# Data Science for Everyone

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.



## "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.



## with IT to operationalize machine learning models.

"The Specialists":

Work across all functions

and business units to solve

problems and collaborate

Attain buy-in and funding from executives. "The Hotshots": Leverage a multitude of

data sources to solve new

solutions using machine

problems, prototype

learning, and run data

"The Embedded":

business operations.

Focus on business unit-led

initiatives and improving

"The Untapped Potential": Want to jump in, but don't feel they have the support or

training or don't work for an

offering reusable templates.

organization with technology



## science workflows at scale.

Favor tools like R, Python, Scala, Hadoop, and Spark.





Domain Expertise/ Business Knowledge collaboration,



teamwork, and

communication

geospatial analytics,

and data visualization

24% Deployment into the business

and exploratory analysis

deployment,

monitoring, and

management

Data collection, prep,

22%

25%

Understanding and

problem analysis

20%

Model deployment into

and maintenance

the business, monitoring,

9%

Communication around

decisions and governance

Organization: Lack of alignment between data science, business, and IT

Lack of coordination in the

maintainability of models

development, deployment, and

**Solution 2** 

**AnalyticOps:** 

**Process:** 

on its operations through pipeline monitoring, management, updating, and governance

skill sets.

Monetize the value of data

### Democratize and collaborate on data science with automation, reusable templates, and a common collaborative framework for

**Solution 1** 

## **Solution 3** science by systematically focusing **Connected Intelligence:**

cross-functional teams

**Data Science for Everyone:** 

partner ecosystems The number of data and analytics experts in business units will

With a platform that provides

orchestration and governance

lifecycle, rapidly prototype new

algorithms, open source, and

for the end-to-end analytic

solutions with native

**Technology:** 

infrastructure

Incompatible systems, data

access challenges, and

scientists. The number of roles using modern analytics and business intelligence platforms that are differentiated by augmented data discovery capabilities will grow at twice the rate — and deliver twice the business value — as those that do not.

in increased productivity and broader usage by citizen data

grow at three times the rate of experts in IT departments, which

More than 40% of data science tasks will be automated, resulting

will force companies to rethink their organizational models and

To learn more

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