

Data Science for Everyone

What is data science?

A multidisciplinary approach to finding, extracting, and surfacing patterns in data through a fusion of analytical methods, domain expertise, and technology. To monetize and realize value, organizations need to infuse analytics into business processes and operations.



Who uses data science?

“The Hidden Talent”

aka Citizen Data Scientists: Use data and analytics on a daily basis to solve specific business problems with a point-and-click interface.



“The Specialists”:

Work across all functions and business units to solve problems and collaborate with IT to operationalize machine learning models. Attain buy-in and funding from executives.



“The Embedded”:

Focus on business unit-led initiatives and improving business operations.



“The Hotshots”:

Leverage a multitude of data sources to solve new problems, prototype solutions using machine learning, and run data science workflows at scale. Favor tools like R, Python, Scala, Hadoop, and Spark.



“The Untapped Potential”:

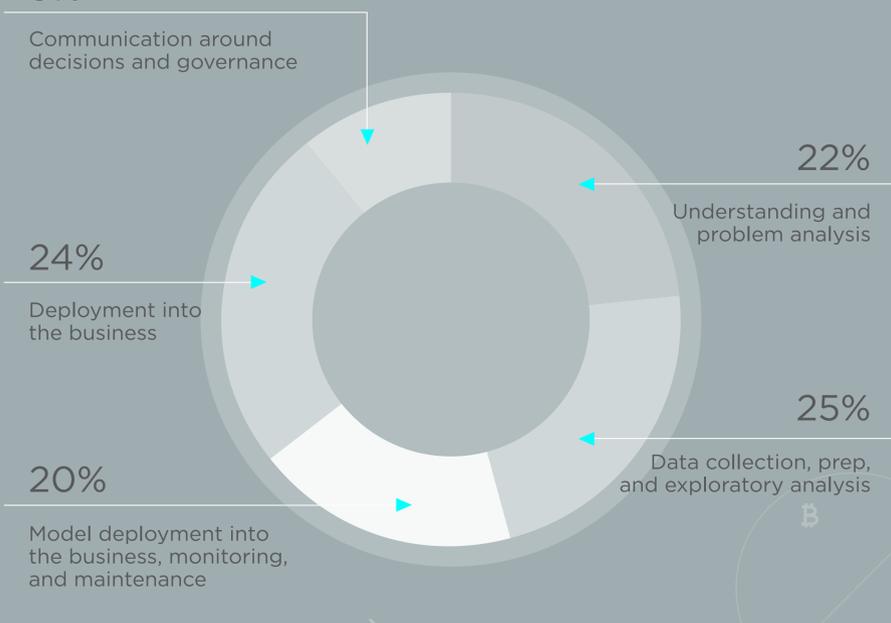
Want to jump in, but don't feel they have the support or training or don't work for an organization with technology offering reusable templates.



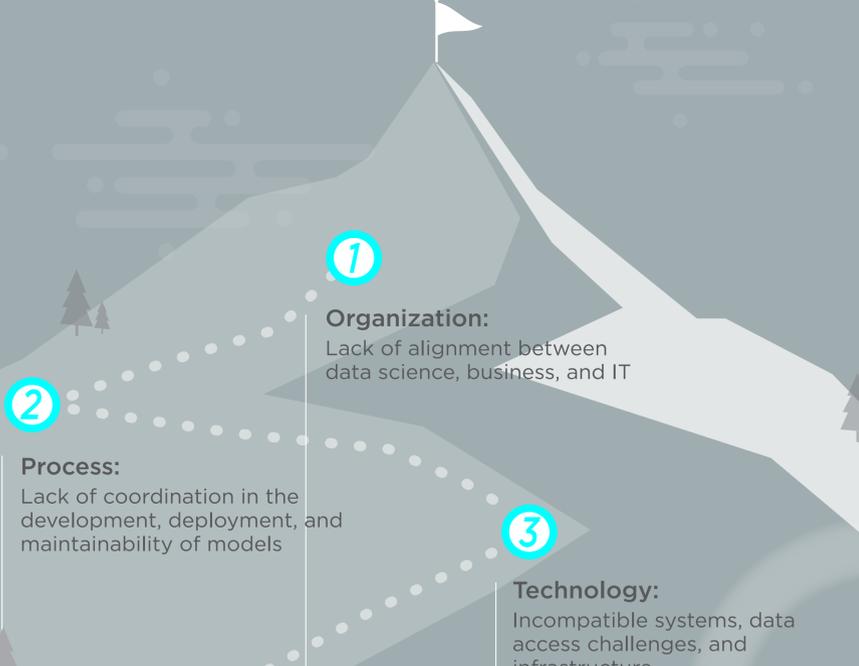
Data scientists require a broad combination of knowledge and skills:



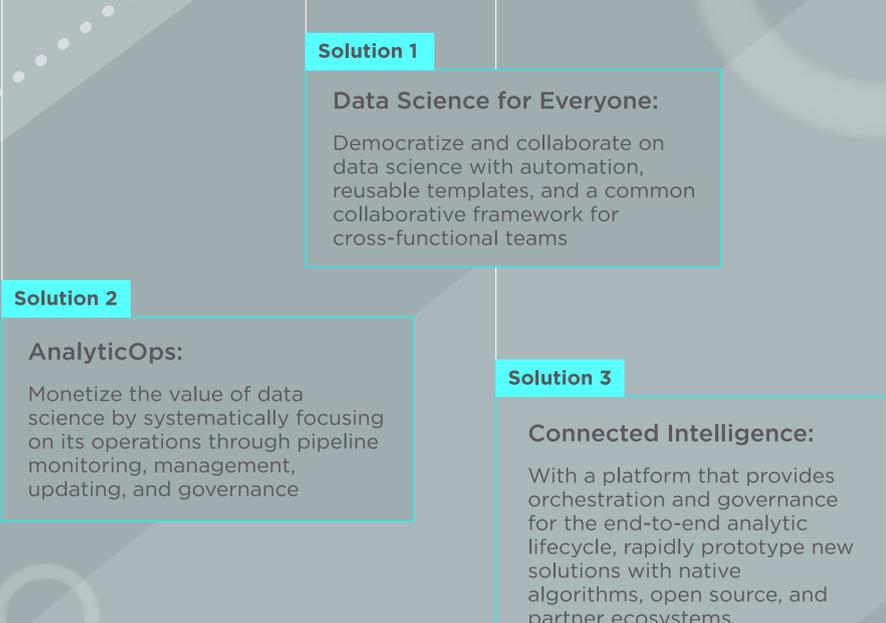
Proportion of time spent on data science tasks



Top challenges for data science:



How to solve these challenges:



By 2020*...

- ◆ The number of data and analytics experts in business units will grow at three times the rate of experts in IT departments, which will force companies to rethink their organizational models and skill sets.
- ◆ More than 40% of data science tasks will be automated, resulting in increased productivity and broader usage by citizen data scientists.
- ◆ The number of roles using modern analytics and business intelligence capabilities that are differentiated by augmented data discovery platforms will grow at twice the rate — and deliver twice the business value — as those that do not.



To learn more

visit TIBCO Data Science at www.tibco.com/products/data-science