

ONLINE SURVEY

# Data Analytics, Algorithms & Machine Learning



# Table of Contents

<b>Introduction &amp; Methodology</b>	<b>3</b>
<b>Respondent Profile</b>	
Primary Industry	5
Number of Employees	6
Current Job Function	7
<b>Key Findings</b>	
Current Status with Regard to Leveraging Data Analytics	9
Satisfaction with Specific Data Analytics Functions	10
Leveraging Predictive Analytics	11
Potential for Machine Learning to Enhance Data Analytics	12
Automation in Predictive Analytics & Competitive Advantage	13
Leveraging Automated Predictive Analytics	14
Leveraging Automated Machine Learning	15
Deterrants to Leveraging Machine Learning in Production	16
Companies Associated with Machine Learning Solutions	17
Resources for Implementing Machine Learning in Production	18
<b>About Informa Engage</b>	

# Introduction & Methodology

---

## OVERVIEW

Methodology, data collection and analysis by Informa Engage, on behalf of Dell.

Data collected March 8, through March 26, 2018.

Methodology conforms to accepted marketing research methods, practices and procedures.

## PRIMARY OBJECTIVES

Investigate various issues around the current and future use of use of analytics, predictive analytics and machine learning, including:

- Satisfaction with data analytics activities
- Key benefits and deterrents associated with the use of machine learning
- Companies associated with machine learning

## METHODOLOGY

On March 8, 2018, IT Pro Today emailed invitations to participate in an online survey to a net 118,083 subscribers.

By March 26, 2018, Informa Engage had received 315 completed surveys, for an overall response rate of 0.3%.

## RESPONSIVE MOTIVATION

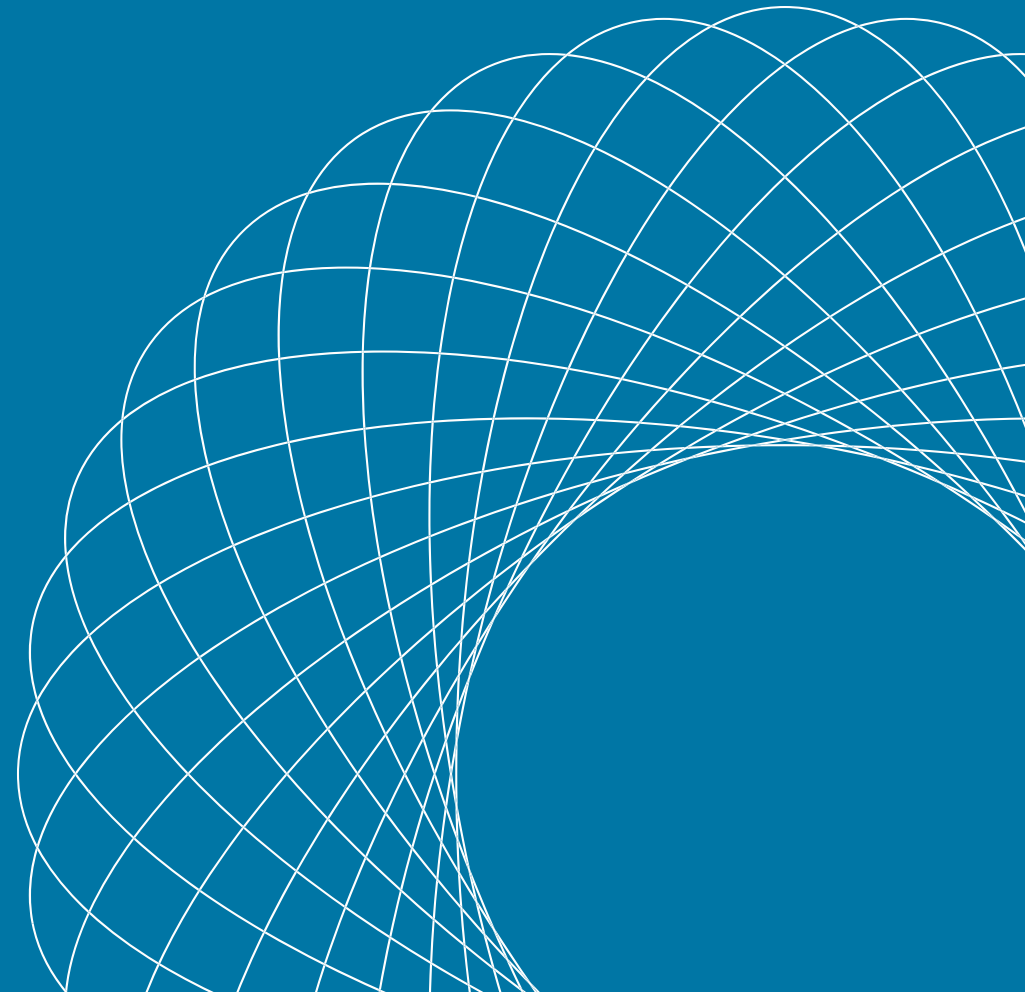
To encourage prompt response and increase the response rate overall, a live link to the survey was included in the email invitation to route respondents directly to the online survey.

The invitations and survey were branded with the IT Pro Today name and logo, in an effort to capitalize on user affinity for this valued brand.

Each respondent was afforded the opportunity to enter a drawing for one of four \$100 Amazon gift cards.

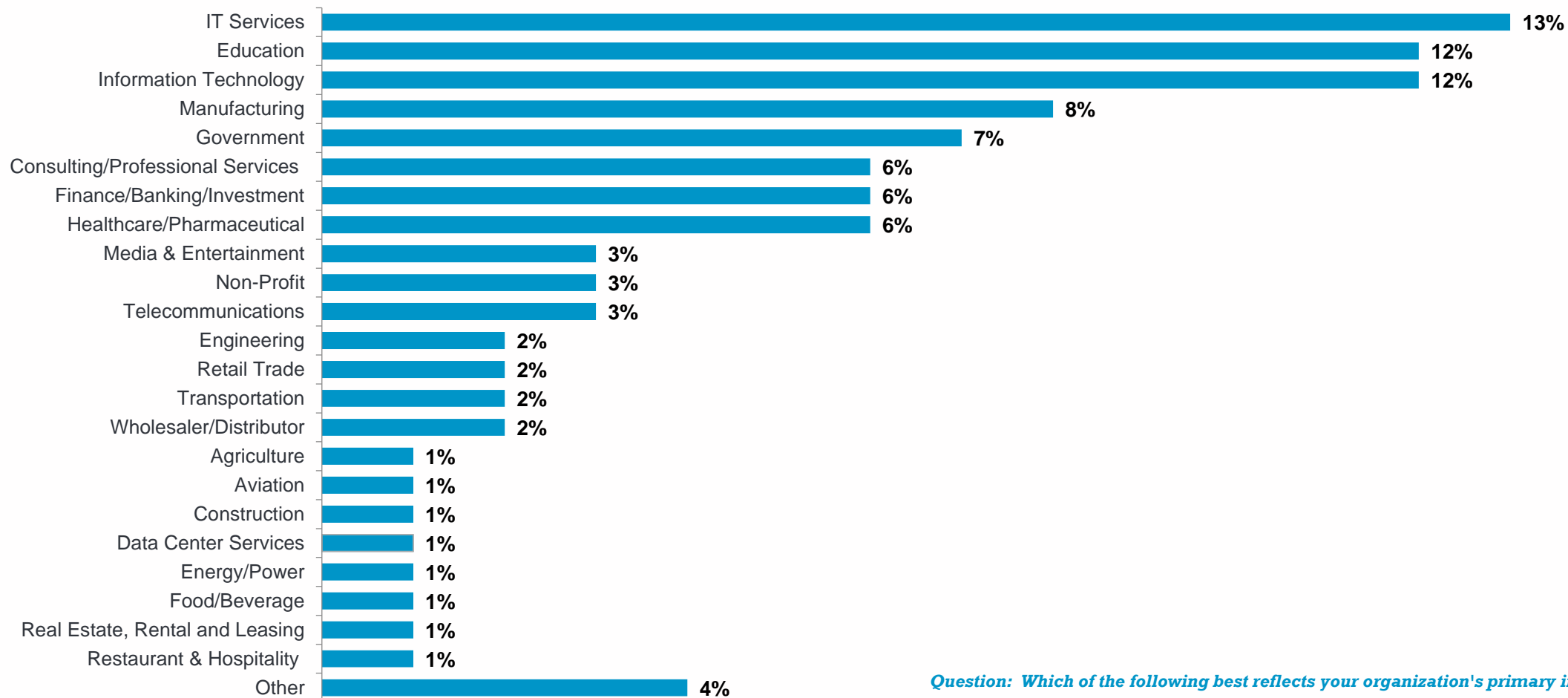
Follow-up emails were sent to non-respondents.

# Respondent Profile



# Primary Industry

A variety of industry types are represented in the sample, most commonly IT Services, Education and Information Technology.

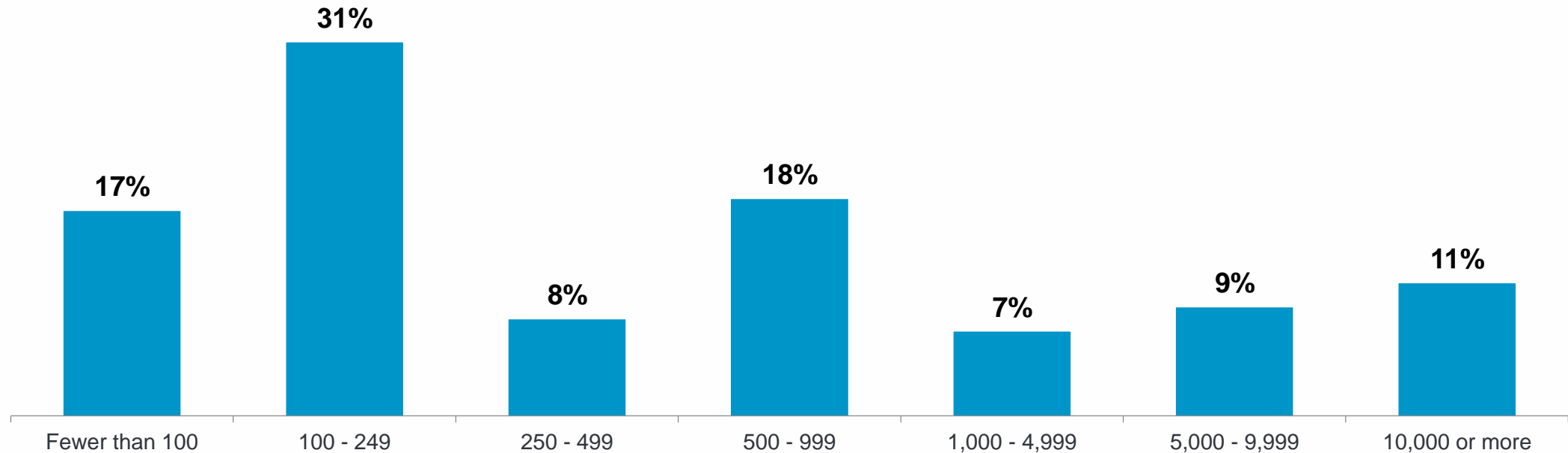


Question: Which of the following best reflects your organization's primary industry?

Base: All respondents (n=315).

# Number of Employees

Organizations of all sizes are represented in the sample: 17% from small organizations (<100 employees); 57% from mid-sized (100-999 employees); and 27% from enterprise (1,000+ employees).



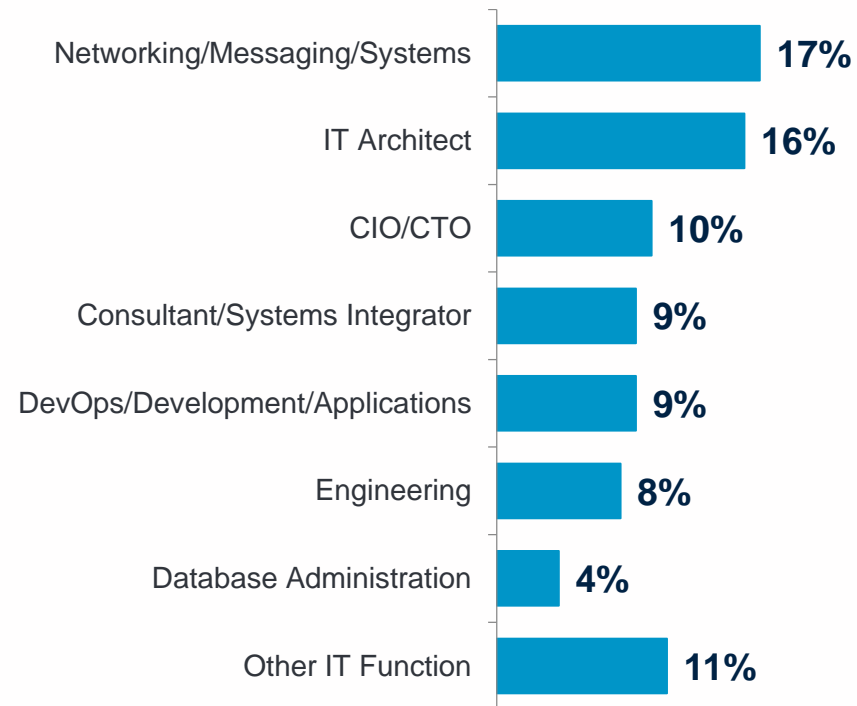
**Question:** *How many people are employed by your organization (at all locations)?*

*Base: All respondents (n=315).*

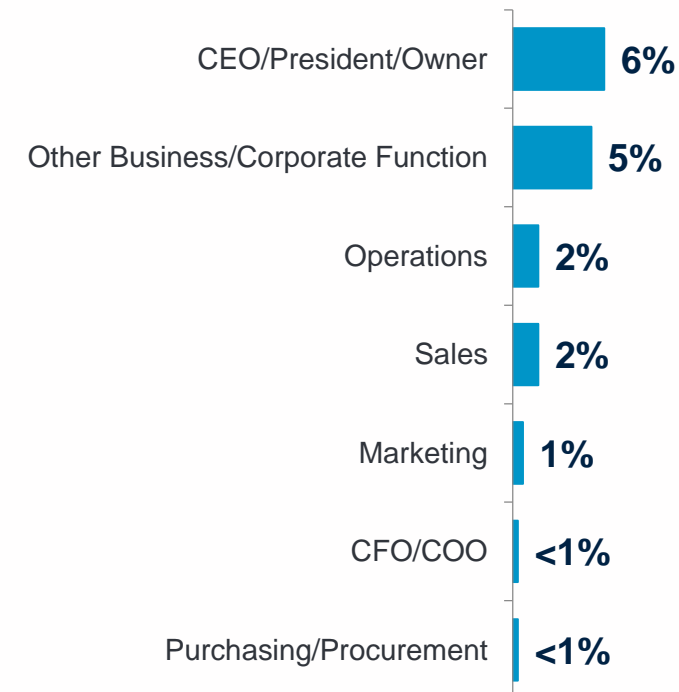
# Current Job Function

The majority of respondents hold IT job functions (84%), most commonly Networking/Messaging/Systems and IT Architects.

## IT Job Function (NET 84%)



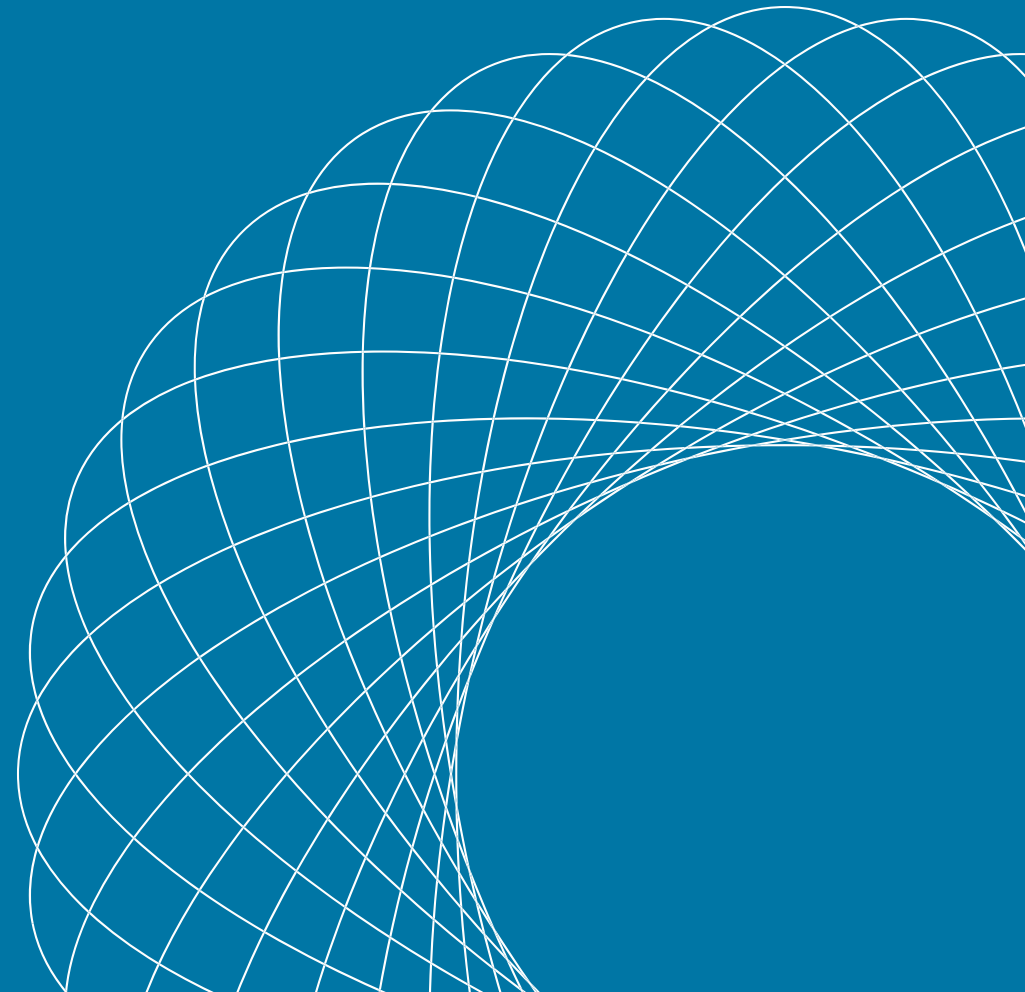
## Business Job Function (NET 16%)



**Question: Which one of the following best reflects your current job function?**

Base: All respondents (n=315).

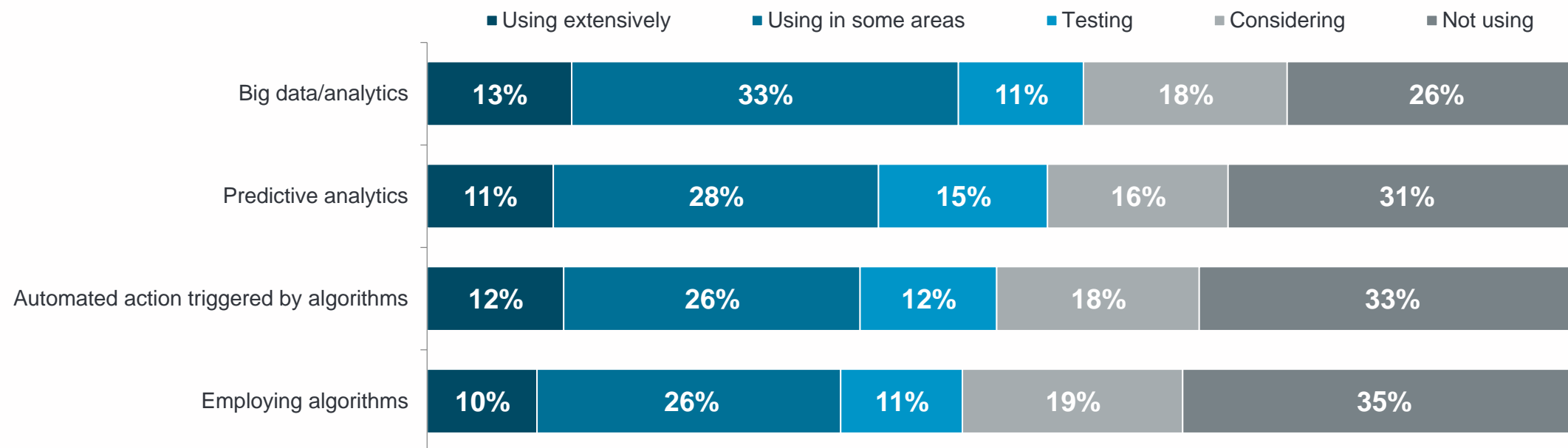
# Key Findings





# Current Status with Regard to Leveraging Data Analytics

Respondent organizations are most likely to be using big data/analytics (46%), followed by predictive analytics (39%), employing algorithms (36%) and automated action triggered by algorithms (38%). An additional 28%-30% of respondents report their organizations are either testing or considering each activity.

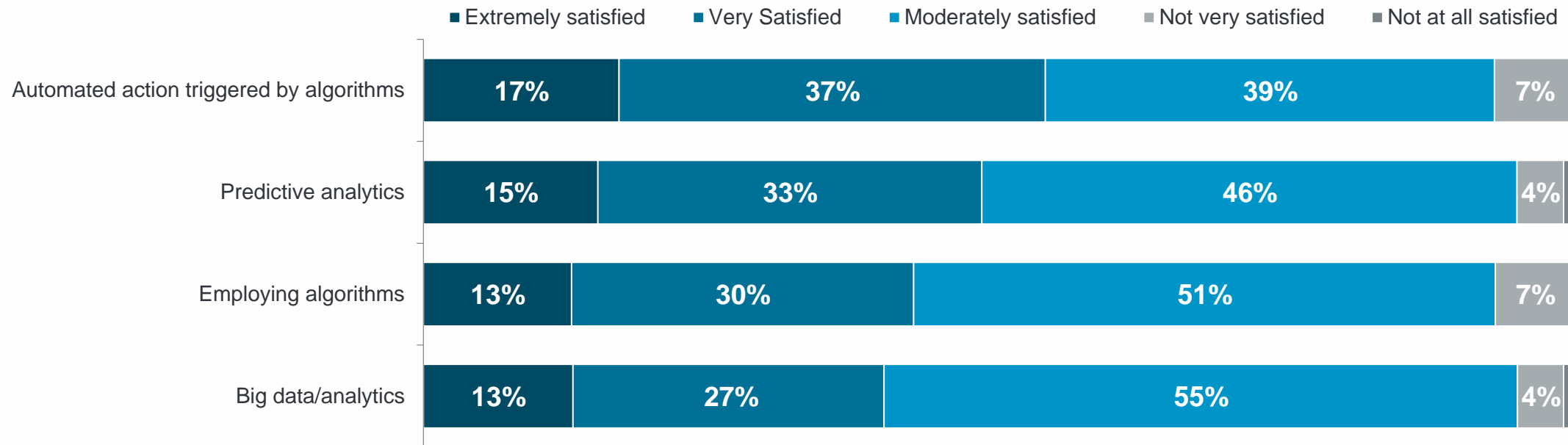


**Question: What is your organization's current status with regard to the following?**

Base: All respondents (n=315).

# Satisfaction with Specific Data Analytics Functions

Respondents expressed the highest satisfaction with the most advanced functionality: automated action triggered by algorithms (54% are “extremely” or “very satisfied”), followed by predictive analytics (48%). Interestingly, big data/analytics is associated with relatively lower levels of satisfaction, which may be driven in part by a lack of clarity around how to most effectively utilize that data.

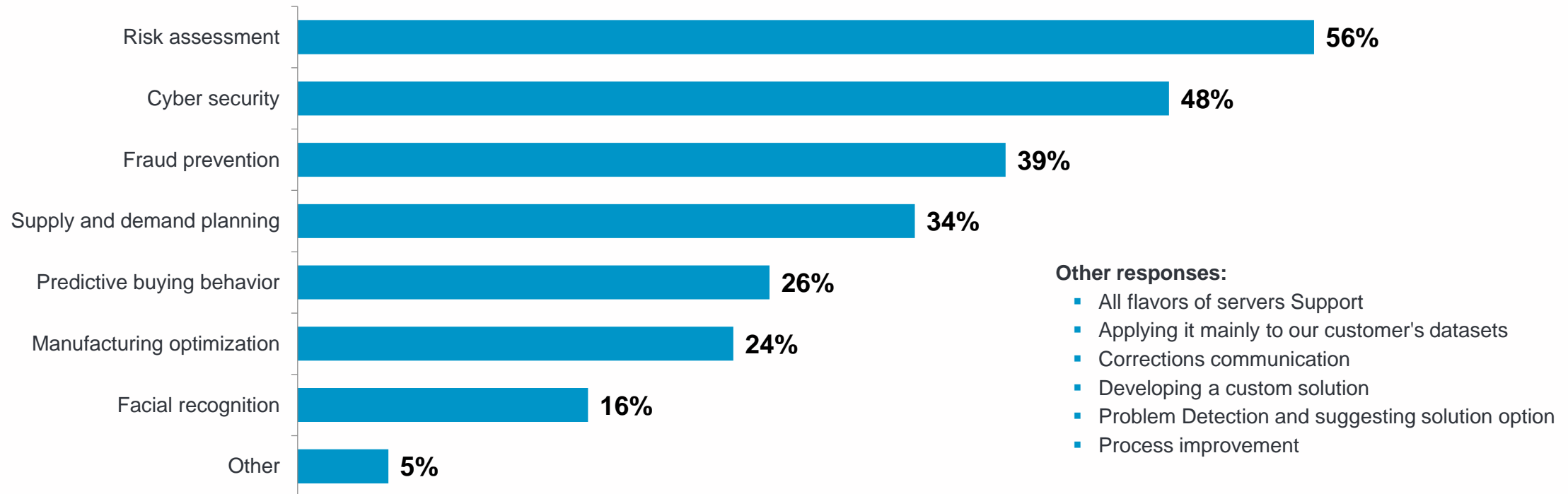


**Question: How satisfied are you with your organization's use of...?**

Bases vary: Respondents currently using respective function; Big data analytics (n=135); Predictive analytics (n=117); Employing algorithms (n=104); Automated action triggered by algorithms (n=111).

# Leveraging Predictive Analytics

Those respondents whose organizations are currently using predictive analytics are most likely to leverage it for risk assessment (56%) and/or cyber security (48%), followed by fraud prevention (39%) and/or supply and demand planning (34%).

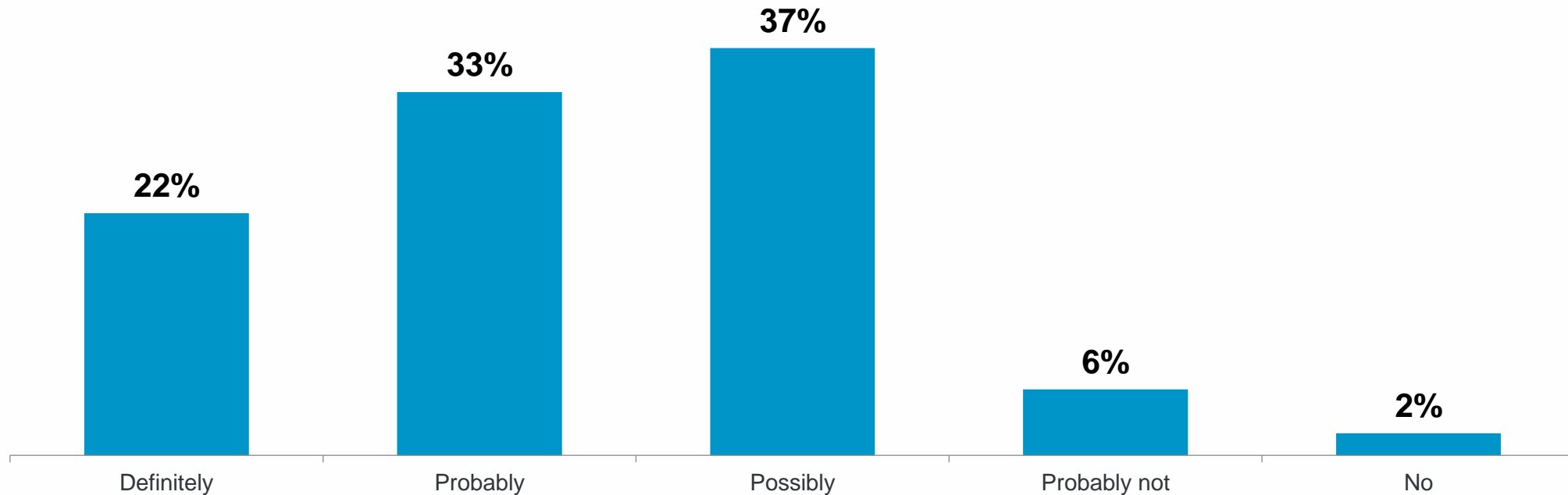


**Question:** *How is your organization leveraging predictive analytics?*

*Base: Respondents currently using predictive analytics; multiple answers permitted (n=117).*

# Potential for Machine Learning to Enhance Data Analytics

A majority of those respondents currently leveraging data analytics (55%) believe those programs would benefit from machine learning. An additional third think machine learning could possibly enhance their use of data analytics.

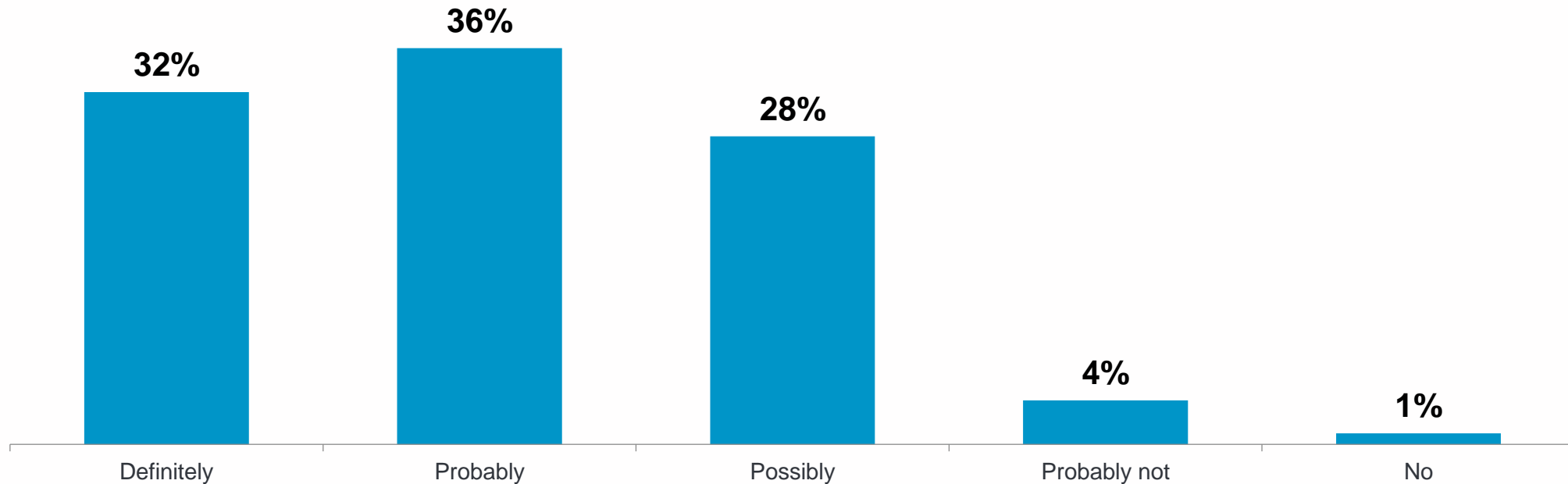


**Question:** *Could your company improve its data analytics program with machine learning?*

*Base: Respondents currently using data analytics (n=252).*

# Automation in Predictive Analytics & Competitive Advantage

A clear majority of those respondents currently leveraging data analytics (68%) believe automation in predictive analytics will be a key differentiator for companies in terms of staying competitive in the future.

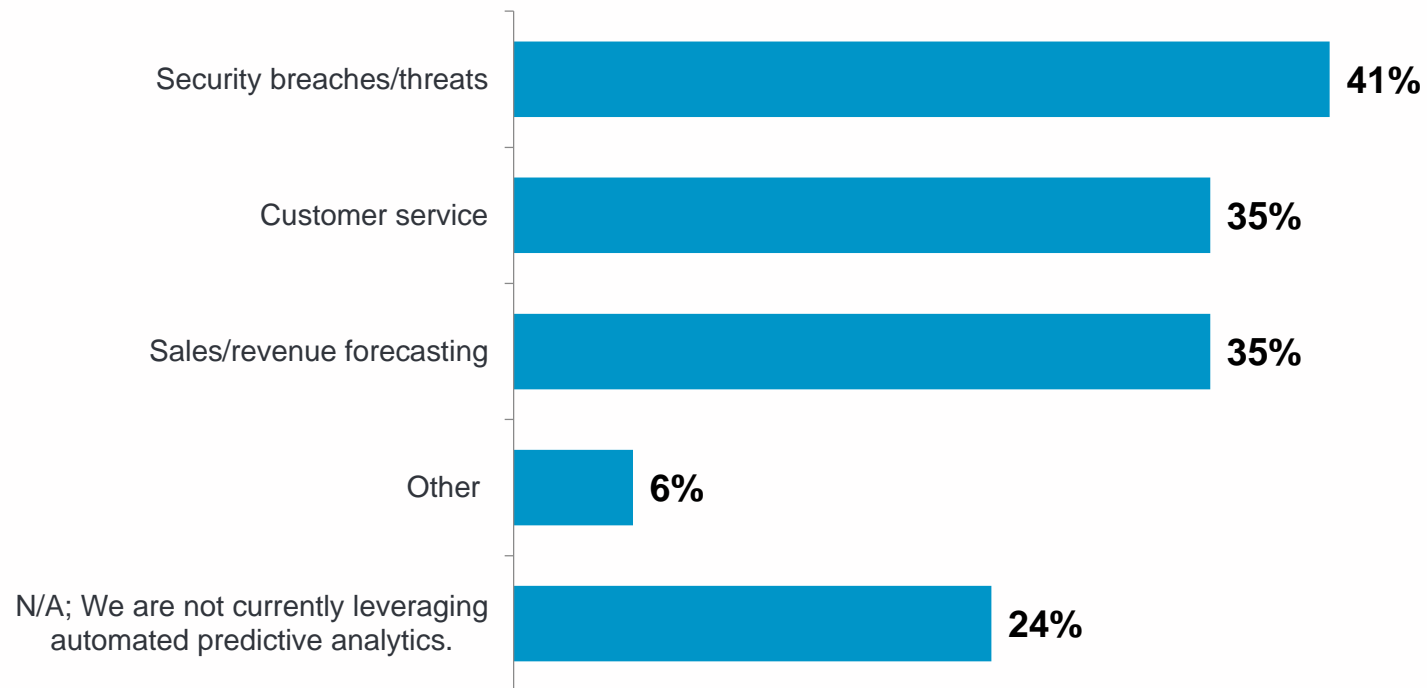


**Question:** Do you think automation in predictive analytics will be a key differentiator for companies to stay competitive in the future?

Base: Respondents currently using data analytics (n=252).

# Leveraging Automated Predictive Analytics

The majority of those respondents whose companies are currently using some form of data analytics (76%) are also leveraging automated predictive analytics. The most common application is detection of security breaches/threats (41%), followed by customer service (35%) and/or sales/revenue forecasting (35%).



#### Other responses:

- Applying it mainly to our customer's datasets
- Azure & windows
- Being provided to partners
- Claims analysis
- Customer experience for network testing
- Ordering levels of titles
- Product Health Monitoring
- Workforce planning

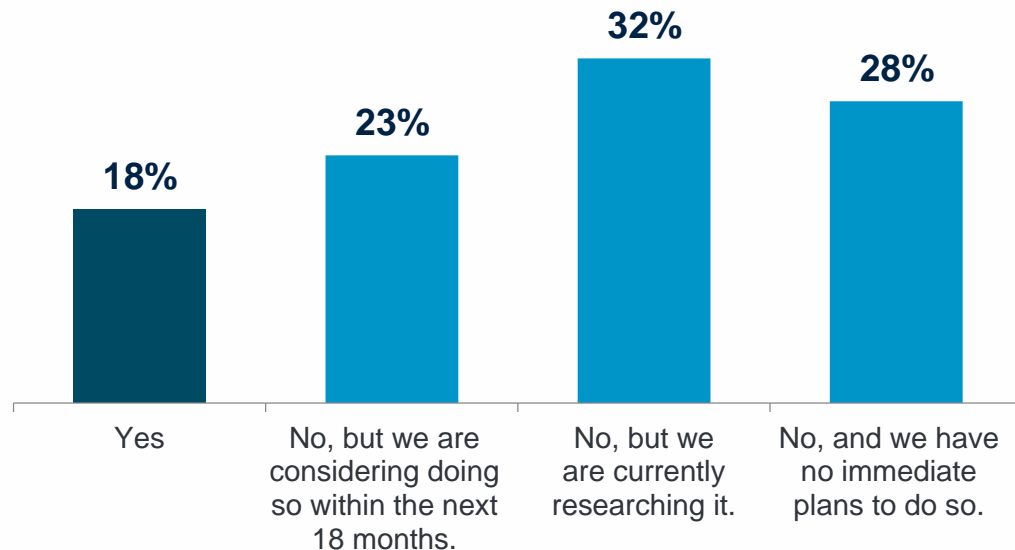
**Question:** *How is your organization leveraging predictive analytics?*

*Base: Respondents currently using some form of data analytics; multiple answers permitted (n=247).*

# Leveraging Machine Learning

Only 18% of those using some form of data analytics are currently leveraging machine learning. Another 55% are either considering implementing, or researching machine learning.

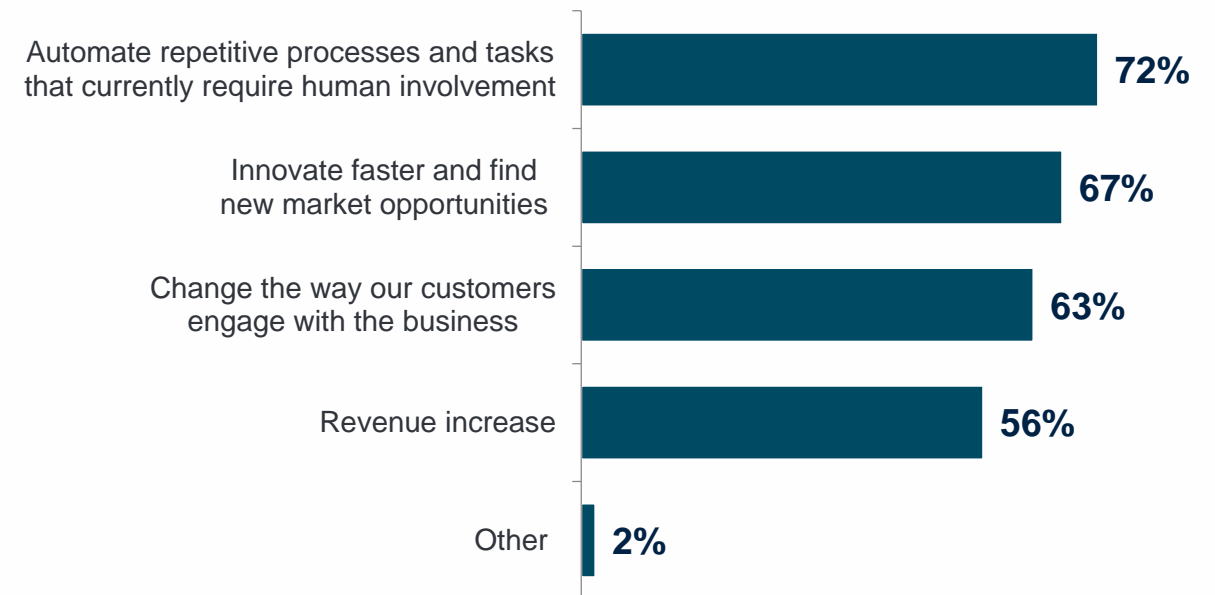
## Machine Learning Utilization



**Question:** *Is your organization currently leveraging machine learning in production?*

Base: Respondents currently using some form of data analytics (n=247).

## Primary Benefits of Machine Learning

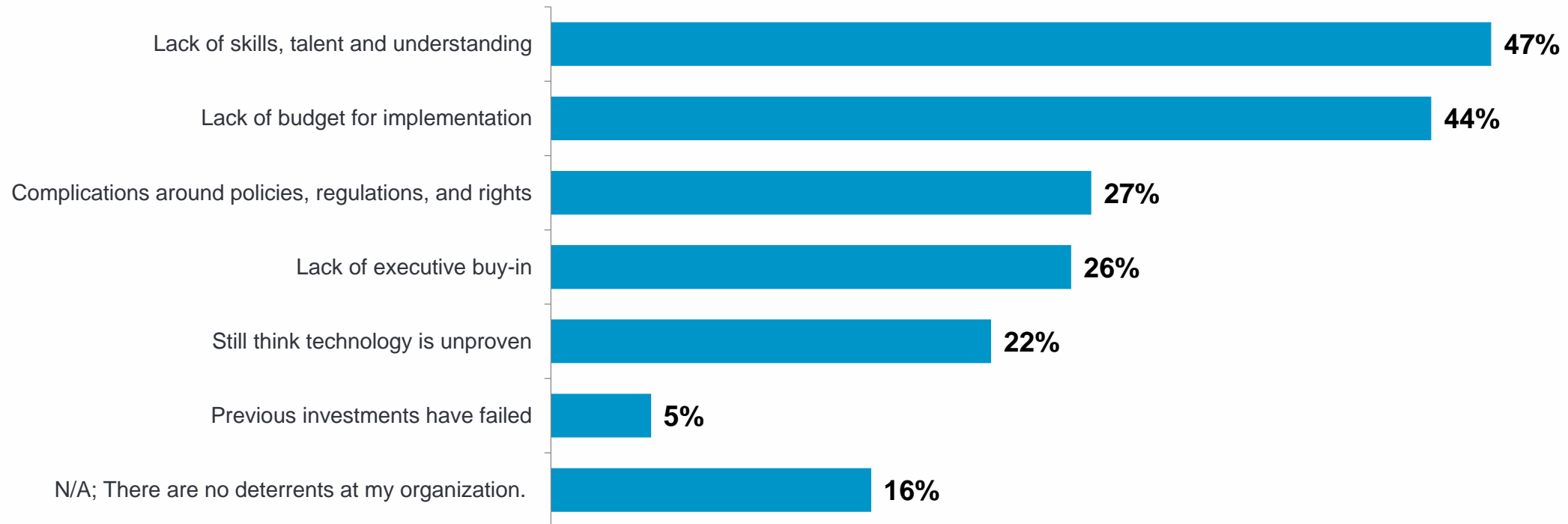


**Question:** *What are the primary benefits of leveraging machine learning in production?*

Base: Respondents currently leveraging machine learning; multiple answers permitted (n=45).

# Deterrents to Leveraging Machine Learning in Production

Those top two deterrents to leveraging machine learning in production are lack of skills, talent and understanding (47%) and lack of budget for implementation (44%).



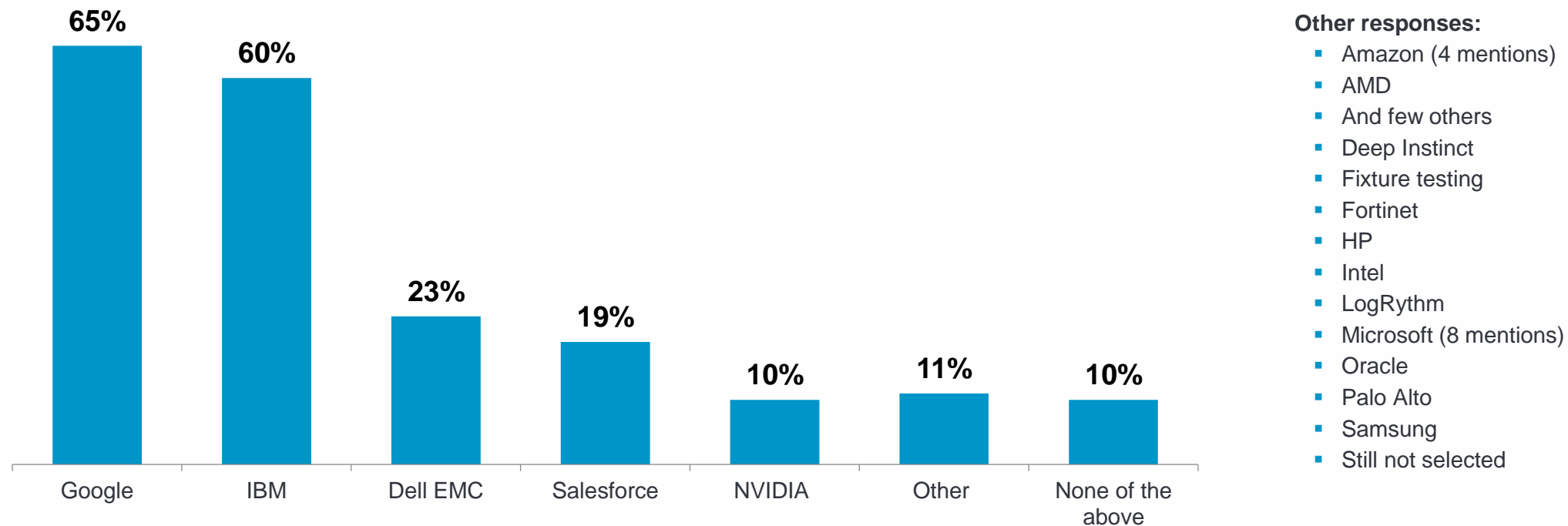
**Question:** *What are the deterrents to leveraging machine learning in production?*

*Base: Respondents not currently leveraging machine learning; multiple answers permitted (n=197).*



# Companies Associated with Machine Learning Solutions

Respondents are most likely to associate Google and IBM with machine learning solutions, followed by Dell EMC and Salesforce.

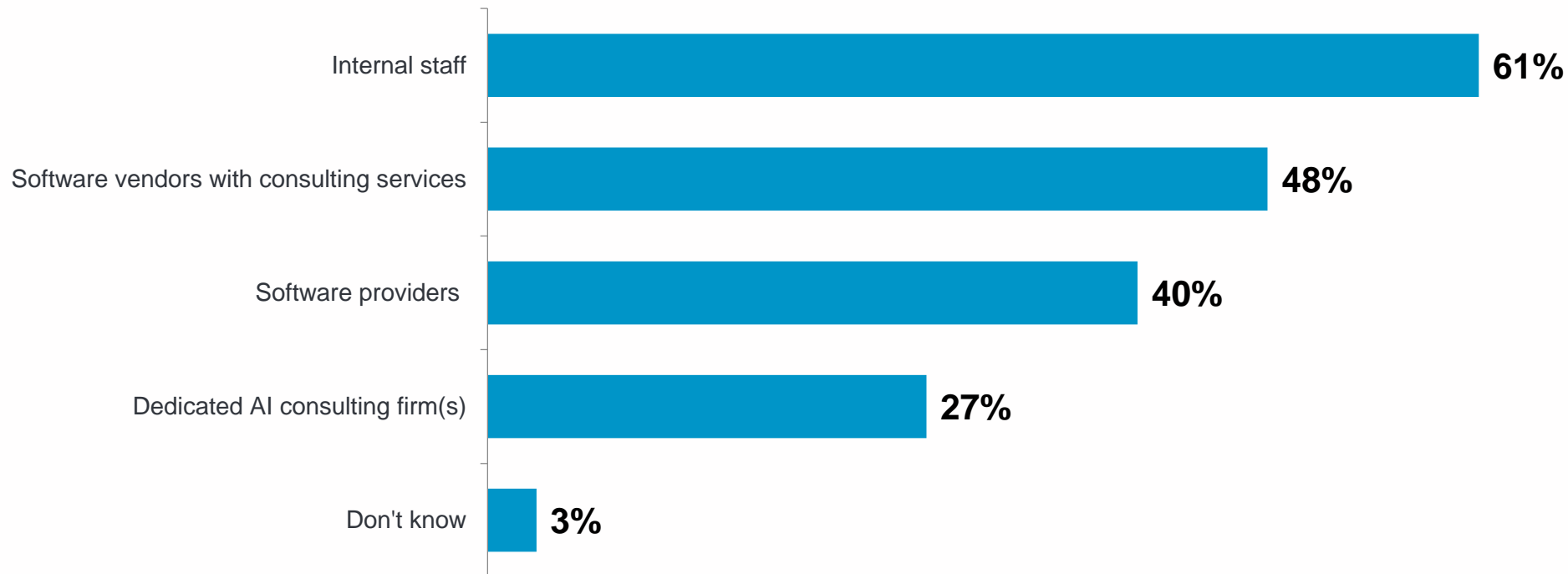


**Question:** Which companies do you most associate with machine learning solutions?

Base: Respondents currently using data analytics (n=252).

# Resources for Implementing Machine Learning in Production

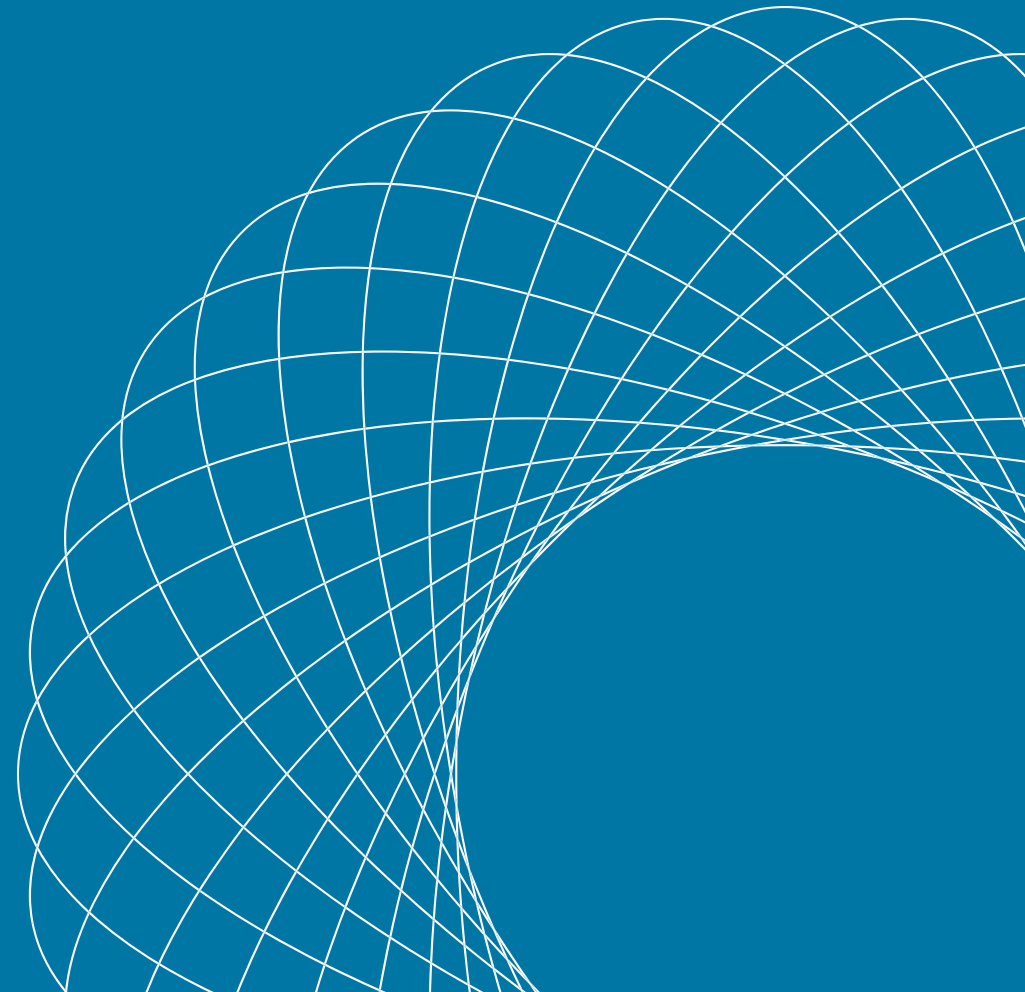
Respondents using or considering machine learning are most likely to rely on internal staff for implementation. Approximately half rely on software vendors with consulting services, and 40% rely on software providers.



**Question:** What resources do you, or will you use to implement machine learning in production?

Base: Respondents using or considering machine learning; multiple answers permitted (n=235).

# About Informa Engage



# informa engage

Informa Engage is the marketing services powerhouse behind Informa's trusted brands. We provide B2B marketers with unrivaled specialist audiences, deep knowledge of vertical markets, sophisticated data and content marketing expertise. Through our deep understanding of our customer's behaviors and changing needs, Informa Engage connects marketers to customers as they move from discovering a problem to identifying features and functionality of a solution to selecting a provider and making a purchase.

Connect at  
[informaengage.com](https://informaengage.com)

250+

DATA, INSIGHT &  
INTELLIGENCE  
PRODUCTS

INTELLIGENCE

110K+

ACADEMIC  
BOOKS  
& JOURNALS

KNOWLEDGE

1,800+

EVENTS &  
EXHIBITIONS

EVENTS

180+

COUNTRIES  
WORLDWIDE  
FUELING A RICH  
DATABASE

GLOBAL REACH

informa

With reach to 30+ million business decision makers.

# Meet Our Research Team

---



**Kristin Letourneau, PhD**

Research Director

kristin.letourneau@informa.com

(913) 967-1892



**Elinor Delagrange, MBA**

Senior Research Manager

elinor.delagrange@informa.com

(770) 693-2064



**Scott Grau, MS**

Senior Research Manager

scott.grau@informa.com

(952) 851-4650



**Jennifer Sigwart, MBA**

Data Analyst

jennifer.sigwart@informa.com

(410) 935-5023

# Thank you!

Kristin Letourneau, PhD  
Director, Market Research  
Informa Engage  
Overland Park, KS, USA

**T** (913) 967-1892  
**E** [kristin.letourneau@informa.com](mailto:kristin.letourneau@informa.com)  
**W** [engage.informa.com](http://engage.informa.com)

