

What is holding IT leaders back from realizing the full benefits of machine learning?

Machine learning (ML) holds many promises; by harvesting its true potential, businesses stand to boost their operations and carve out a niche. However, this is easier said than done as ML requires tremendous commitment, investment and a robust infrastructure.

Thus, most organizations are barely scratching the surface when it comes to benefitting from ML, let alone venturing into deep learning - the natural extension of ML. **Pulse surveyed 100 IT decision-makers with active AI initiatives (such as large and compute-heavy model building) to understand how they are incorporating ML in their operations and what their successes or blockers are.**

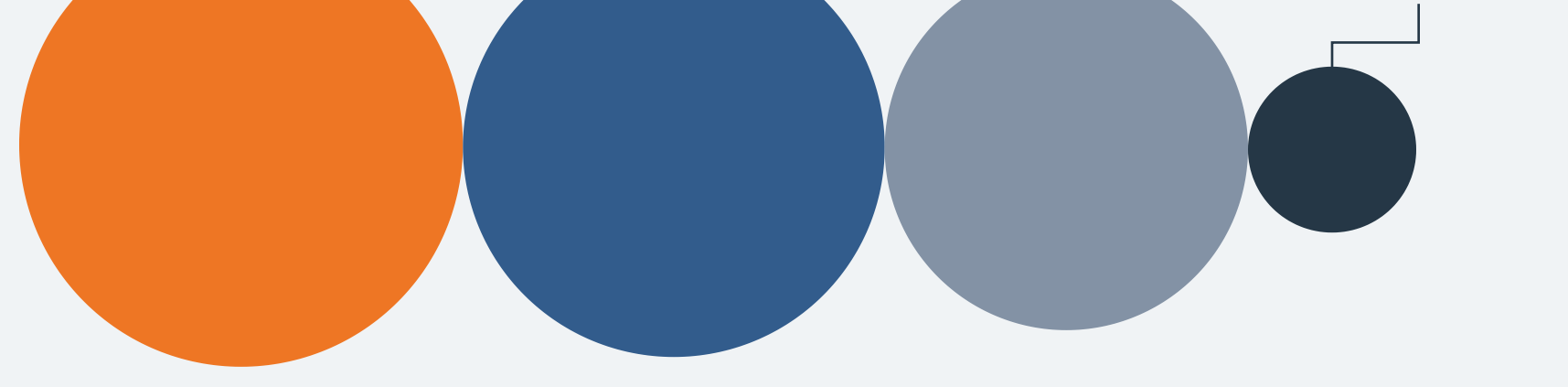
Data collected from July 29 - August 25, 2021

Respondents: 100 IT decision-makers with active AI initiatives

Talent scarcity, development time, and cost are barriers to success

Attracting ML talent is one of the top challenges for 71% of those surveyed, followed closely by their inability to keep pace with ML innovations (67%).

Which of the following are your biggest challenges in ML initiatives?



The majority of survey respondents (71%) spend most of their time developing ML models, while 29% are one step behind still spending most of their time setting up the compute infrastructure for model development.

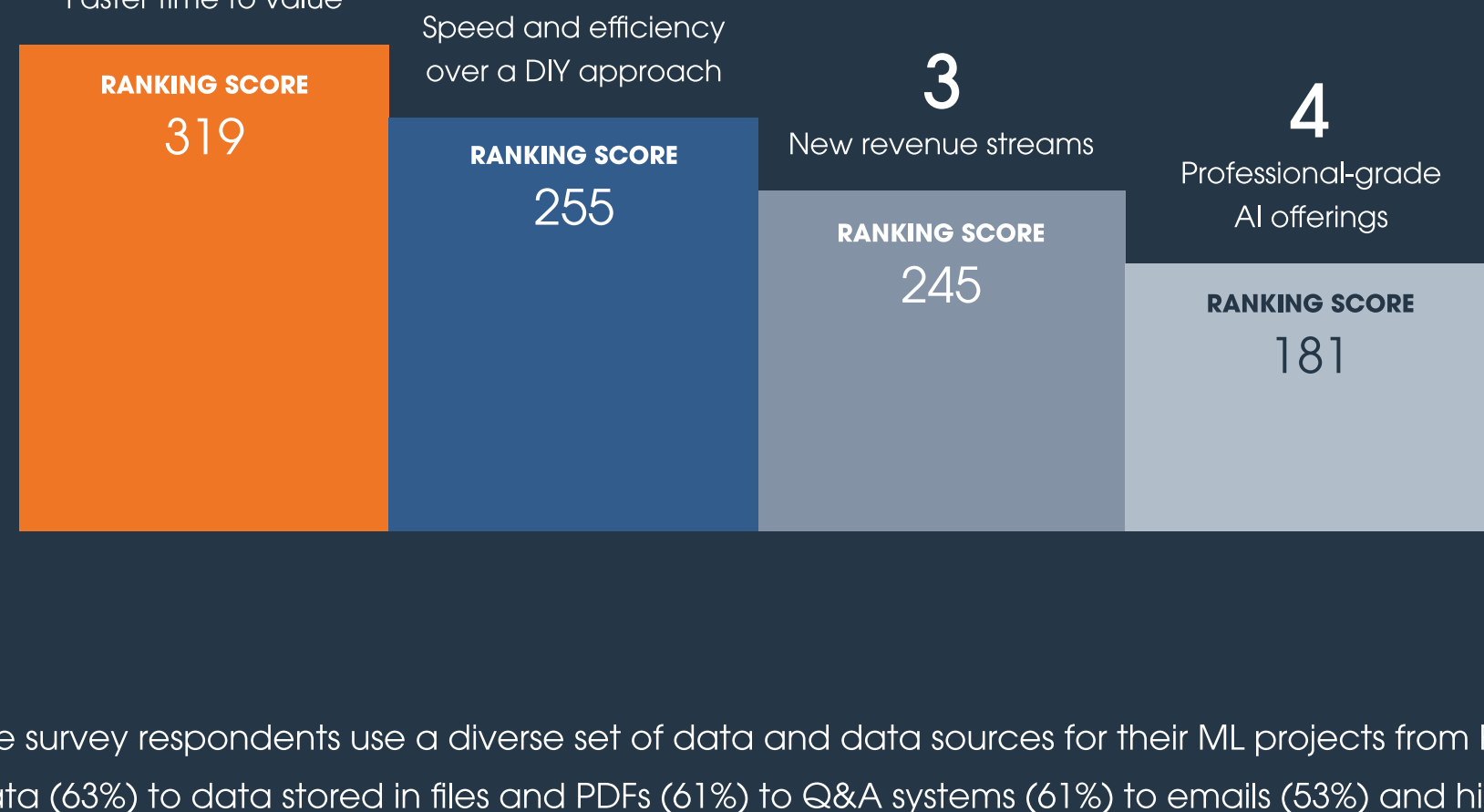
Which part of the ML journey takes the longest time for your organization?



Leaders require accuracy in ML to make sense of their heterogeneous data

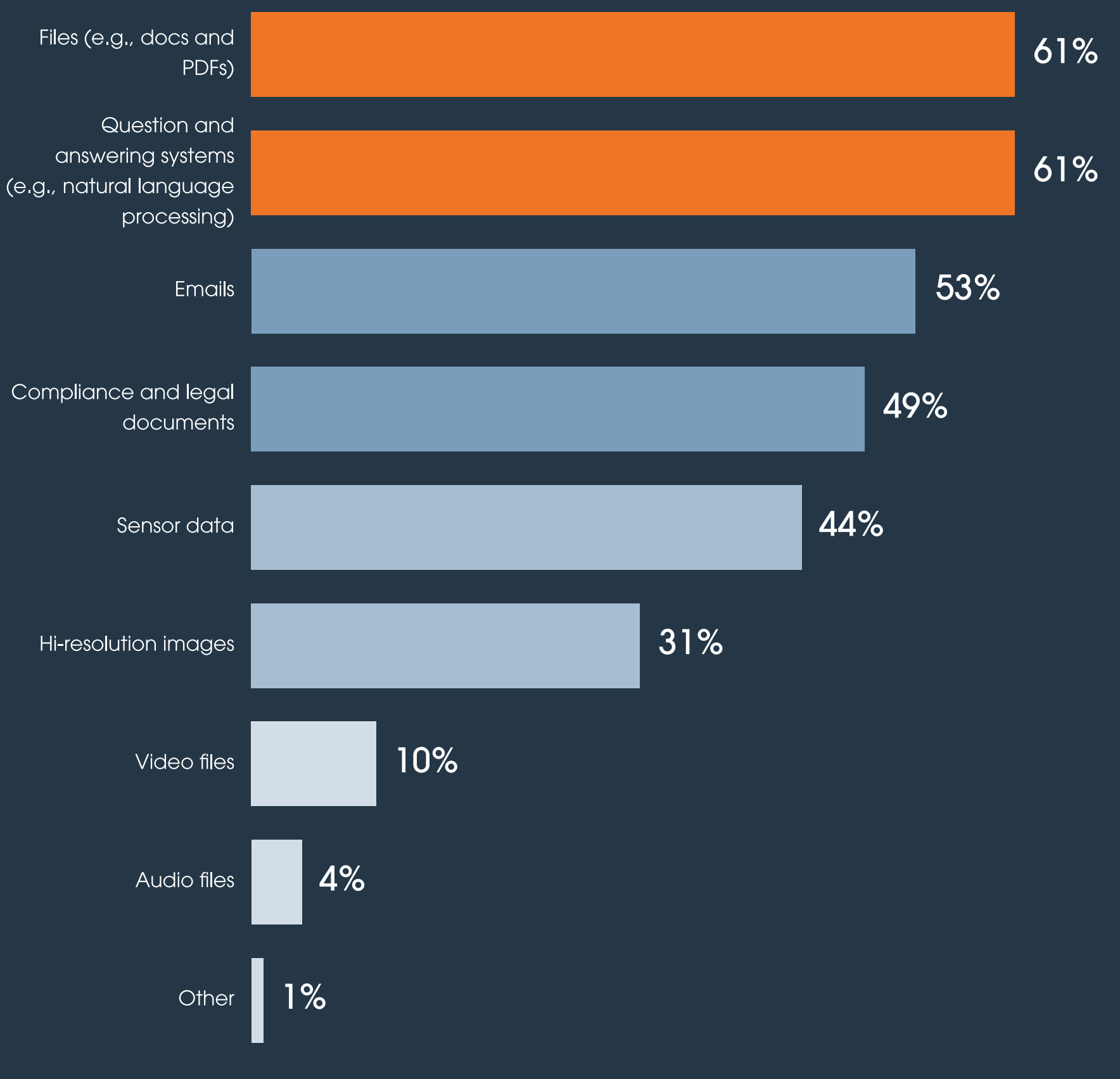
To gain a competitive edge using ML, most leaders are hoping to optimize their current operations; 42% rank faster time to value as the most important ML benefit to achieving a competitive advantage. The second most important in overall ranking is speed and efficiency over a DIY approach. Unlocking a new revenue stream and professional-grade AI-powered offerings are seen as less important as competitive advantages.

Please rank the following ML benefits in order of importance from highest (most important) to lowest (least important) in helping you achieve competitive advantage.



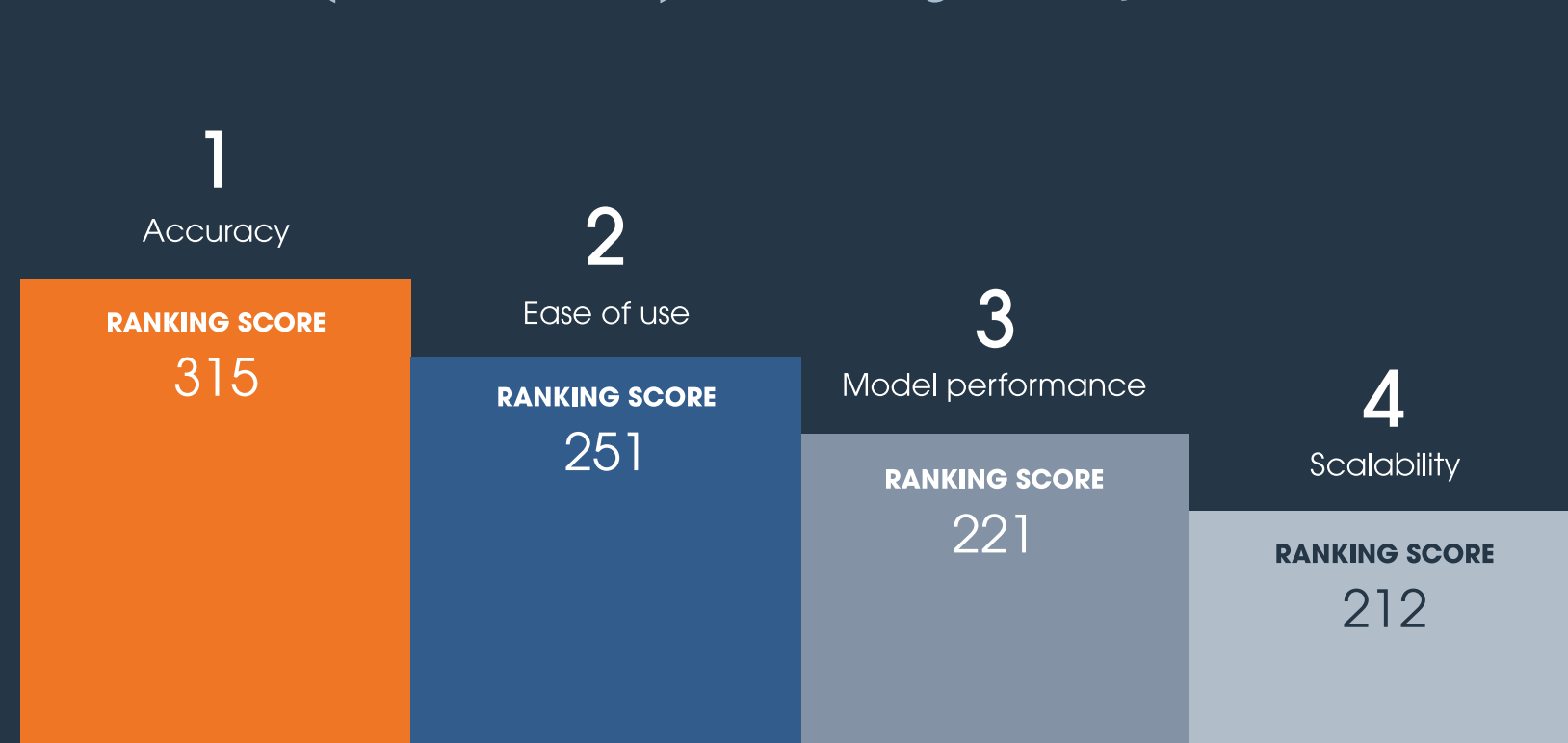
The survey respondents use a diverse set of data and data sources for their ML projects from ERP data (63%) to data stored in files and PDFs (61%) to Q&A systems (61%) to emails (53%) and hi-resolution images (31%).

When thinking about your ML projects, what data types do you primarily target today? (Select all that apply)



Survey respondents rank accuracy and ease of use as the top two most important attributes of ML, with 47% of respondents ranking accuracy as most important and 31% ranking ease of use as most important.

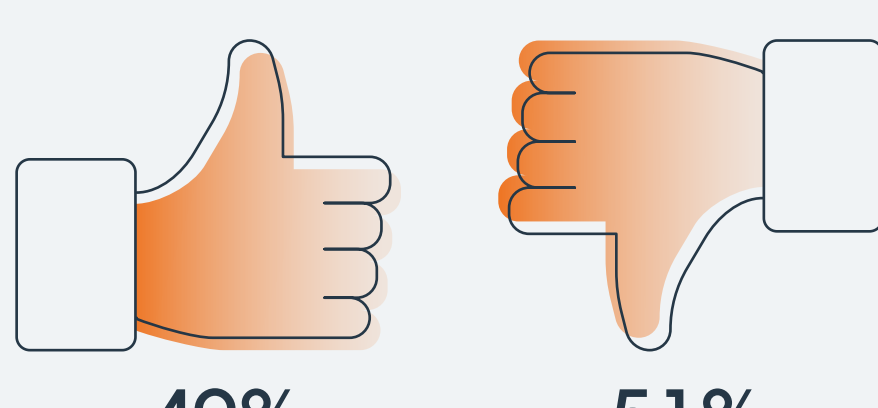
Please rank the following ML attributes in order of importance from highest (most important) to lowest (least important) in achieving your objectives.



51% of leaders are underinvested in deep learning, but 37% of them will be increasing the priority of ML initiatives in the next 6 months

A closely contested question: 51% of leaders feel that they are underinvested in deep ML while 49% believe that they are properly invested.

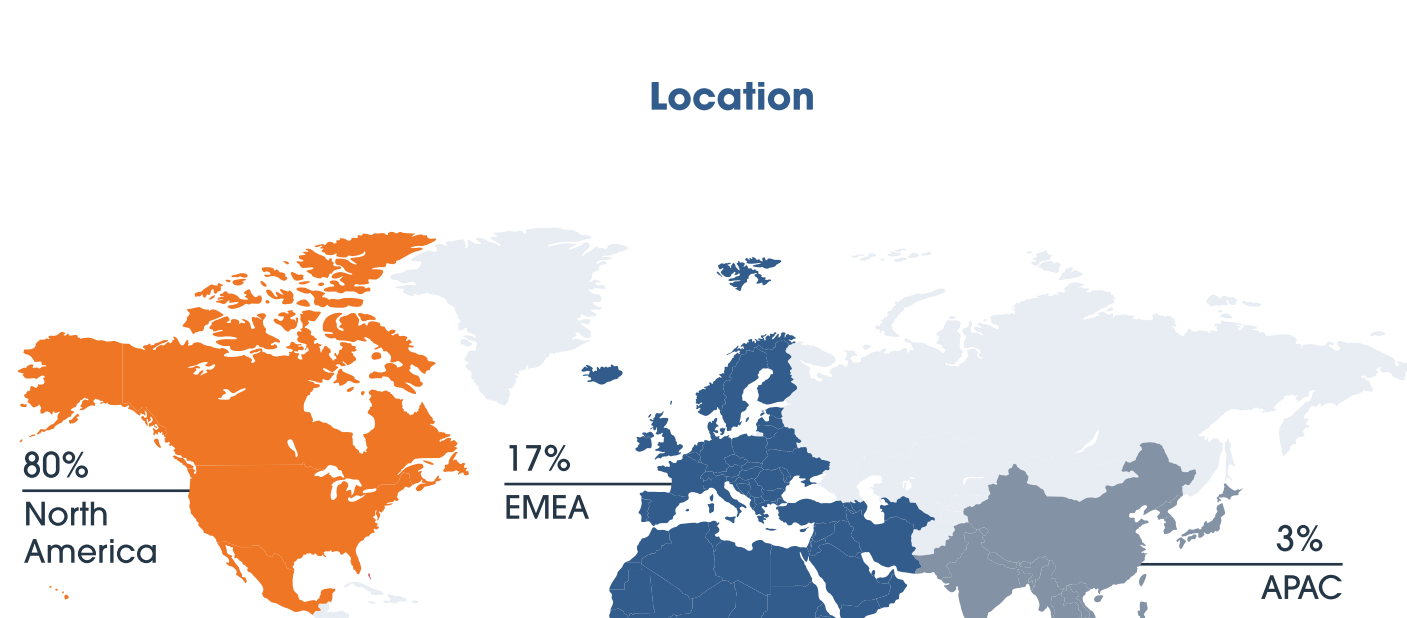
In your opinion, what is your current investment level in deep ML?



Amongst the respondents that believe they are properly invested in deep ML, their ML initiatives in the next 6 months will mostly remain the same (31%) or slightly increase in priority (24%). A higher percentage of those that are currently under-invested in deep ML are increasing the priorities of their ML initiatives (37%), while 39% will stay unchanged.

Respondent Breakdown

Location



Title

Company Size

