

Technology in metals 2021



Survey results



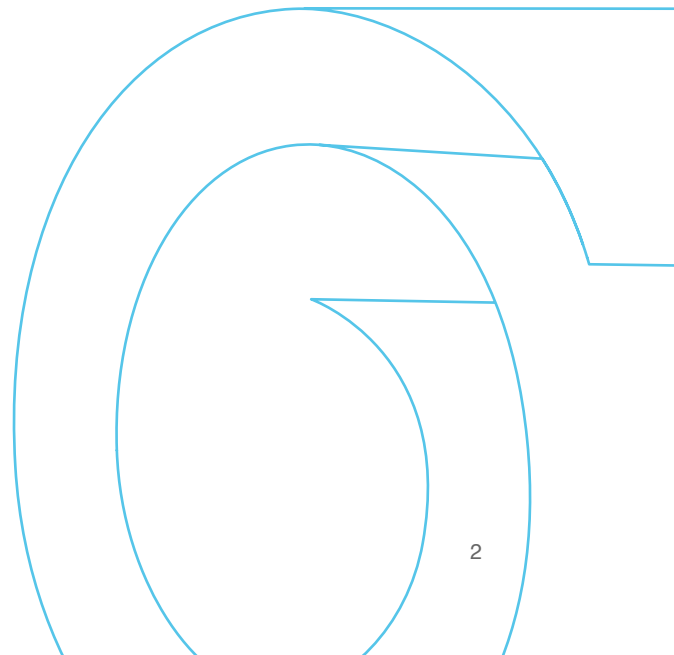
Introduction

Thank you for participating in the Crowe Technology in Metals Survey. For the past decade, our metals technology specialists have surveyed metals executives. Your participation in this year's survey enables us to provide powerful and actionable indicators to help combat uncertainty and step into the future with confidence.

Uncertainty has never been as high as it is right now. The world is changing at light speed: Last year the coronavirus caused unprecedented disruption across domestic and global steel markets. This year the industry is reaching dizzying new heights.

All of these changes left us wondering, "What's next? When will demand and prices stabilize? How can we get an edge on the future?"

As we analyze data and trends at Crowe, we've learned a lot from the past decade. This allows us to support our metals industry clients in deploying legacy-building technologies that sustain growth. Though we can't answer what the future holds, we can position you to face it with confidence – even in the midst of uncertainty.



Technology remains a top priority

As it has for the past several years, the 2021 survey confirmed that metals companies that intend to remain competitive have come to regard technology investment as a requirement rather than an option. When asked to characterize the importance of new technology in their three- to five-year business strategies, nearly two-thirds (64%) of the survey respondents said it was very important, with technology investments tied to specific business strategies or outcomes.

Rather than reducing their technology commitments as they try to ascertain the coronavirus pandemic's long-term effects on their business, more than half (52%) of the respondents said they actually increased their technology investments in 2020 in response to the pandemic. That number includes 20% who reported significant increases. Looking ahead, even more (56%) said they plan to increase their technology investment in 2021 due to COVID-19.

52%

of respondents increased their technology investments in 2020 due to COVID-19.

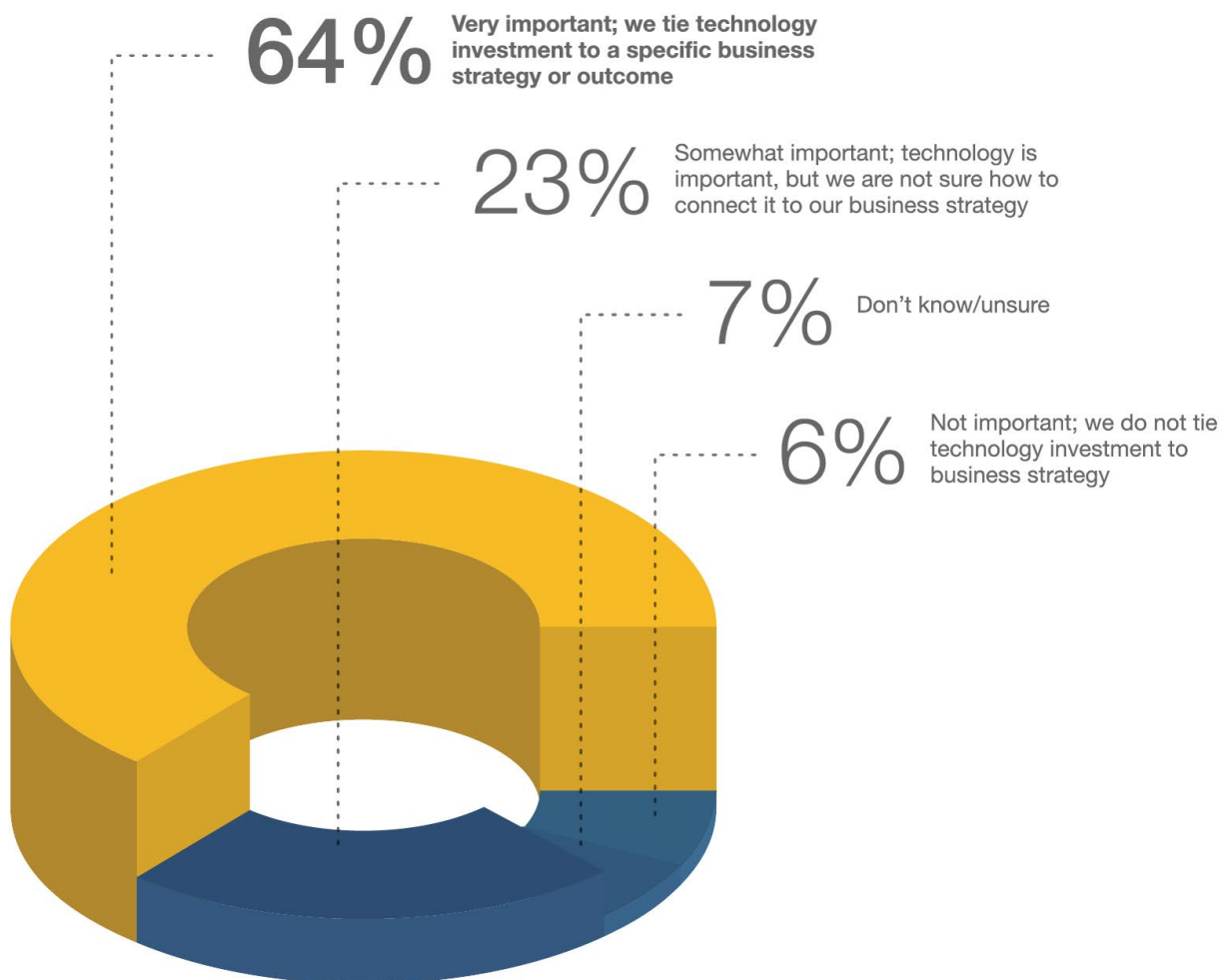
56%

of respondents said they plan to increase their technology investment in 2021 due to COVID-19.



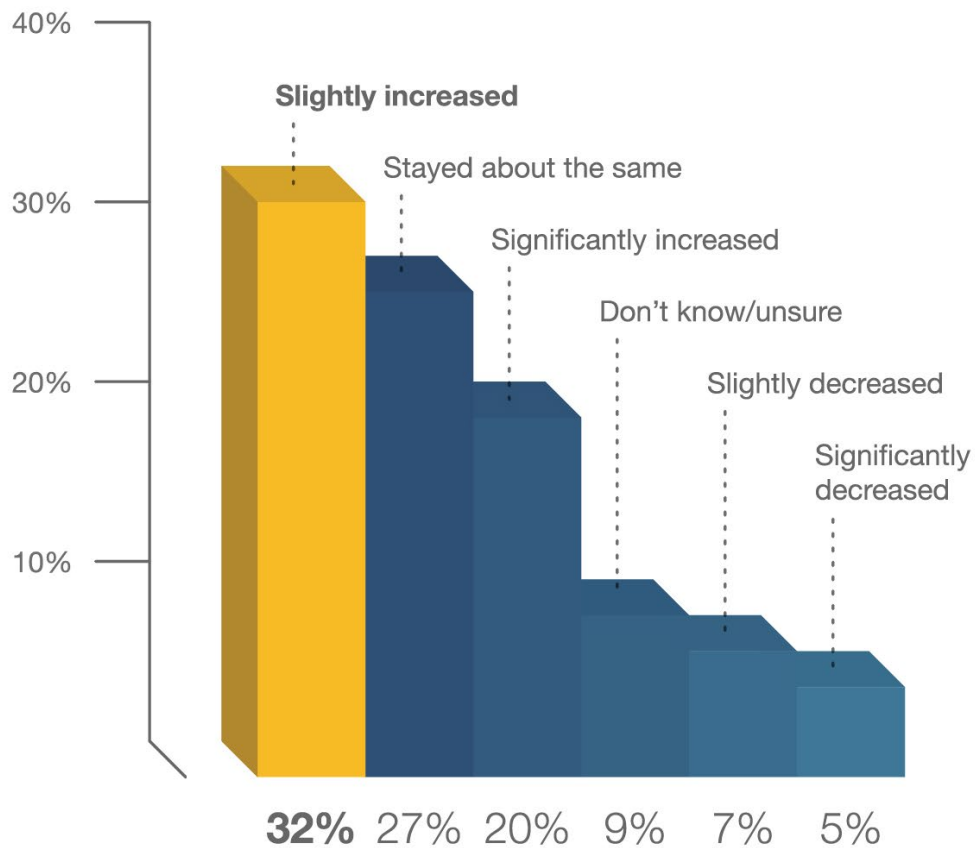
01

How important is new technology to your 3-to-5-year business strategy?



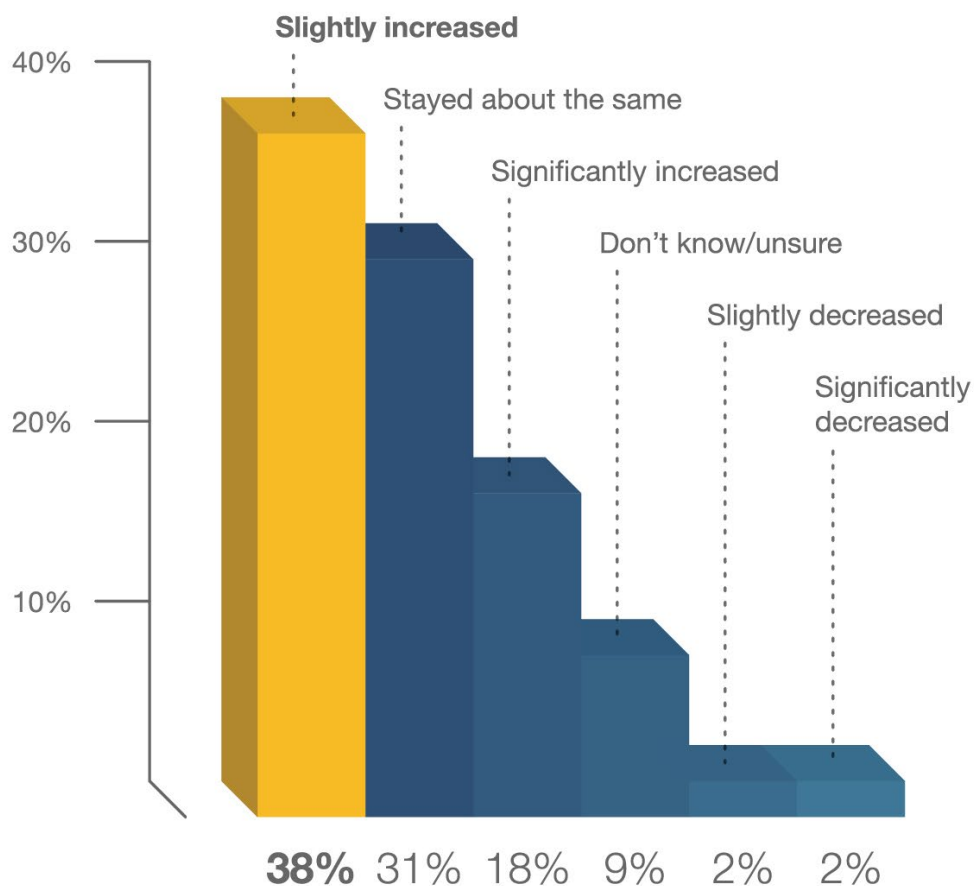
02

In what way, if any, did you adjust your technology investments in **2020** due to COVID-19?



03

In what way, if any, have you adjusted your technology investment plan in **2021** due to COVID-19?



Despite the uncertainty of the pandemic year, the 2021 survey responses indicate that technology remains a strategic imperative in the eyes of a majority of metals industry executives.

Cybersecurity remains the No. 1 risk

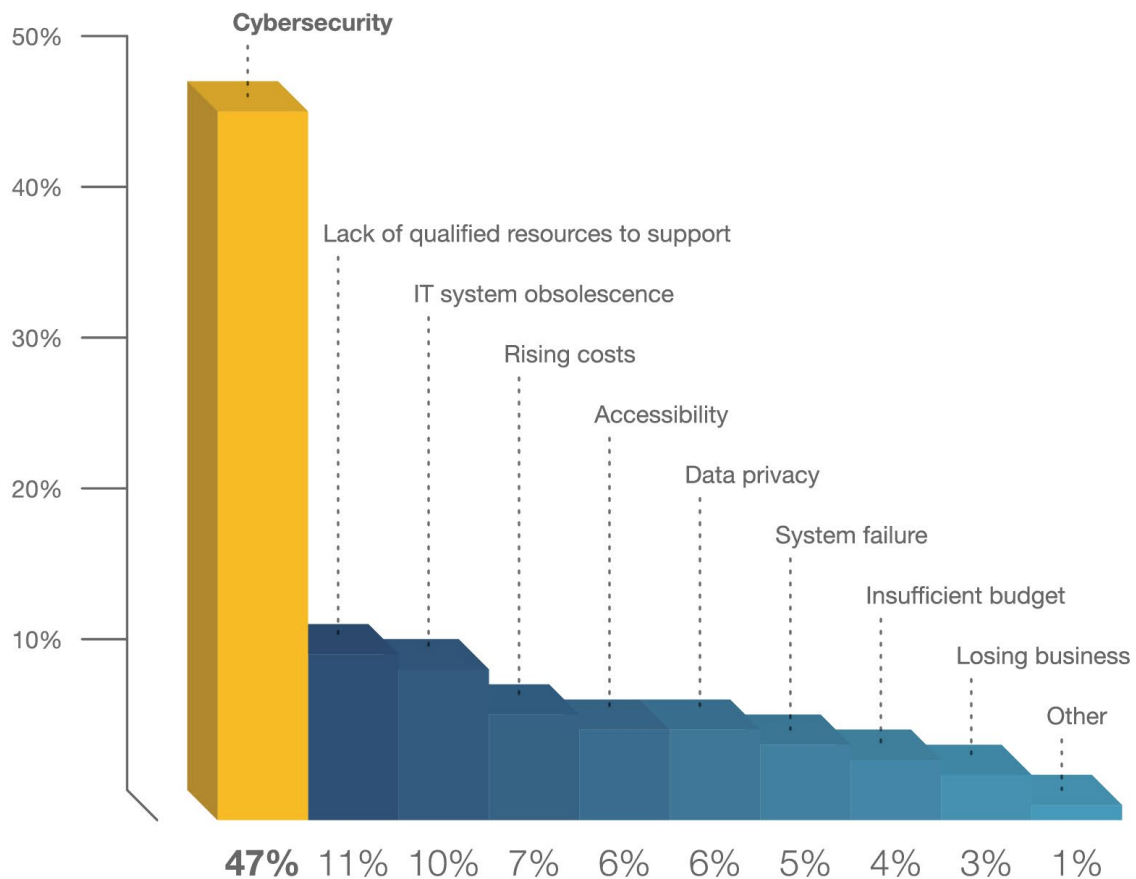
Once again, cybersecurity tops the list as the No. 1 concern among metals executives. Whereas it was a concern mostly for medium and large companies in years past, cybersecurity now dominates across all companies, regardless of size. This is likely due to increased publicity of cyberattacks on large multinational companies – including large metals companies – and increased security risks caused by an expanded mobile workforce following the pandemic.

Though security is paramount, risks No. 2 and No. 3 should not be ignored. System obsolescence can often be a root cause for much larger issues including lack of innovation, the challenge of recruiting new employees, and even cybersecurity risks. Additionally, a lack of qualified resources can cause costly delays to technology transformation projects.



04

What do you believe is your single most significant IT-related business risk in the next 3 years?



Being proactive about security and managing risks appropriately is critical to sustaining growth.

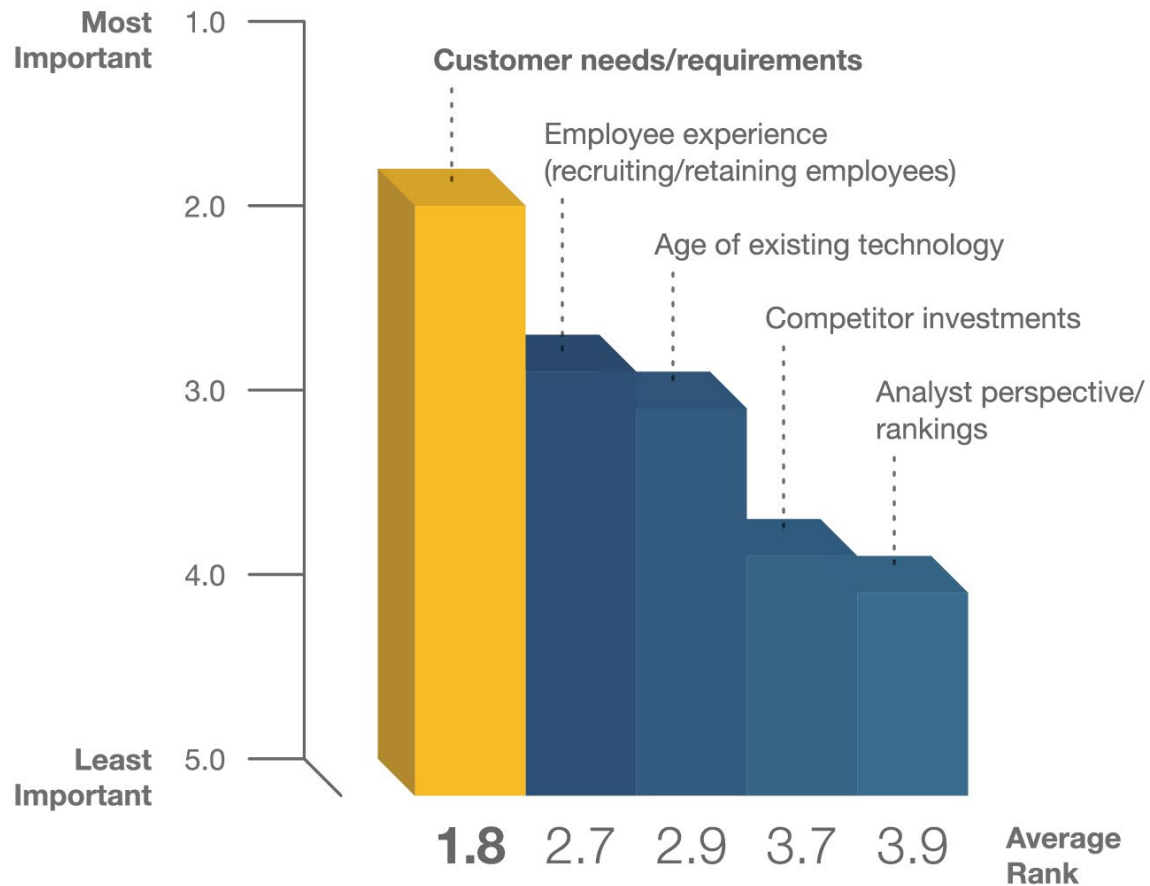
Technology investments are now driven by customer experience

Customer needs and requirements are by far the most important factor for respondents when considering technology investments. This suggests that customer expectations are now playing a larger role, outpacing the cost-control and operational efficiency concerns that drove metals companies' technology investment decisions in years past.



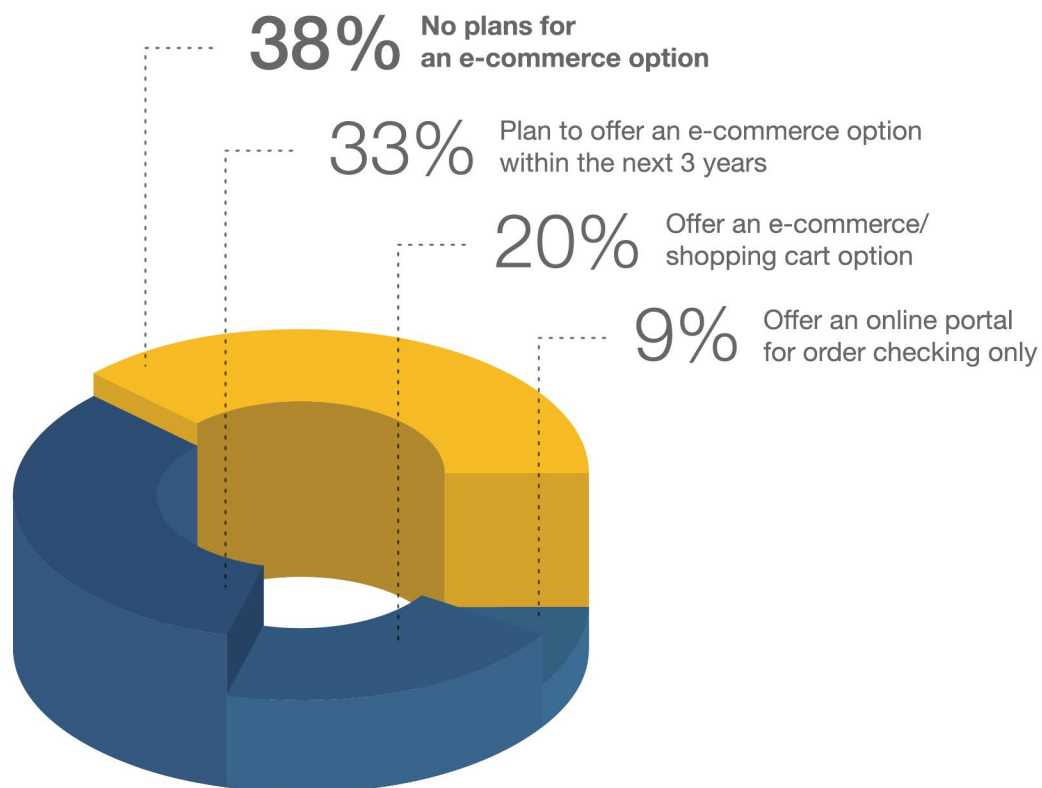
05

What is the most important factor when it comes to making decisions about technology investment?



06

Do you currently offer or plan to offer your customers an option to buy products from you via a self-branded, e-commerce website?



The increasing emphasis on customer experience is likely due to increased competition for existing customers and the need to offer new products in order to attract new customers with different requirements from new industries.

Technology choices among metals businesses are evolving

A comparable shift can be seen in the types of technology metals businesses are implementing. Core business applications such as enterprise resource planning (ERP) and customer relationship management (CRM) still account for the majority of technology investments, but a growing number of companies are shifting large portions of their budgets toward more advanced technology applications such as data analytics, artificial intelligence (AI), and machine learning (ML). Companies are investing in these advanced technologies to improve product quality, predict market fluctuations, and deliver on higher customer expectations.

For instance, when participants were asked to select among the various types of IT projects they currently have in process, upgrading ERP systems and implementing new systems were still the top two choices, but implementing a new business intelligence initiative was the third most popular choice.

Moreover, when participants were asked about technologies they did not yet have in place but plan to implement within the next five years, AI software was the leading choice with ML technology a close second.

22%

of the respondents said their organizations are currently working on implementing a new business intelligence initiative.

36%

of the respondents said they plan to implement AI capabilities within the next five years.

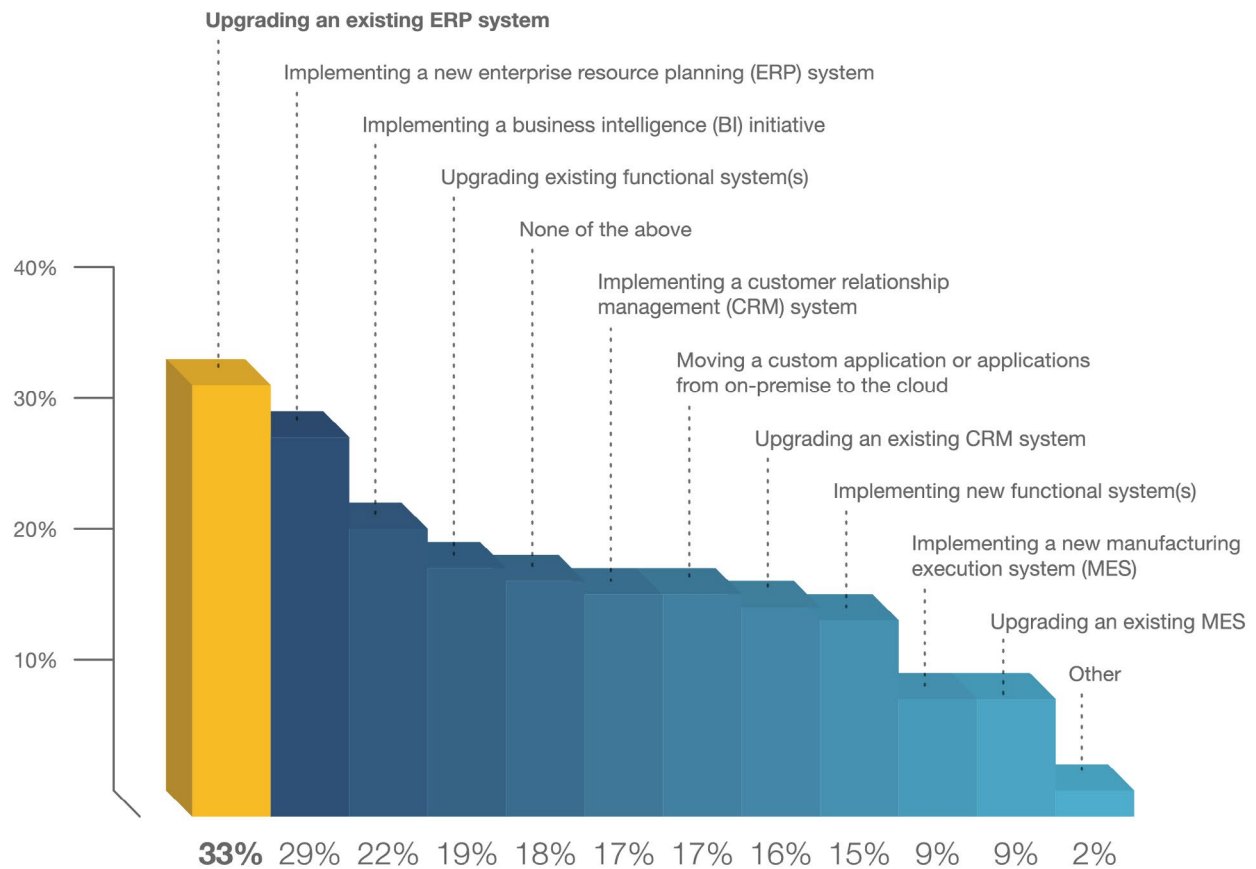
28%

of the respondents said they plan to implement machine learning within the next five years.



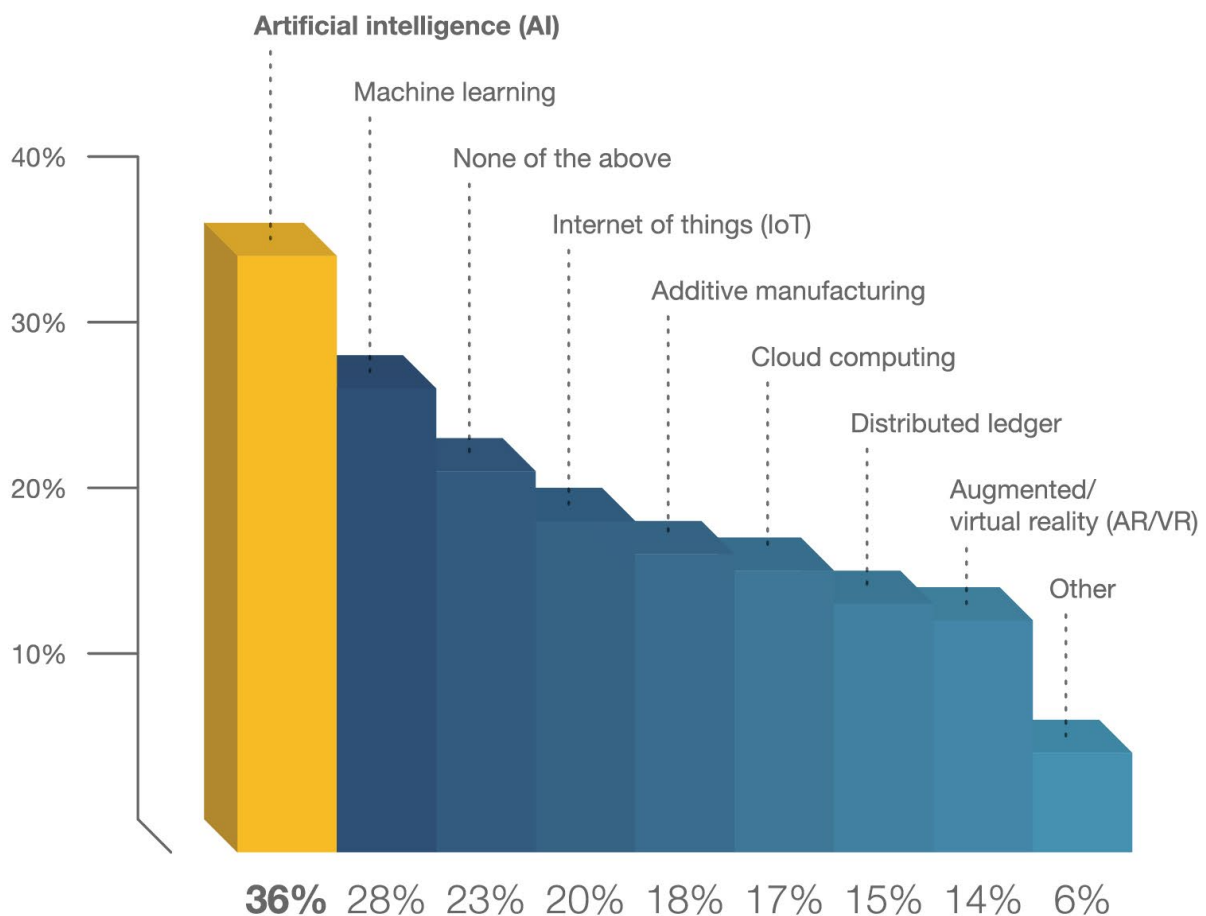
07

Which of the following IT projects do you currently have in process? (Participants could select multiple responses.)



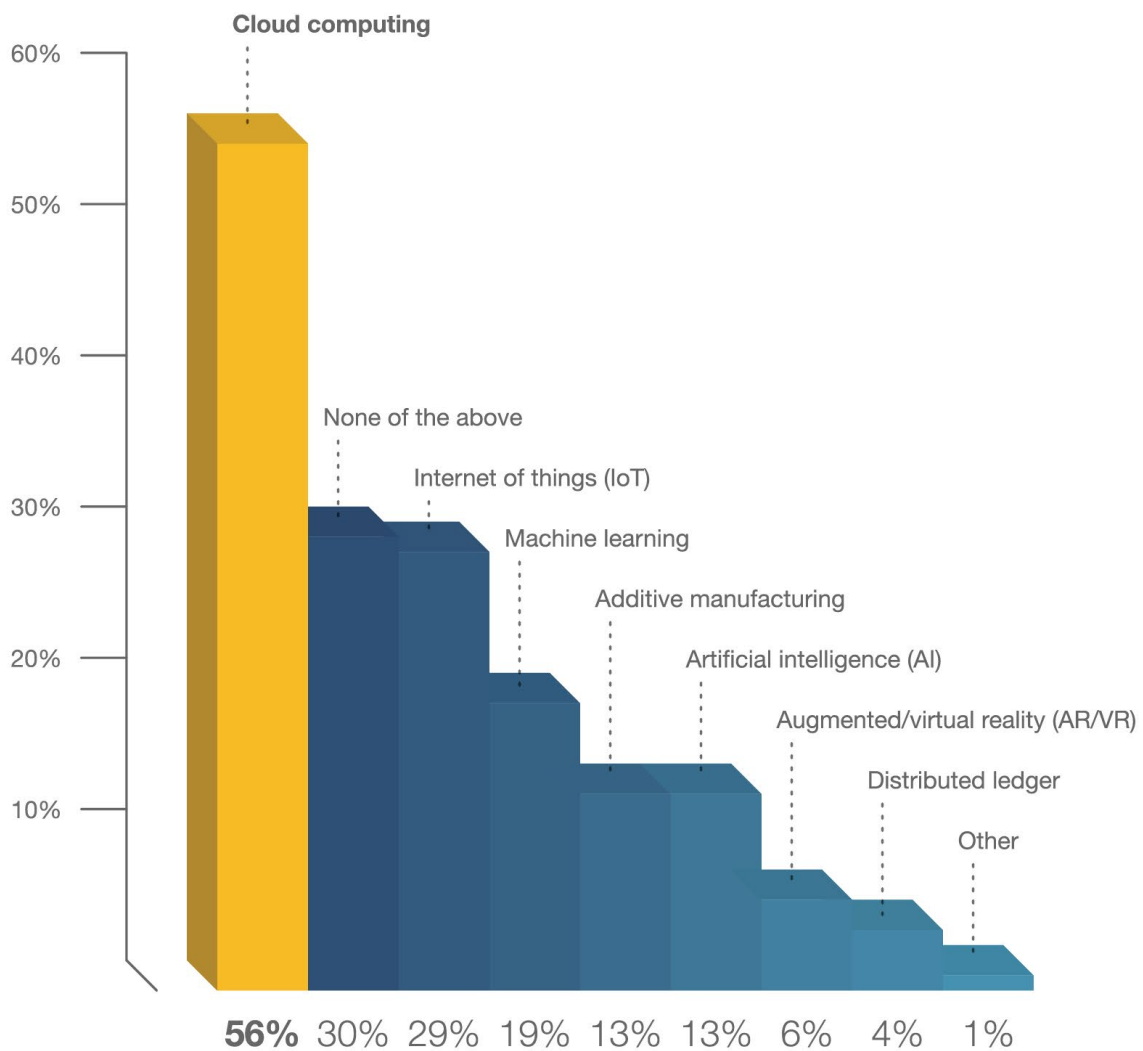
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Which of the following technologies is your company not using today that you plan to put in place within the next 5 years? (Participants could select multiple responses.)



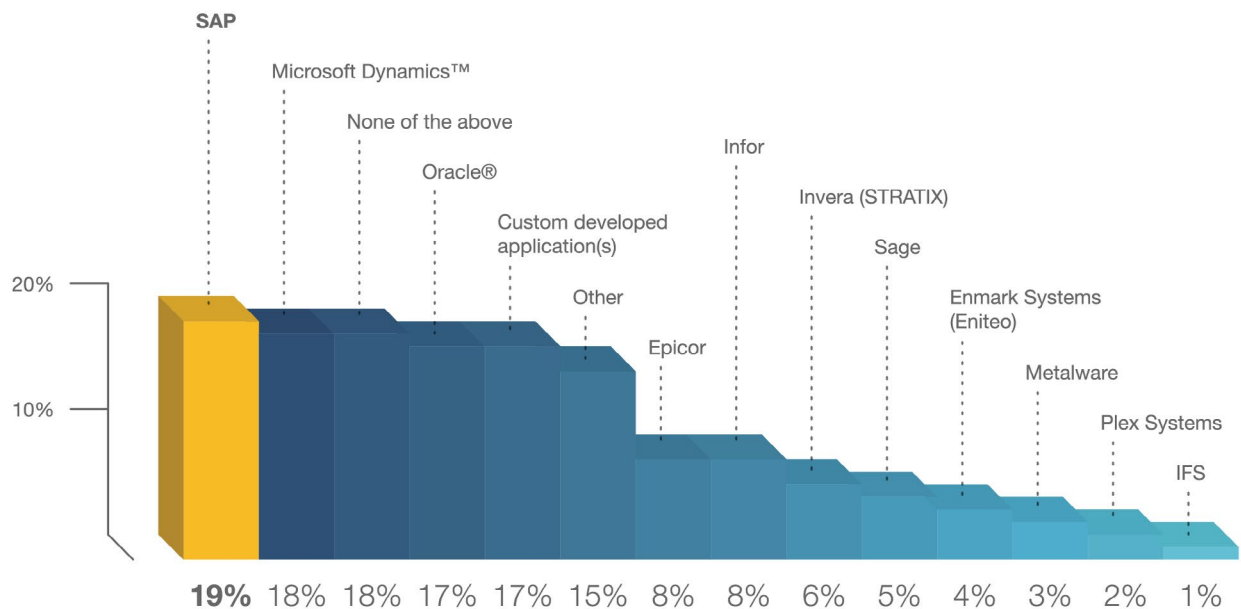
09

Which of the following technologies are currently in use at your company?
(Participants could select multiple responses.)



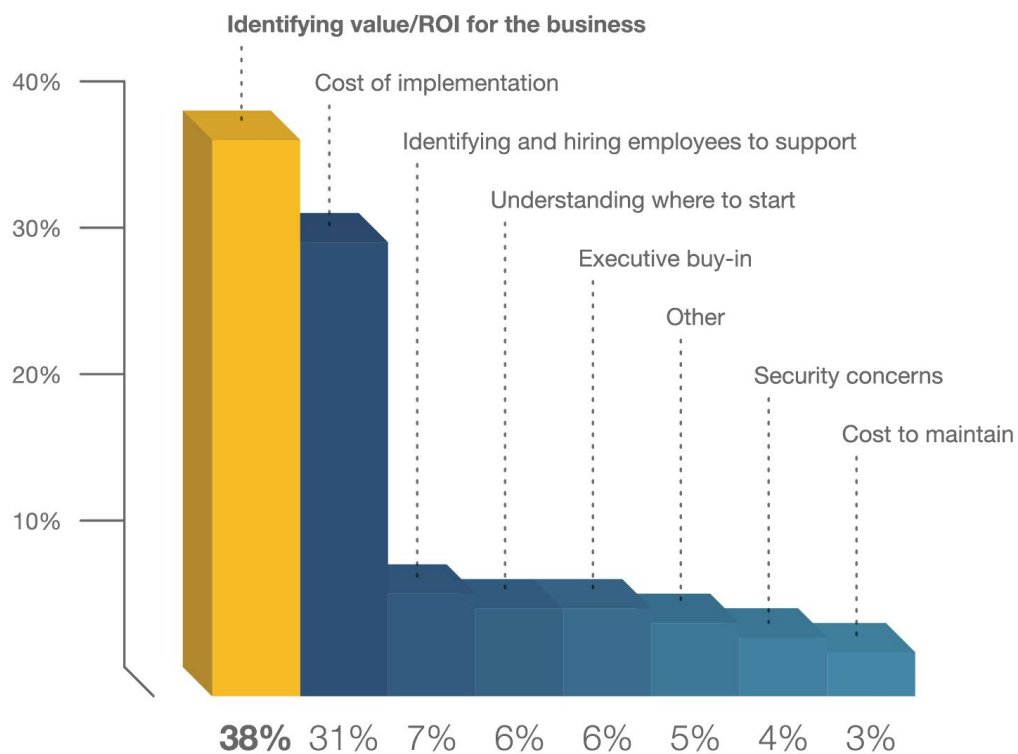
10

What ERP provider(s)/system(s) are currently in use within your company?
(Participants could select multiple responses.)



11

Please select the single biggest challenge when seeking approval for an advanced technology initiative.



When considering your approach to advanced technologies, make sure you have both a short-term and a long-term plan. Ask yourself, “What do we want to get from IoT in the next six months? How do we continue to realize benefits 12, 24, and 36 months in the future?” This requires an attitude of “continuous improvement” not only in IT, but throughout the organization to be ready to adopt the new insights these tools can provide.

Opportunity remains for increased business intelligence adoption

The data from this year's respondents nearly mirrors last year's, with just over a third (34%) consistently using analytics to explore data and recommend actions. This presents an opportunity for the 46% of companies just beginning to use analytics, exploring its possibilities, or unsure where to start. Utilizing data to power decisions can help you defuse uncertainty by better understanding what keeps customers satisfied and keeps your company ahead of the competition.



34%

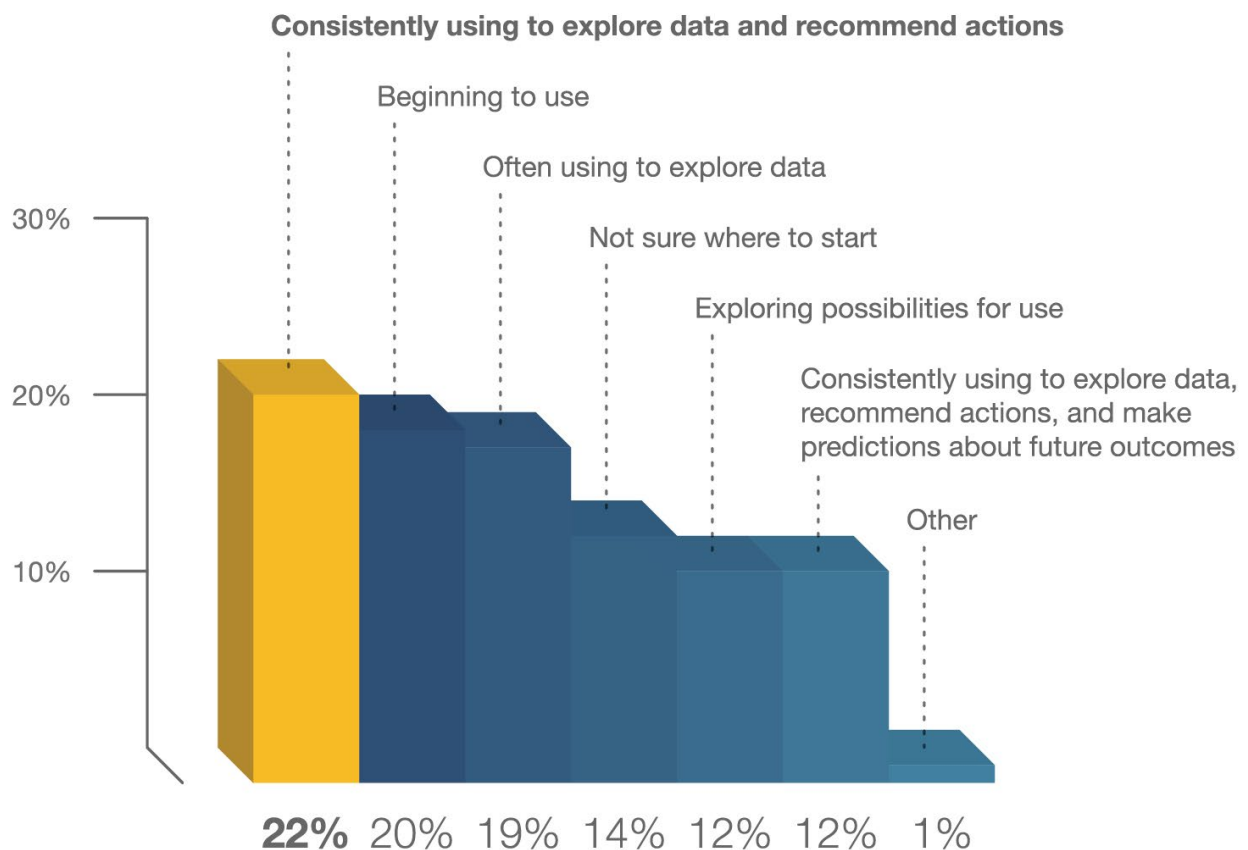
of the respondents are consistently using analytics to explore data and recommend actions.

46%

of the respondents are just beginning to use analytics, exploring its possibilities, or unsure where to start.

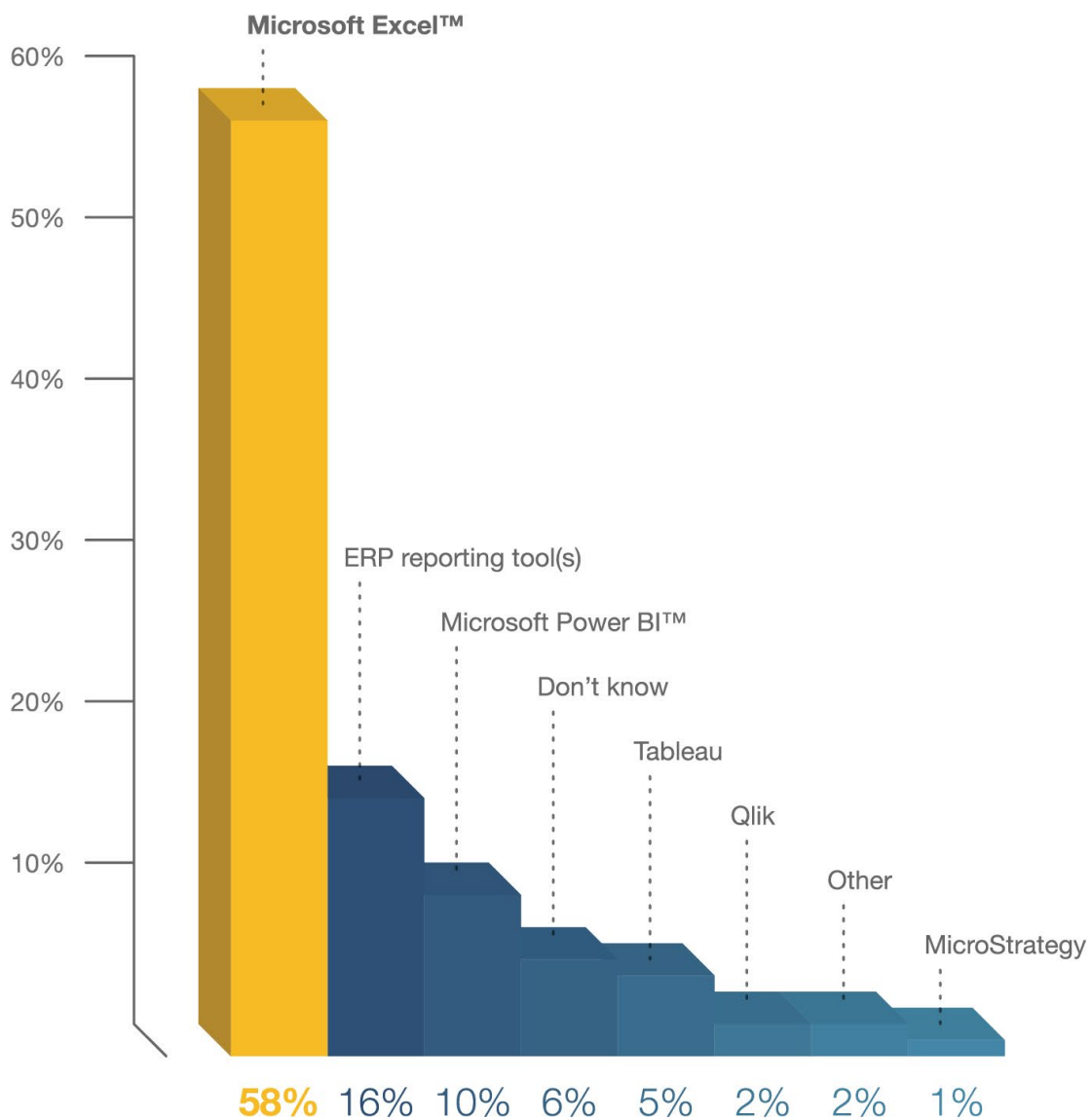
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Please select the statement that best describes your company's use of business data analytics tools.



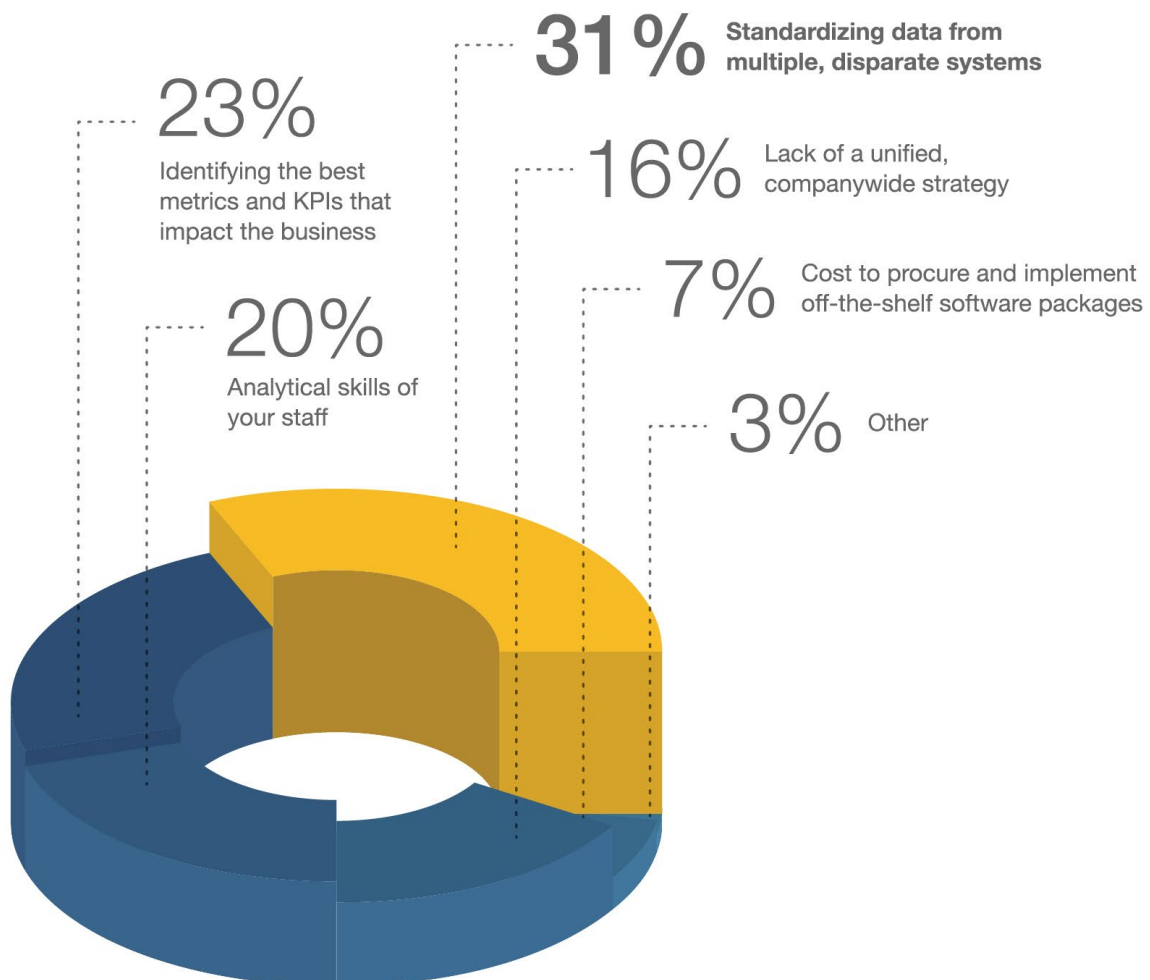
13

What is the most common provider/tool your nontechnical employees use for business data analysis?



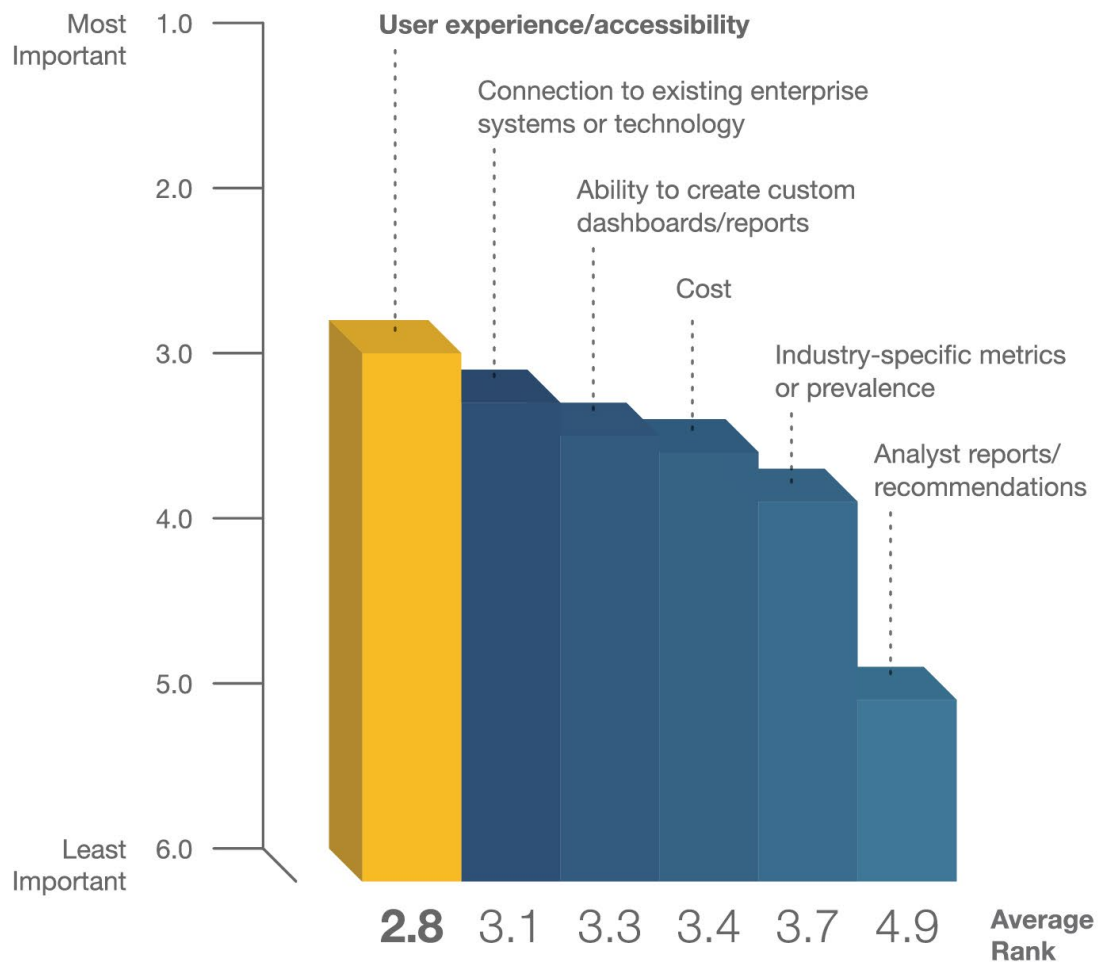
14

What is the single biggest business intelligence challenge for your company?



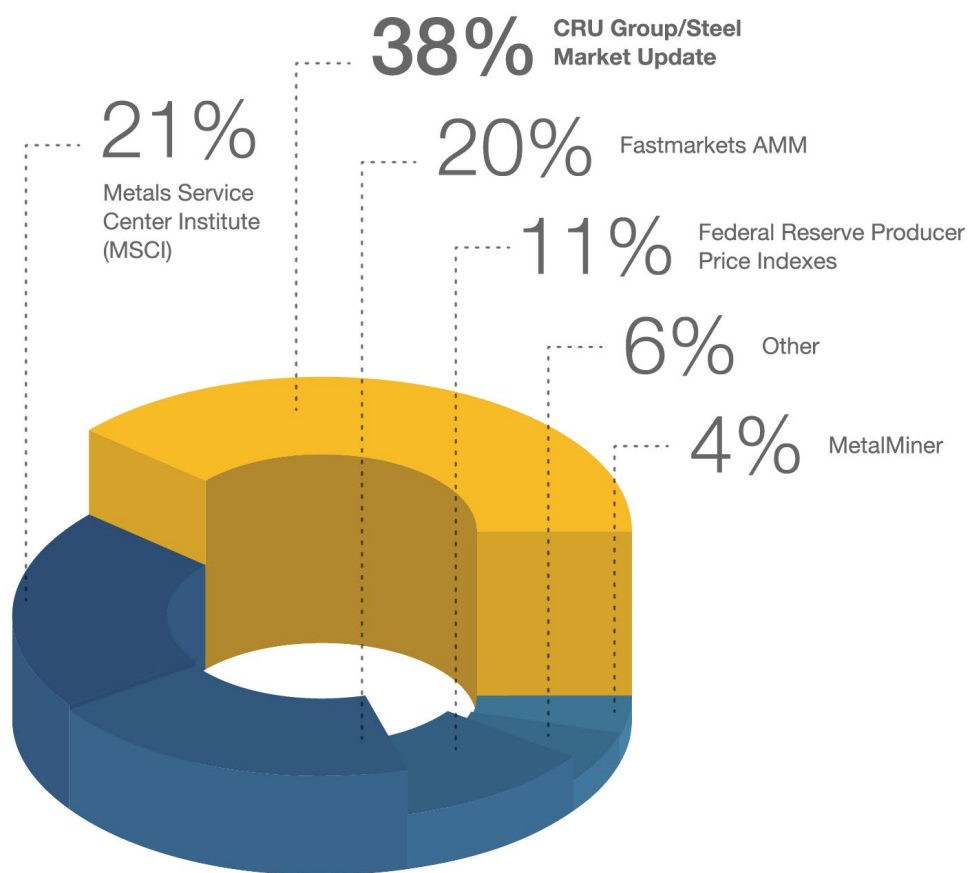
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Which of the following criteria is most important when selecting data analytics/BI software?



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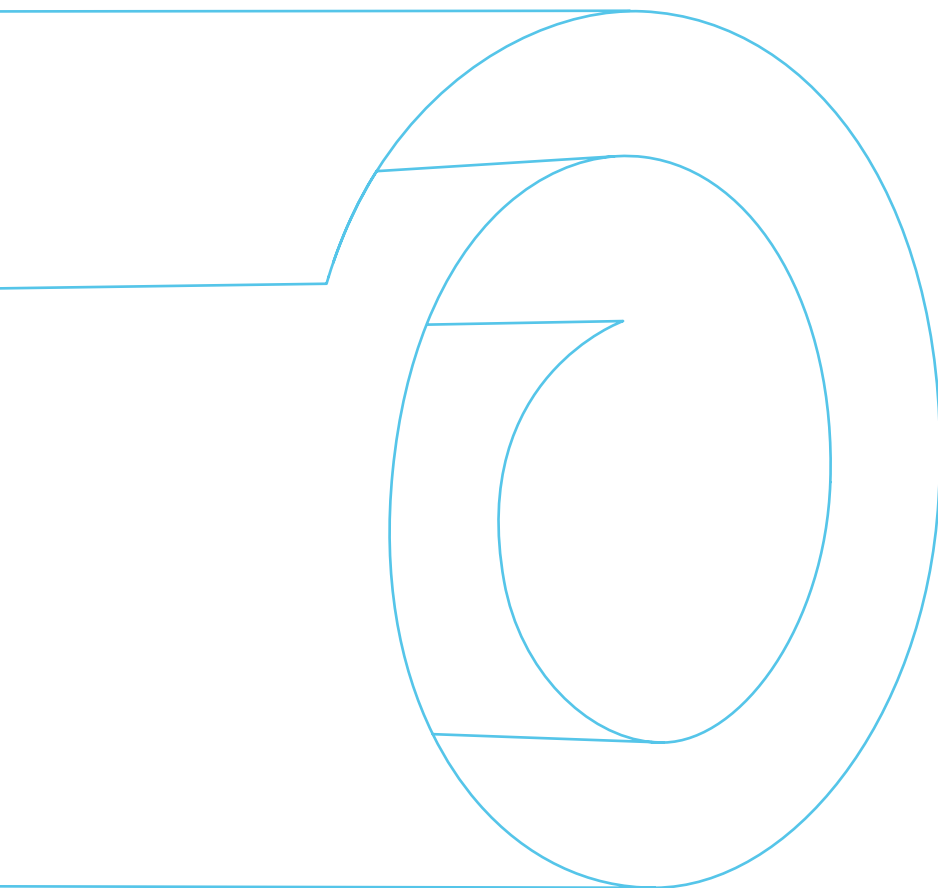
What industry data do you use to assess your internal business results?



Whether in your next board meeting or budgetary decision, arm yourself with the right data. You'll have the confidence to inform what technologies are needed to streamline and scale operations, and provide a stable foundation no matter the volatility that lies ahead.

About the survey

This year's online survey elicited nearly 150 responses from senior executives and managers across the global metals industry. Respondents represented a variety of metals-based companies, including manufacturers, service centers, mills, scrap recyclers, producers, and processors, with annual revenues from under \$25 million to over \$1 billion.



Have questions?

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