

The background of the entire page is a complex, abstract pattern of thin, overlapping lines in various colors including blue, red, orange, and brown. These lines are scattered across the white background, creating a sense of dynamic movement and data flow.

Welcome to the DataOps Revolution!

The Definitive Data Operations Report

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**THE GOAL OF DATAOPS IS TO
DELIVER DATA TO THE PERSON,
SYSTEM, OR APPLICATION THAT
CAN TURN IT INTO BUSINESS
VALUE.**

Just as cloud computing has changed how we manage thousands of servers, Data Operations will change how we manage thousands of datasets from hundreds of sources.

INTRODUCTION

Welcome to the Data Operations Revolution

The amount of data on earth is expanding at a rate greater than Moore's Law, on track to grow to 180 zettabytes by 2025. Companies in all industries want to better leverage data for machine learning and artificial intelligence to add business value. Often, companies need data that exists outside of their enterprise boundaries. Workflows for inter-company data collaboration are not supported by traditional tools and processes. We need a new way.

The goal of DataOps is to deliver data to the person, system, or application that can turn it into business value. That value could be an input into a model, an analytical insight, or even a revenue-generating data product. DataOps, like operations on a factory floor, controls the process of production that turns inputs into outputs.

This first-of-its-kind survey asked hundreds of data professionals about how they derive value from data. This report examines the results to understand the current landscape and the future outlook for DataOps. Key findings include:

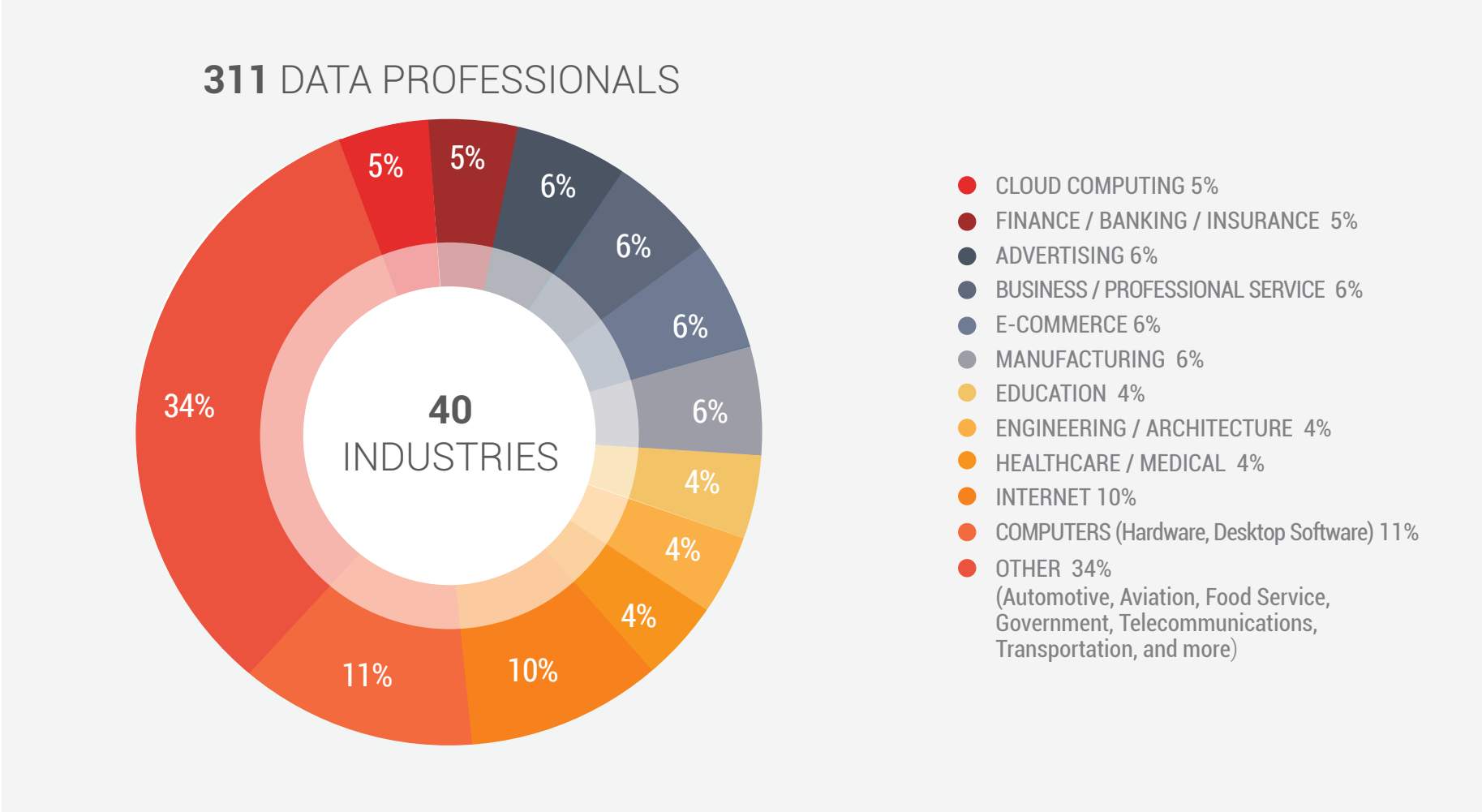
- Companies need to elevate DataOps into a core function if they want to maximize data value
- Inter-company data collaboration is growing and will become the norm
- Machine Learning is happening in every industry and fueling data demand

Read on to learn more. Welcome to the Data Operations Revolution.

METHODOLOGY

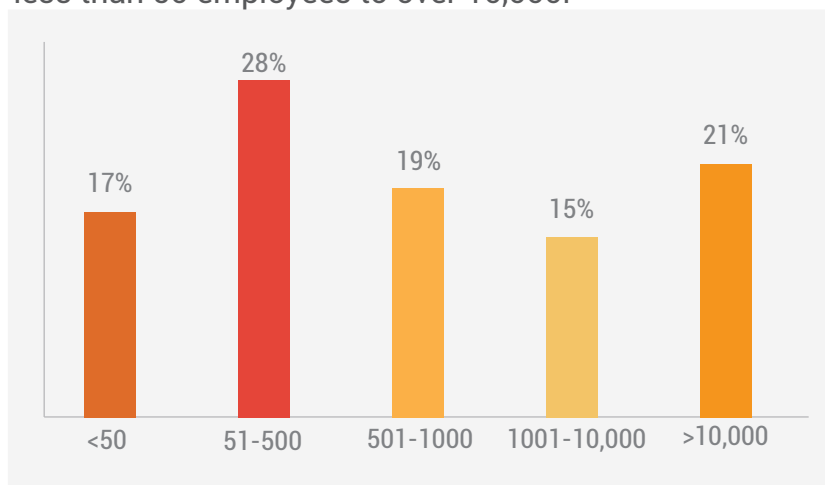
SURVEY

We surveyed 311 data professionals from over 40 industries. The respondents included people working in tech companies as well as in healthcare, education, finance, and more.



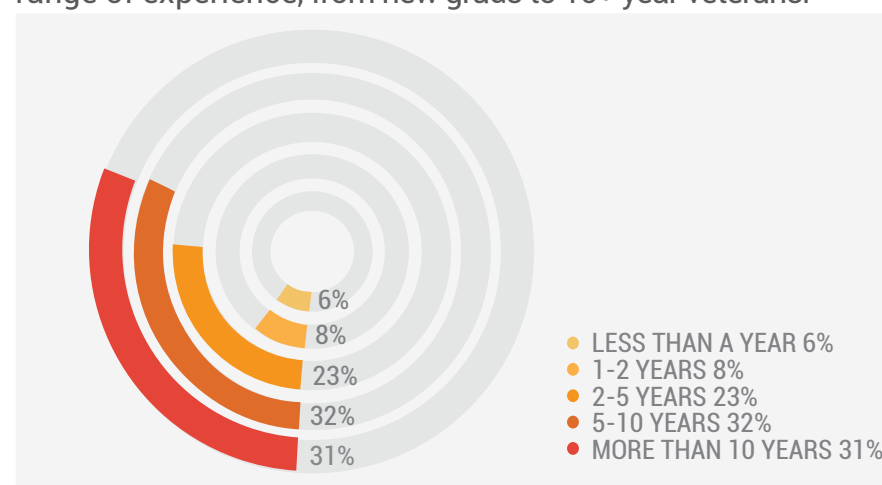
SIZE OF COMPANY

Companies represented in the survey ranged in size from less than 50 employees to over 10,000.



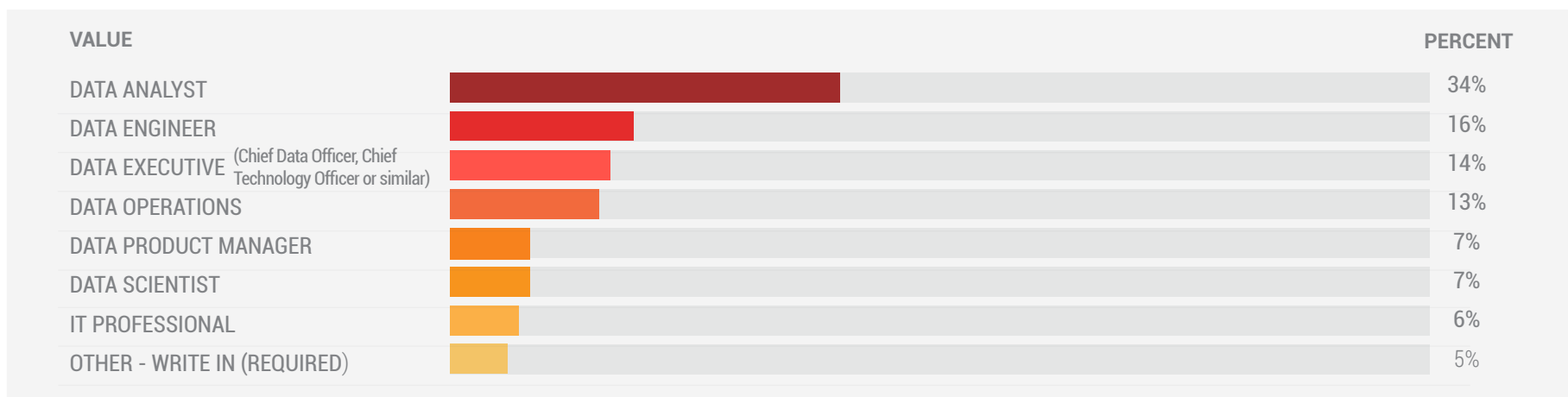
YEARS OF EXPERIENCE

The survey captured responses from professionals with a wide range of experience, from new grads to 10+ year veterans.



ROLES

To qualify for this survey, respondents must primarily and consistently work with data in their jobs. We received responses from analysts through Chief Data Officers.

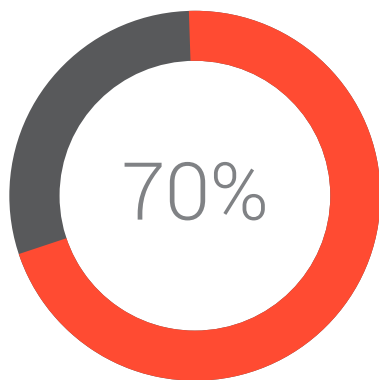


DATA OPERATIONS OUTLOOK

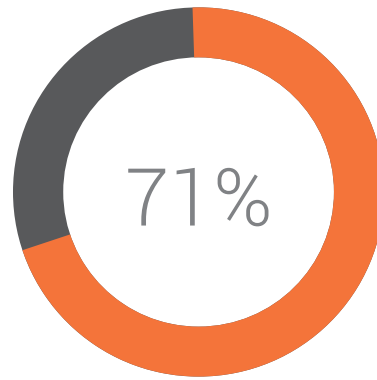
The hiring outlook for the Data Operations industry in 2017 is robust. As the volume, variety, and velocity of data continues to grow (more on that later), more and more companies will bolster their DataOps capabilities.

In fact, 70% of respondents said their company has plans to hire in the DataOps function in the next 12 months. When we exclude traditionally data-focused industries such as Computers, Cloud Computing, E-Commerce, and Internet, 63% of respondents from the remaining industries have plans to hire in the next 12 months. We see similar intent regardless of company size.

THIS IS NOT A TECH TREND, BUT A BUSINESS TREND.



COMPANIES 10K+



COMPANIES LESS THAN 1,000



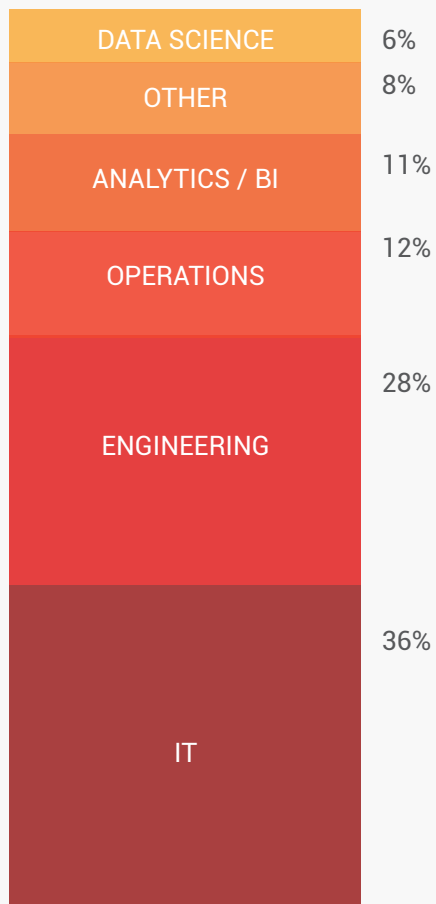
PERCENT OF ALL COMPANIES THAT PLAN TO HIRE IN DATAOPS IN NEXT 12 MONTHS.



EXCLUDING TRADITIONALLY FOCUSED INDUSTRIES THAT PLAN TO HIRE IN DATAOPS IN NEXT 12 MONTHS

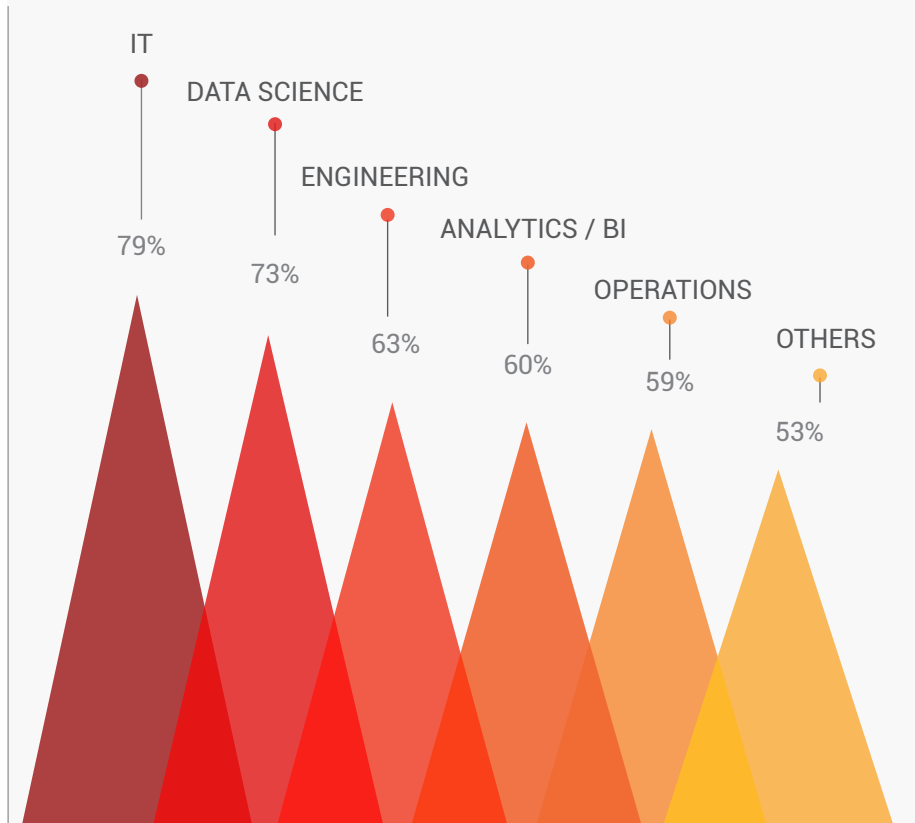
DATAOPS IN THE ORGANIZATION

Responsibility for Data Operations is split throughout the organization, with most practitioners sitting within IT or Engineering. Only 12% of respondents reported into an Operations function. The breadth of data professionals across teams suggests that there are few companies today where the DataOps function is centralized.



FUNCTIONS PLANNING TO HIRE

More respondents in IT organizations (79%) said they planned to hire in DataOps in the next year. Data Science was next, with 73% planning to hire. It seems there isn't a trend to consolidate this function in the next 12 months, as even functions like marketing and product management have plans to hire for DataOps.



DATA DRIVEN DECISION MAKING

An important trend in business has been to empower all users to access the data they need to make decisions in their jobs. And for the most part, data professionals agree that business units are empowered to perform their own analyses. The vast majority – 67% – agree or strongly agree with this statement. Only 14% of data professionals disagreed.

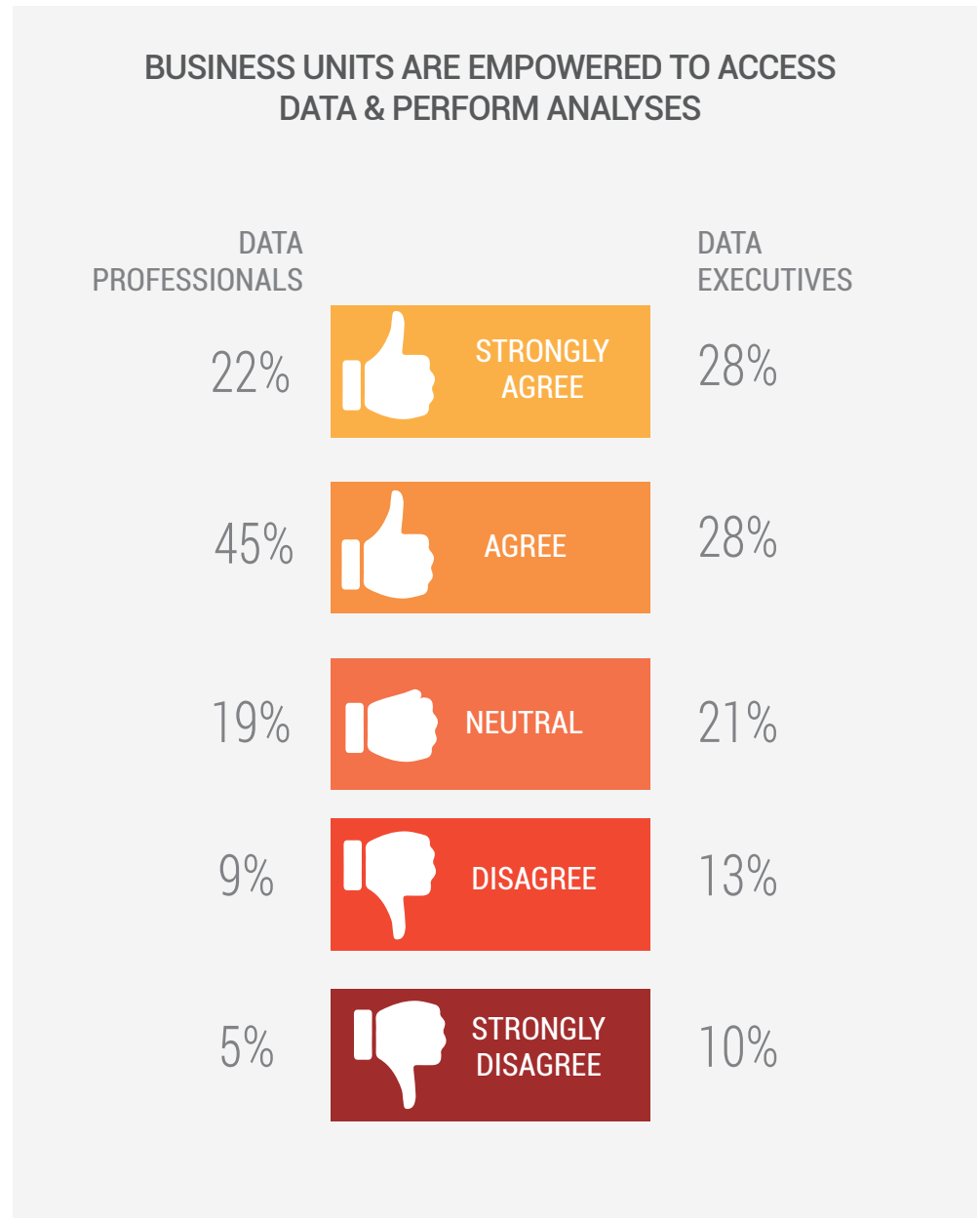
However, when we further examined sentiment by role, a more concerning image emerged. Only slightly more than half – 56% – of data execs (CDOs, CTOs, and similar) agreed BU's are empowered. The percent that was neutral on the subject was approximately the same as data professionals, **but the percentage that disagreed was 23%.**

DATA PROFESSIONALS

67% 14%
AGREED **DISAGREED**

DATA EXECUTIVES

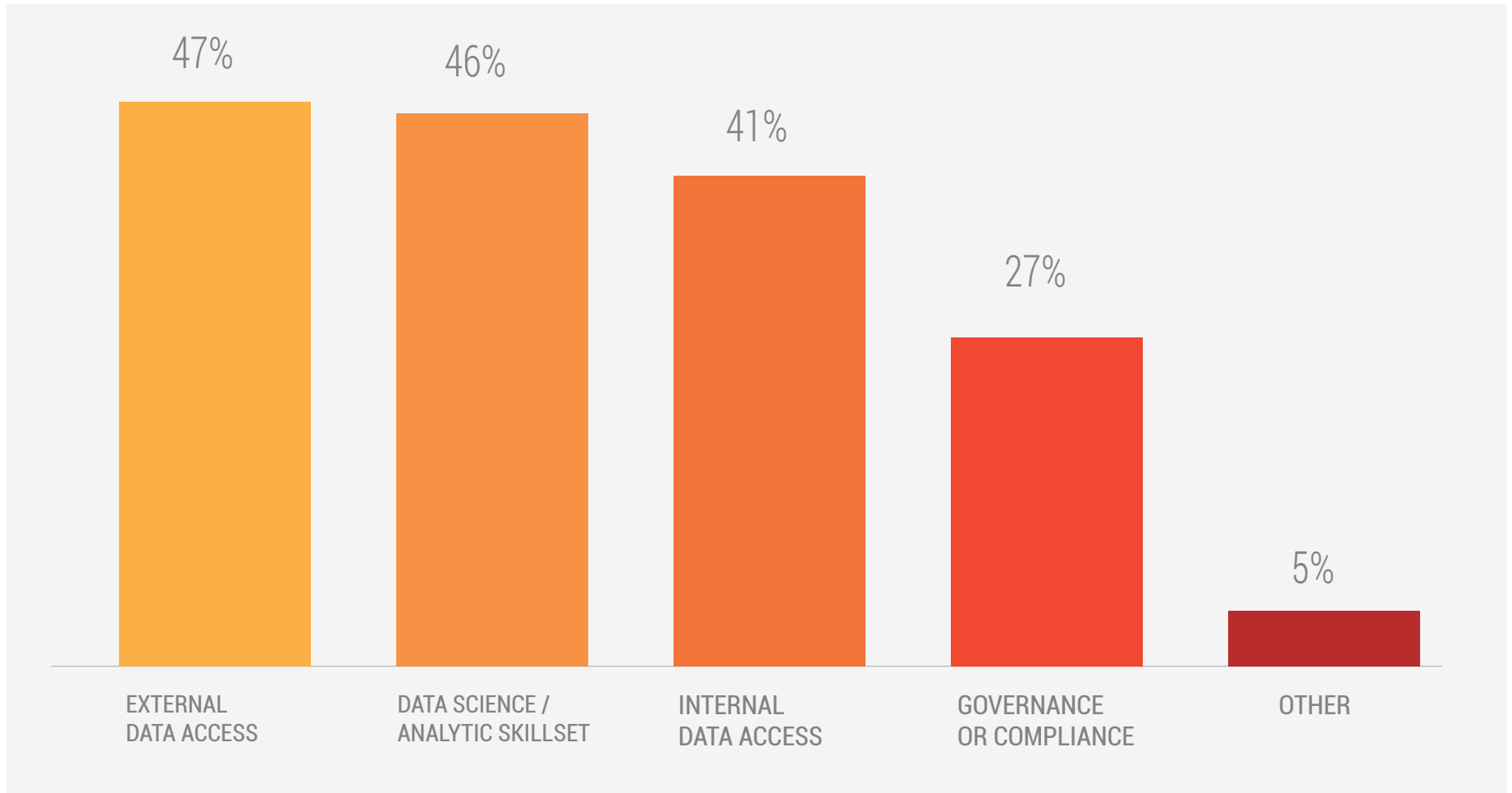
56% **23%**
AGREED **DISAGREED**



There is disconnect at the top, which suggests there are business unit struggles that execs may have visibility into. It would make sense that the folks building the data systems believe business units are empowered to perform their own analyses.

In spite of a general agreement that business units are empowered to perform their own analyses, when asked about the challenges to driving insights in their companies, 47% respondents pointed to external data while 41% cited access to internal data.

WHAT ARE THE CHALLENGES YOUR COMPANY FACES IN DRIVING MORE INSIGHTS FROM DATA? (SELECT ALL THAT APPLY)



MANAGEMENT SUPPORT

Any challenges remaining for business units to perform their own analysis are not for lack of trying. The vast majority (74%) of data professionals agree or strongly agree that their company and management understand the effort required to maintain their DataOps. Only 11% disagree with that statement.

However, once again, we see a different picture when it comes to Data Executives.

30% of Data Executives disagree or strongly disagree that their company understands the efforts required to maintain DataOps. This suggests that Data Executives may not be able to get the support they need to run effective DataOps functions. The consequence of this could be the data access challenges that respondents continue to note.

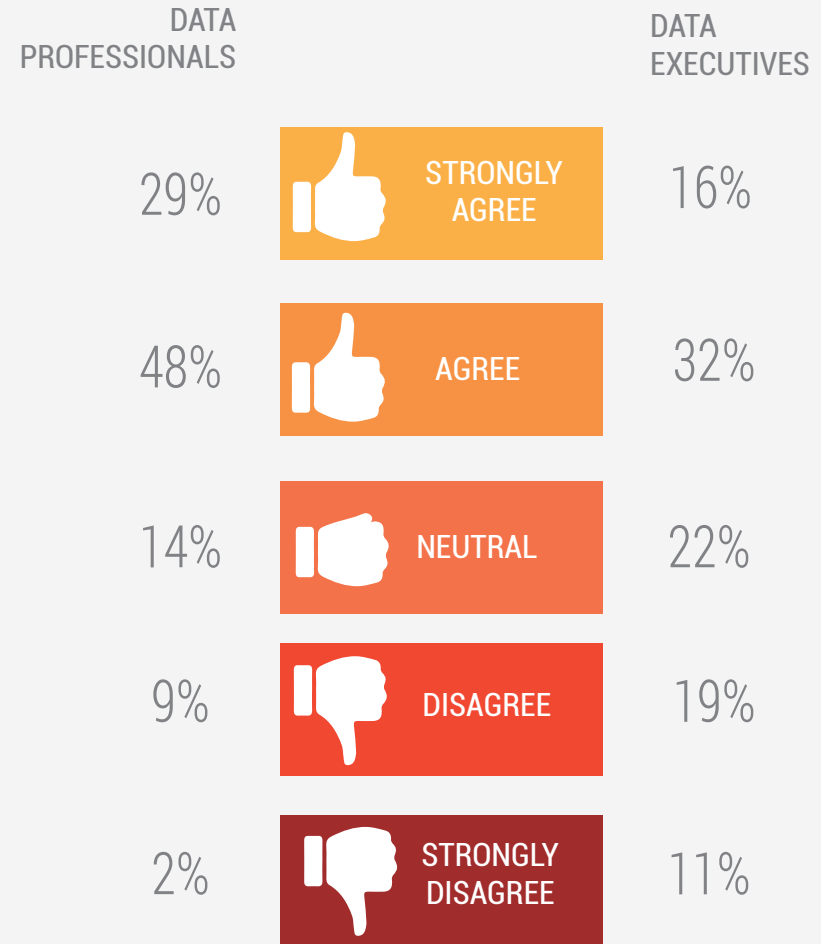
DATA PROFESSIONALS

74% **11%**
AGREED **DISAGREED**

DATA EXECUTIVES

48% **30%**
AGREED **DISAGREED**

MY COMPANY AND MANAGER UNDERSTAND THE EFFORT REQUIRED TO MAINTAIN OUR DATA OPERATIONS



WORKLOAD

Given the lack of support they feel, it should come as no surprise that Data Executives disagree with the statement “My current workload is sustainable.” Only 33% agree or strongly agree with this sentiment, 28% are neutral, and a whopping 41% of executives disagree or disagree strongly. Data leaders feel overworked, and think their efforts underappreciated by the company in general.

In contrast, 67% of data professionals outside the executive ranks agree their workload is sustainable. There seems to be an opportunity for Data Executives to delegate or put in place new processes. This might alleviate executive burnout and further enable employees to perform their own analyses.

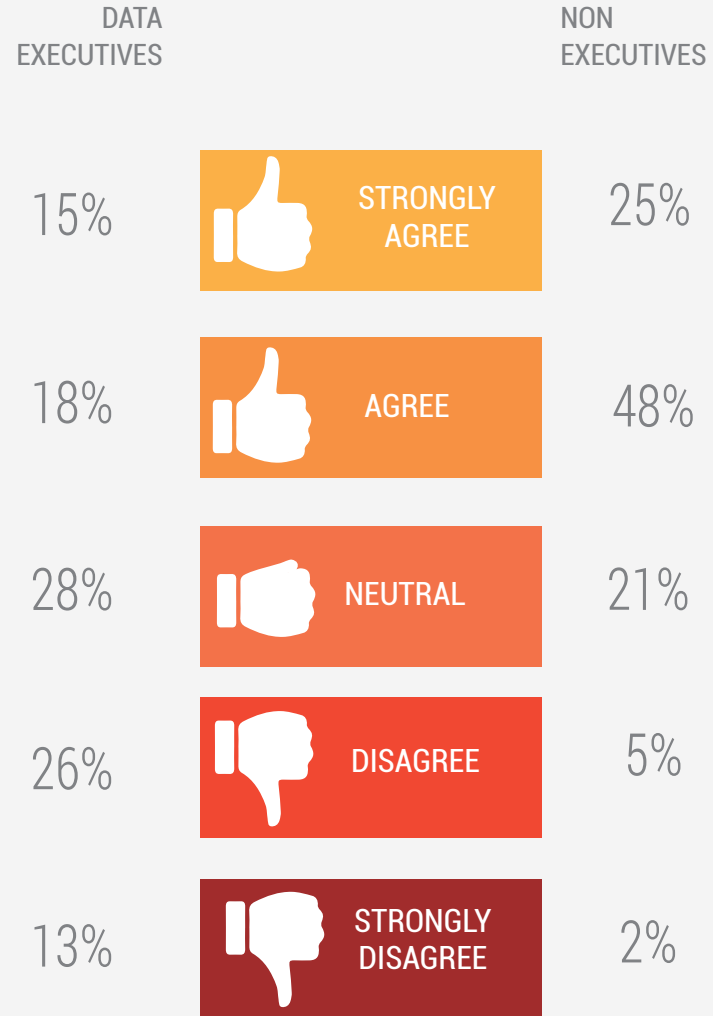
DATA PROFESSIONALS

48% **AGREED** 21% **NEUTRAL** 5% **DISAGREED**

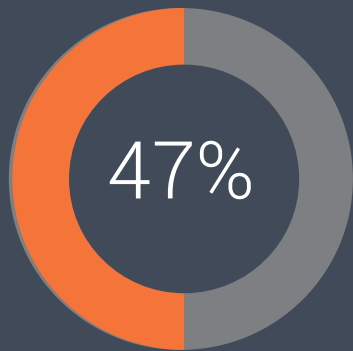
DATA EXECUTIVES

33% **AGREED** 28% **NEUTRAL** 41% **DISAGREED**

MY CURRENT WORKLOAD IS SUSTAINABLE



INTEGRATION, DATA PIPELINES, ETL JOBS, & TROUBLESHOOTING COMBINED TAKE UP ON AVERAGE

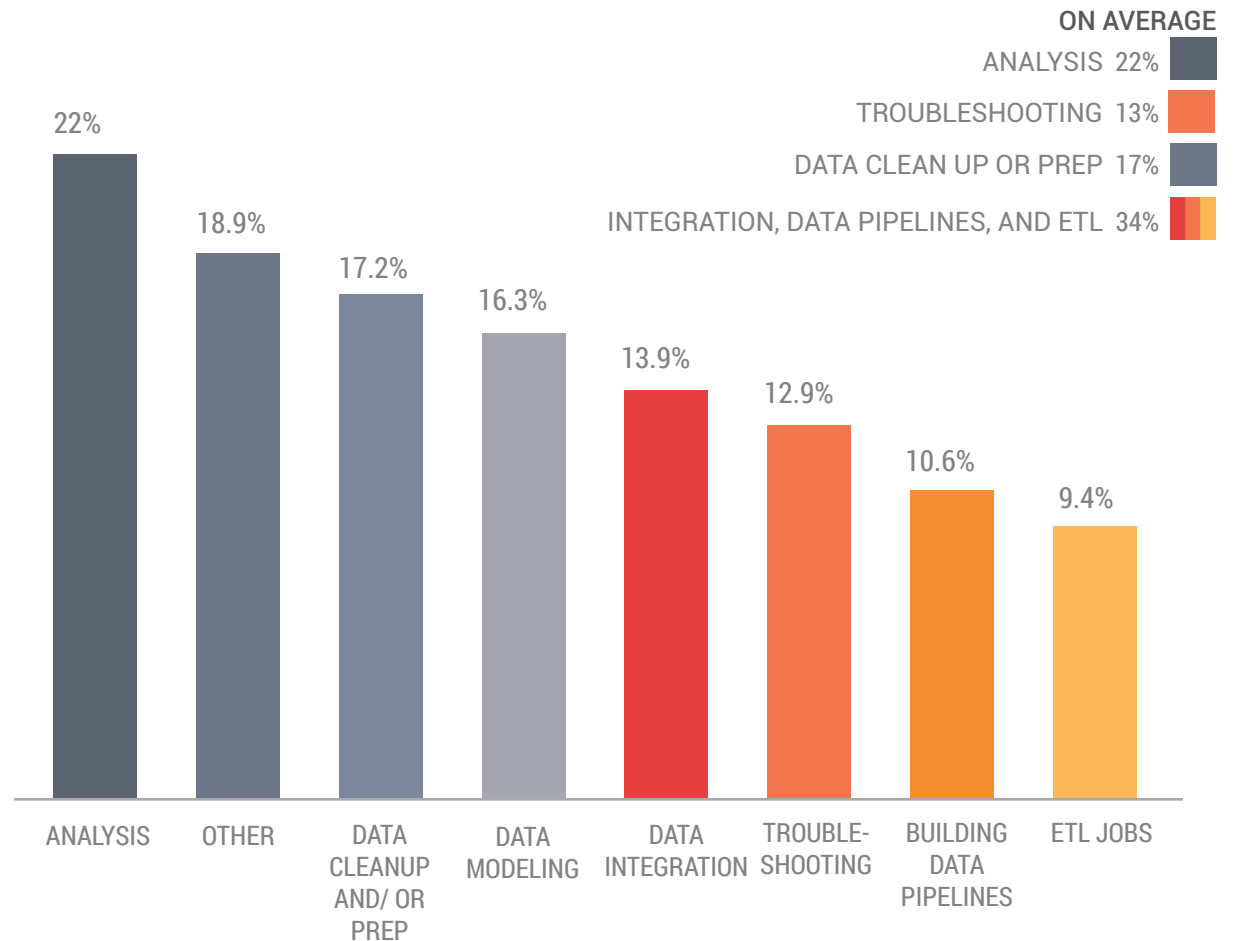


OF RESPONDENT'S TIME.

KEY DATAOPS ACTIVITIES

As one would expect, data professionals spend the most time on analysis. On average, data professionals spend 22% of their time on analysis, with some respondents spending 100% of their time on analysis, depending on job function. **Integration, troubleshooting, data pipelines, and ETL jobs combined take up on average 47% of respondent's time. These last tasks are considered central to data Operations.**

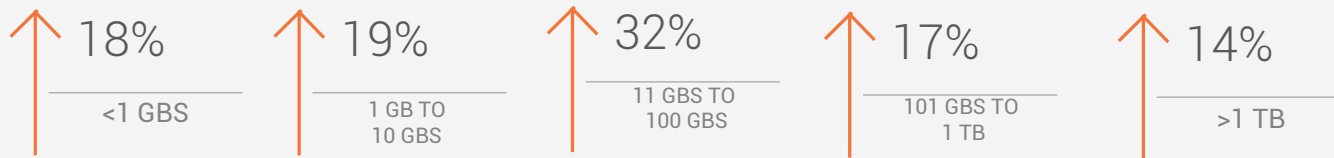
DATAOPS ACTIVITIES



DATA GROWTH

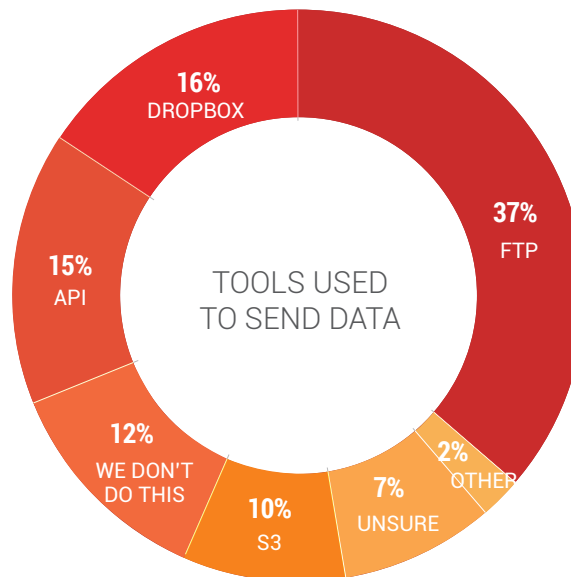
The need for hiring in DataOps becomes clear when we examine data growth in companies. **63% of respondents reported their data is growing at least 100 gigabytes a day. 13% of respondents reported data is growing at a rate of at least 1 terabyte a day.** One TB would hold 33 copies of the entire Star Wars saga!

DATA GROWTH PER DAY



Data at these companies is expanding by at least 300 GB to 30 TB a month (that's 2x the size of the American Library of Congress!). With data growing so quickly, the need to have efficient ways of ingesting and sharing has become crucial.

The most popular tools currently used to share data are FTP (at 37% of respondents) and Dropbox (second highest at 16%). **With data volumes increasing at a rate of 100GB - 1TB a day, it will be interesting to see how long these formats remain the most popular.**



63%

OF RESPONDENTS
REPORTED THEIR DATA
IS GROWING AT LEAST
100 GB A DAY

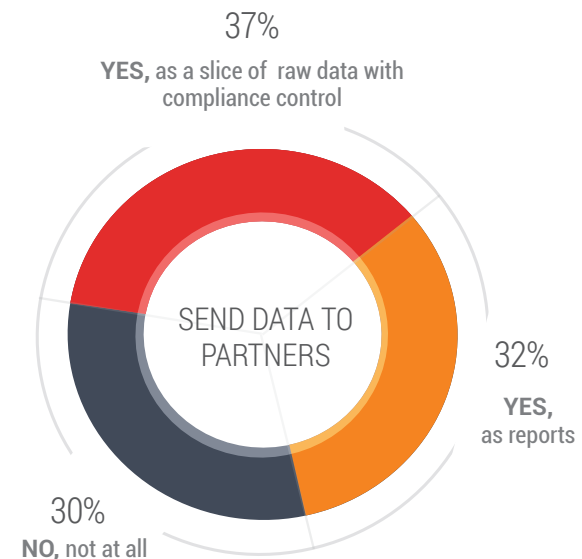
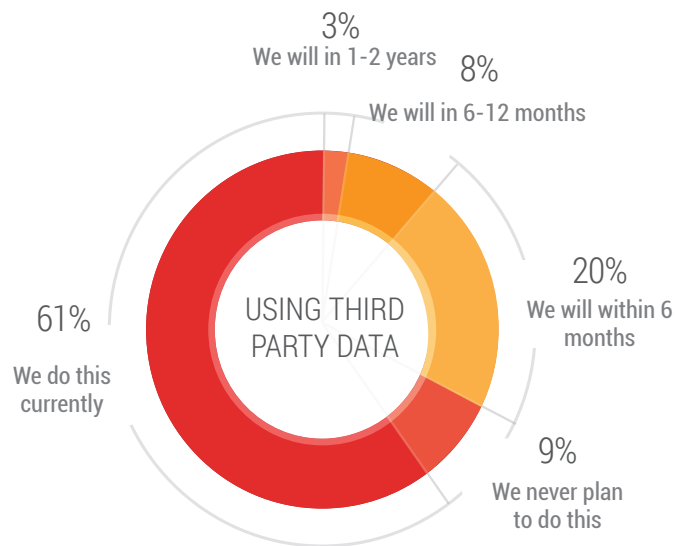
13%

OF RESPONDENTS
REPORTED THEIR DATA
IS GROWING AT LEAST
1 TB A DAY

DATA COLLABORATION

When asked if their company currently ingests, or has plans to, ingest data from a third party (either customers, suppliers, or vendors), an overwhelming 91% of respondents responded "Yes." A small 9% stated they never plan to ingest data from third parties.

Not only are almost all companies ingesting data, the vast majority are sending it too. The survey found that almost 70% of companies either currently share or have plans to share raw data or data reports with partners.



 **91% SAY YES**

when asked if their company currently ingests, or will, ingest data from a third party (either customers, suppliers, or vendors).

 **70% OF COMPANIES**

Either currently share or have plans to share raw data or data reports with partners.

MACHINE LEARNING IS EVERYWHERE

So what are companies doing with all that data moving here and there and everywhere? Our survey found that **70% of respondents are currently working at companies who have teams dedicated to either machine learning or artificial intelligence.** This is especially significant as the data represents respondents from over 40 different industries.

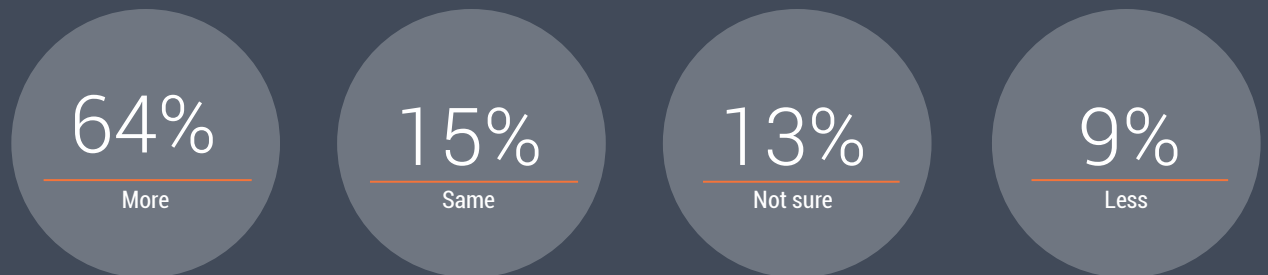
DO YOU HAVE TEAMS WORKING ON MACHINE LEARNING/ARTIFICIAL INTELLIGENCE?



Not only are 70% of companies already engaged in ML and AI, but 64% of respondents said their company plans to do more. Only 15% reported they will do the same amount and a surprising 9% stated they will be doing less.

Of those companies that currently do not have teams working on ML or AI, 34% of them responded that they will be doing so in the future.

MACHINE LEARNING ACTIVITY IN THE NEXT 6 MONTHS



The image features a dark blue background with a complex network of thin, curved lines in blue, orange, and pink. These lines radiate from several central points, creating a sense of dynamic movement and connectivity. Small circular nodes in orange and light blue are scattered throughout the network, representing data points or nodes in a system. The overall aesthetic is modern and technological, typical of data visualization or network diagrams.

WELCOME TO THE DATAOPS REVOLUTION

LOOKING FORWARD

**INTER-COMPANY
DATA
COLLABORATION
IS GROWING AND
WILL BECOME THE
NORM**

**COMPANIES
NEED TO ELEVATE
DATAOPS INTO
A CORE FUNCTION
IF THEY WANT TO
MAXIMIZE
DATA VALUE**

**MACHINE
LEARNING IS
HAPPENING IN
EVERY INDUSTRY
& FUELING DATA
GROWTH**

These trends demand a change to the way we approach Data Operations, from where it sits within the organization to which tools we use. Inter-company data collaboration at scale for machine learning requires scalable, repeatable processes.



About Nexla

Nexla is a scalable Data Operations platform that can manage inter-company data collaboration, securely and in real-time. Nexla automates DataOps so companies can quickly derive value from their data, with minimal engineering required. Our secure platform runs in the cloud or on-premise. It allows business users to send, receive, transform, and monitor data in their preferred format via an easy to use web interface.