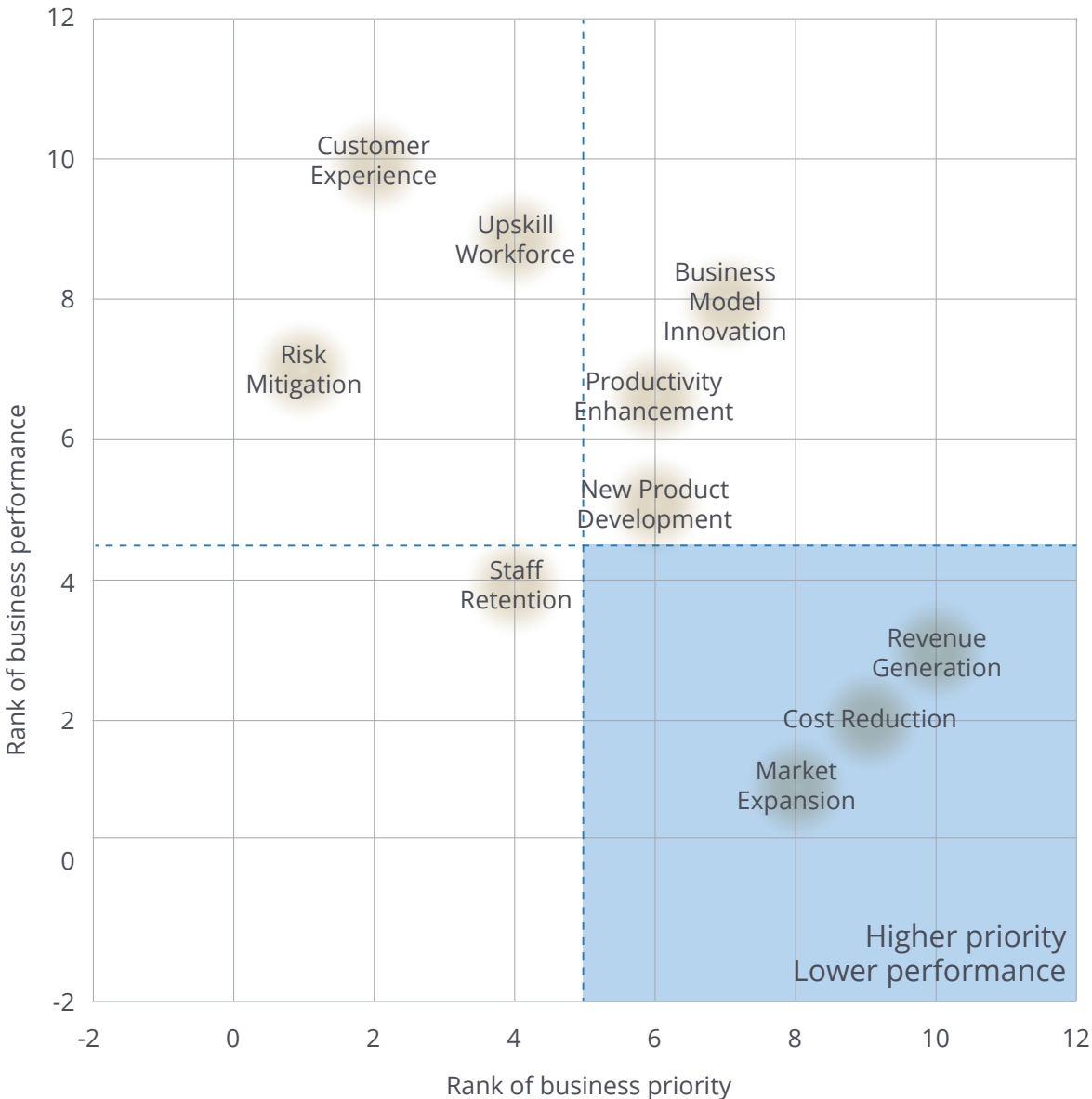
Only **6%** of Singapore organizations have reached the “automating” stage (i.e., expert) in the **process** dimension.



33% of companies surveyed in Singapore are from **professional services**. They service the region and are known for having a workforce with higher level of data skills and data literacy.

Singapore organizations should use analytics automation to improve the processes associated with their existing data analytics, with an eye to increasing the scale of their data and the insights that can be generated from the data.

Priority Rank Versus Performance Rank



Source: IDC-Alteryx Asia/Pacific Analytics Automation Survey, 2021 (N = 500)

Prioritize collaborative analytics to upskill and disruptively innovate in Japan



Japan’s major gaps between priorities and performance are:

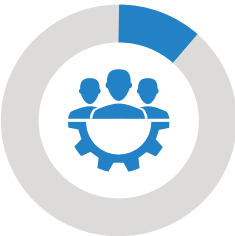


Business model innovation



Upskill workforce

This may reflect Japan’s large corporations with established business models trying to adapt to the new DX world. At the same time, Japan’s aging demographics necessitate prioritizing the rapid upskilling of new millenials entering the workforce.



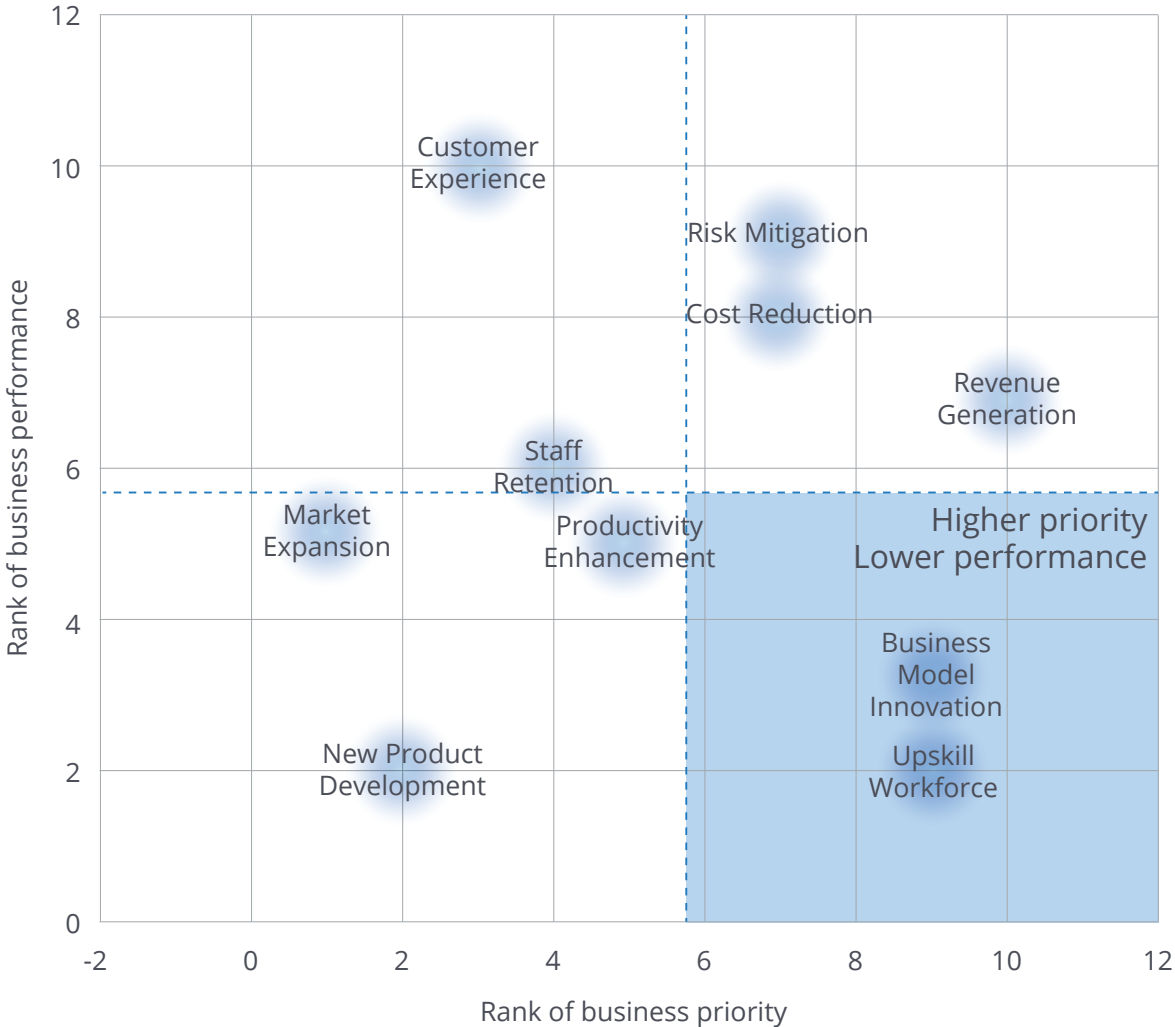
Only **12%** of Japan organizations have reached the “democratizing” stage (i.e., expert) in the **workforce** dimension.



28% of companies surveyed in Japan are from **manufacturing, construction and resources**, which are increasingly concerned with sharing data and analytics across supply chains and ecosystems for collaboration and innovation.

Upskilling and collaborative analytics can be supported by analytics automation, encouraging users to work across departments and businesses.

Priority Rank Versus Performance Rank



Source: IDC-Alteryx Asia/Pacific Analytics Automation Survey, 2021 (N = 500)

Prioritize data operations to **efficiently innovate** in Hong Kong



Hong Kong’s major gaps between priorities and performance are:

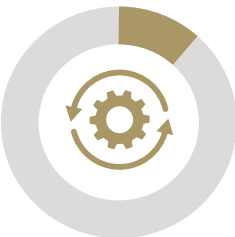


Cost reduction



New product development

These may reflect the predominance of BFSI in Hong Kong and the high costs of staffing and the limited scope for innovation in the financial services and insurance sector.



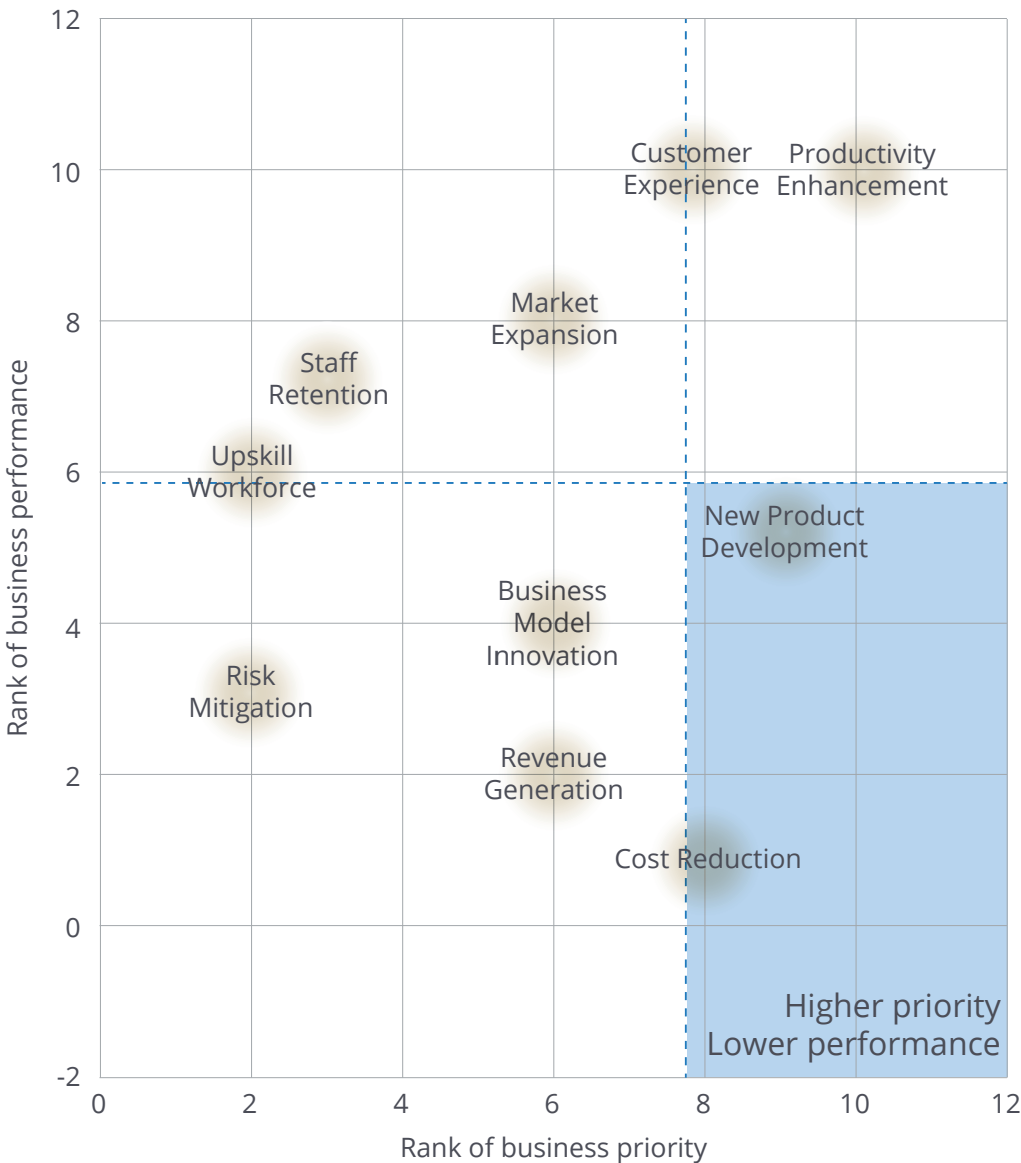
Only **12%** of Hong Kong organizations have reached the “automating” stage (i.e., expert) of the **process** dimension.



22% of companies surveyed in Hong Kong are from **financial services**, known for the breadth of its capabilities across multiple dimensions.

Hong Kong organizations especially BFSI should look to automate as much of their data operations processes to cover data ingestion, cleaning, and analytics modeling; thereby reducing expensive manual interventions.

Priority Rank Versus Performance Rank



Source: IDC-Alteryx Asia/Pacific Analytics Automation Survey, 2021 (N = 500)

Prioritize data engineering and metadata management to **transform** customer experience in India



India’s major gaps between priorities and performance are:



Customer experience



Cost reduction



New product development

The Indian economy is dominated by a large consumer market and by the government (about 70% of total GDP) with extensive labor regulations limiting employee mobility and innovation.



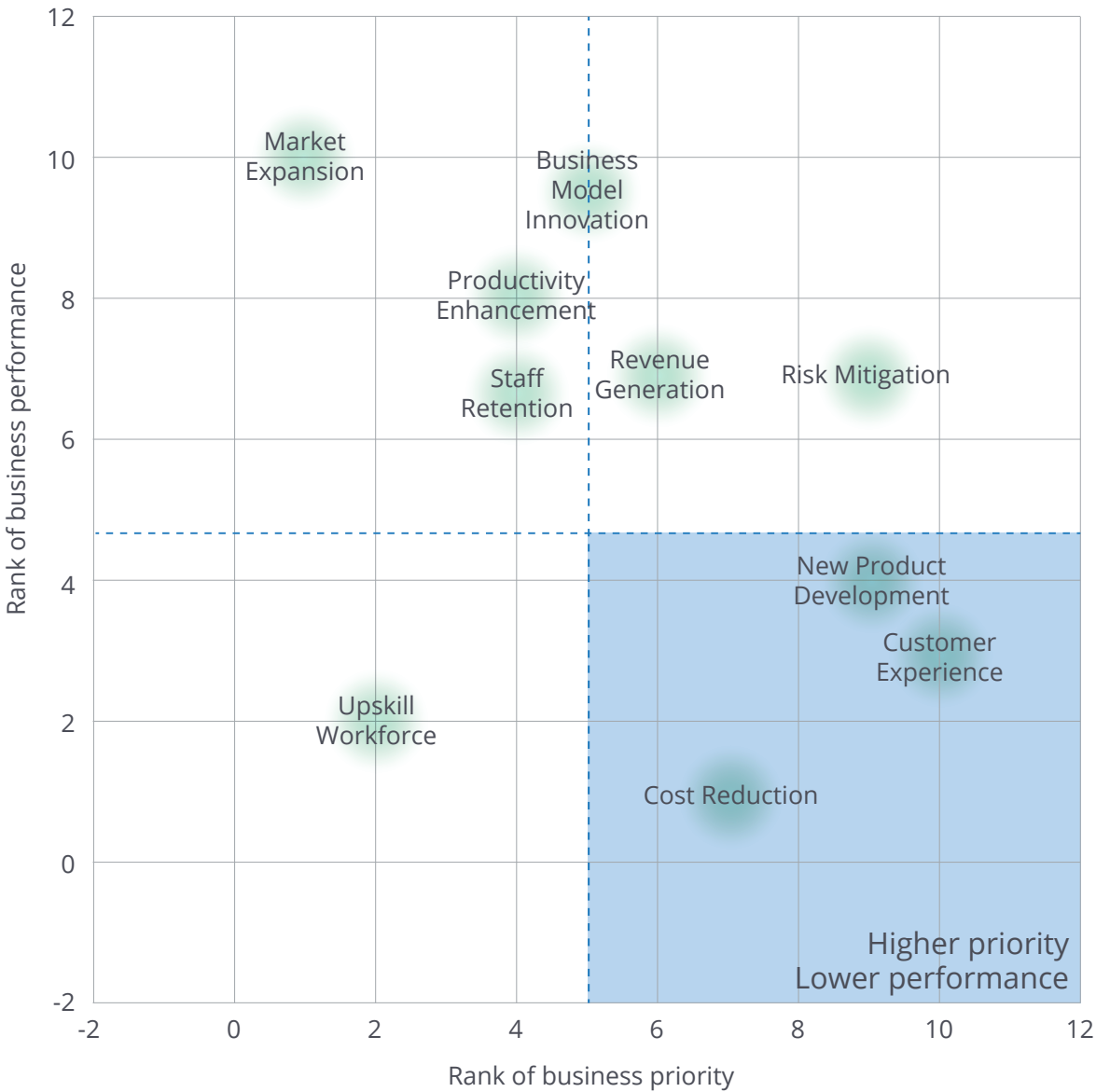
Only **9%** of India organizations have reached the “systematic” stage (i.e., expert) in the **data** dimension.



16% of companies surveyed are from the **government, education, and utilities** sectors. They are often the visionary in planning for paradigm shifts such as digital customer experience (CX), but much still remains to be done.

CX requires the development of enterprise data and metadata to enhance data governance, and the agile development of analytics and data products that build on CX. Analytics automation can support these data engineering and management initiatives.

Priority Rank Versus Performance Rank



Source: IDC-Alteryx Asia/Pacific Analytics Automation Survey, 2021 (N = 500)

Analytics automation provides a unified approach to advanced analytics maturity

Challenges in workforce and process – two common analytics problems

- Variety of complex analytics tools needed leads to inconsistencies, errors, and delays in data processes.
- Manual collaboration using different tools leads to mistakes, poor productivity, and lack of scale.

Process

- Limited data skills and data literacy constrain an organizations' analytics.
- Skills concentrated in only a handful of data and analytics professionals.

Workforce

Analytics
Automation

Analytics automation – closes gaps in both workforce and process dimensions

- Embeds and enforces the data-to-insight process automatically for all roles, leaving less room for mistakes or inconsistencies.
- Creates higher confidence and demand for advanced modeling capabilities such as machine learning.

Process

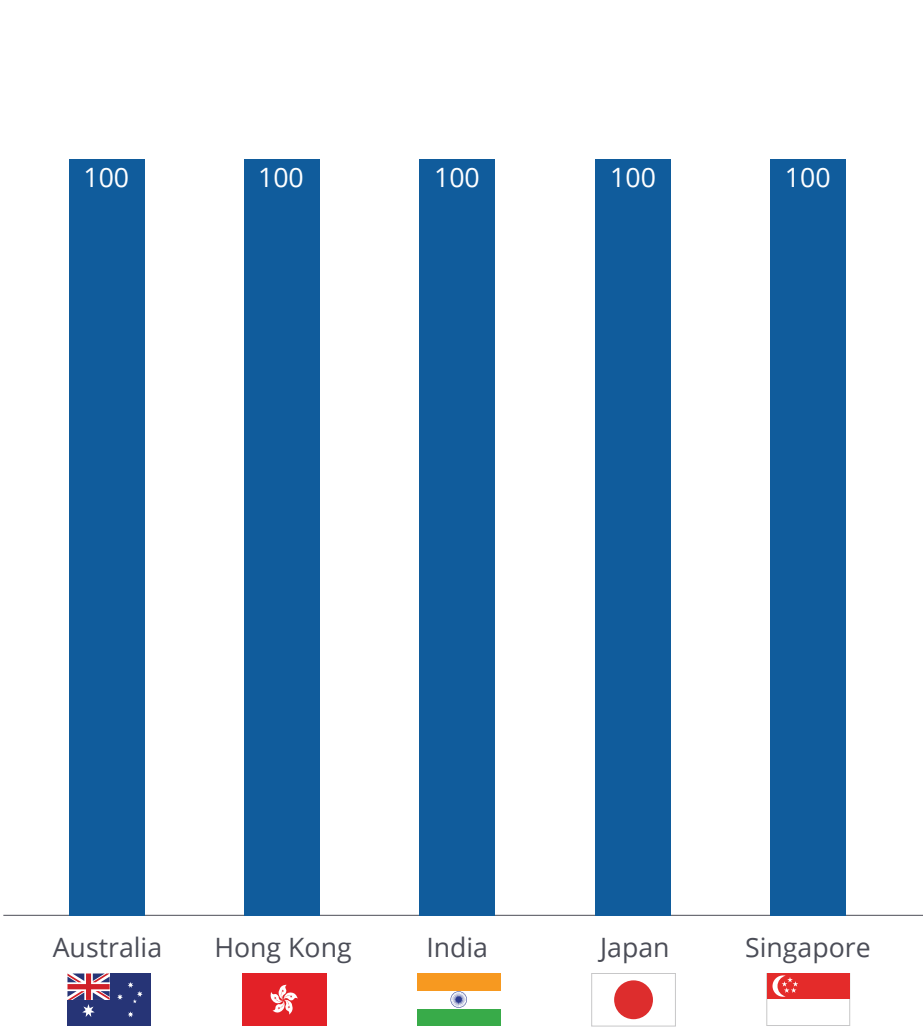
- Helps analytics professionals focus on higher value-add activities.
- Supports front line workers connect insights to the operations that generate them, better reason with results, and trust them more. This improves employees' data literacy and drives a more data-driven culture.

Workforce

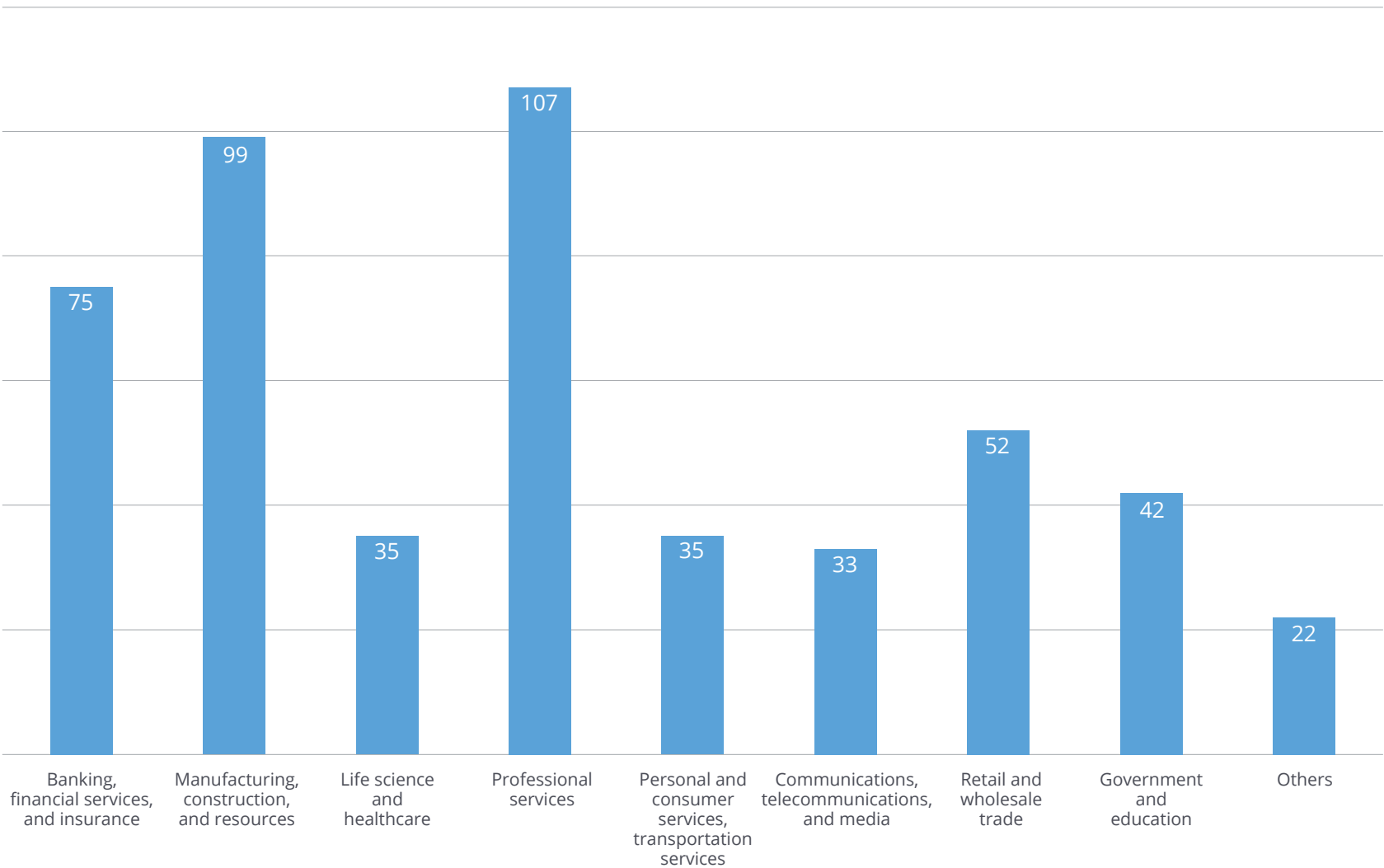
Appendix

In this study, IDC reached out to 500 organizations in Australia, Hong Kong, India, Japan and Singapore across all industries to cover different aspects of data analytics and insight creation practices to drive business results and transformations.

Country Sample Size



Industry Sample Size



Message from the Sponsor

Transform Your Business With Analytics Process Automation

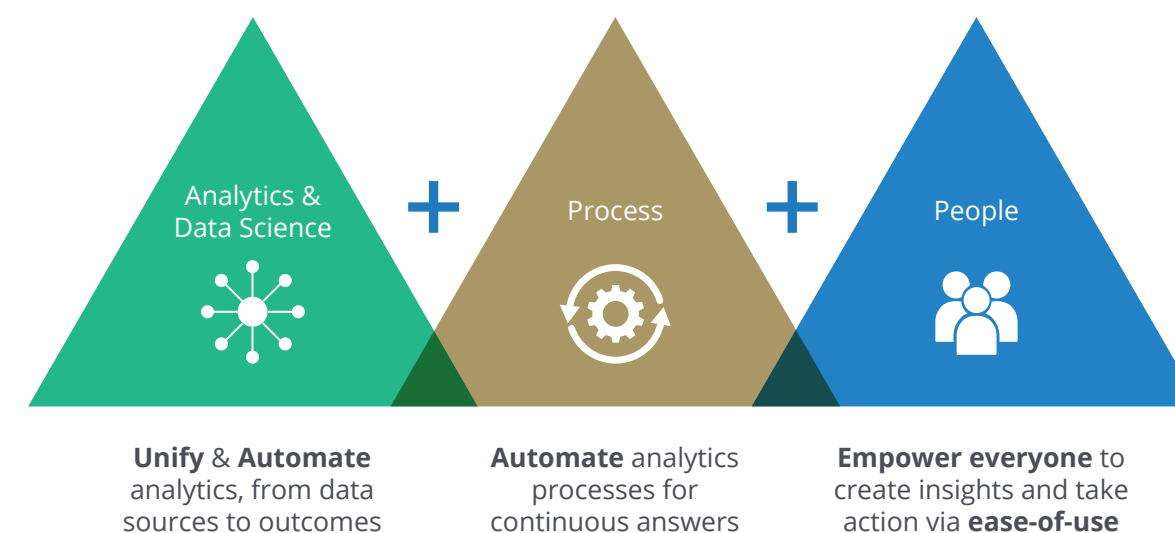
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Alteryx empowers everyone to transform data into a breakthrough

The scope of automation provided by Analytic Process Automation shifts from individual discrete data and process tasks to unified analytics, data science, and business process automation, with an engaging user experience to enable rapid workforce upskilling.



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