PULSE neo4j

# Technology Executive Priorities for Knowledge Graphs

A knowledge graph is a collection of data that leverages the inherent interconnectivity of data to add value to users, applications, and even machine learning models. By embracing the connections within the data, as well as the data itself, knowledge graphs give users complete visibility and help to accelerate business processes and decisions.

Tech executives are seeing the value in expanding and implementing knowledge graphs within their organizations over the next one to two years, with 88% believing that such a move could positively impact their company's bottom line. The majority of leaders (96%) believe that knowledge graphs improve productivity; a further 92% believe knowledge graphs improve machine learning accuracy.

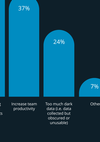
**Pulse surveyed 100 tech executives to better understand the desire to incorporate knowledge graphs organizationally, the potential barriers to adoption, and the business outcomes that respondents foresee.**

Data collected from July 17-August 7, 2020 | Respondents: 100 Tech executives

## Most tech leaders anticipate knowledge graphs will improve their bottom line.

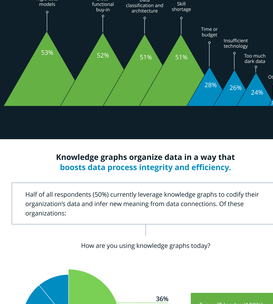
The majority of respondents (88%) believe that implementing or expanding their company's use of knowledge graphs would improve their bottom line.

Would implementing or expanding the use of knowledge graphs have a positive impact on your company's bottom line in the next 24 months?



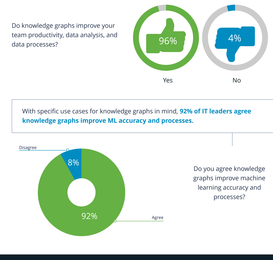

The top three reasons these tech executives are looking to use knowledge graphs more broadly are to improve ML/AI systems (60%), **open new revenue streams (50%)**, and connect data silos to make information more accessible (50%).

What are the **top 3 outcomes** your team hopes to derive by your current or future use of knowledge graphs?




Despite the fact most leaders have an appetite for knowledge graph implementation, rigid data models (53%), cross-functional buy-in (52%), data classification and architecture (51%), and skill shortages (51%) are the biggest barriers standing in the way.

What are the **3 biggest barriers** preventing your company from expanding the adoption of knowledge graphs?




## Knowledge graphs organize data in a way that boosts data process integrity and efficiency.

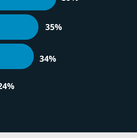
Half of all respondents (50%) currently leverage knowledge graphs to codify their organization's data and infer new meaning from data connections. Of these organizations:

How are you using knowledge graphs today?


Every IT leader (100%) who currently uses knowledge graphs says they're important to driving their company's data analytics processes.

Whether they currently use knowledge graphs or not, the vast majority of respondents (96%) say knowledge graphs increase both team and process efficiency.

Do knowledge graphs improve your team productivity, data analysis, and data processes?




With specific use cases for knowledge graphs in mind, **92% of IT leaders agree knowledge graphs improve ML accuracy and processes.**


Do you agree knowledge graphs improve machine learning accuracy and processes?

## Most tech executives expect to use knowledge graphs more—especially to improve forecasting and analysis.

Nearly all respondents (97%) agree that their organization could use knowledge graphs more broadly.

Is there more potential at your organization for knowledge graph usage?




With that in mind, 89% of tech leaders have an active plan to expand knowledge graph initiatives over the next 12 months.




Is your company planning to expand your knowledge graph initiatives in the next 12 months?

The top three initiatives that tech executives believe will derive the most benefit by increasing knowledge graph usage are forecasting and predictive analysis (55%), business automation (53%), and ML/AI (52%).

Which initiatives receive the biggest positive impact from the use of knowledge graphs?




## Respondent breakdown

REGION




TITLES




COMPANY SIZE

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