



# FSOL-302B-1: Flash Solutions for AI/ML

Jillian Coffin | VP & Publisher

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#### **Jillian Coffin**

VP & Publisher, Storage, Cloud & Data Center

- Oversees the editorial, audience development, and sales and consulting efforts across website communities including SearchStorage, SearchCloudComputing, and SearchITChannel
- Jillian has been working in the data storage community for 12+ years sharing purchase intent data with both established and emerging storage vendors who need to better understand changing market dynamics and maximize growth opportunities
- TechTarget is the leading source of independent enterprise storage and flash technology content on the web and helped make it into a trusted resource to aid IT and business leaders in making informed decisions.





#### **Session Panelists**



**VR Satish** Founder & Chief Technology Officer





Ramnath Sai Sagar Product Marketing Lead, Al & Deep Learning





**Tom Lyon** Founder and Chief Scientist





**Mat Gruen** Senior Director Channels

WEKA.io

### TechTarget's Storage audience

#### 1.3 million Storage members globally

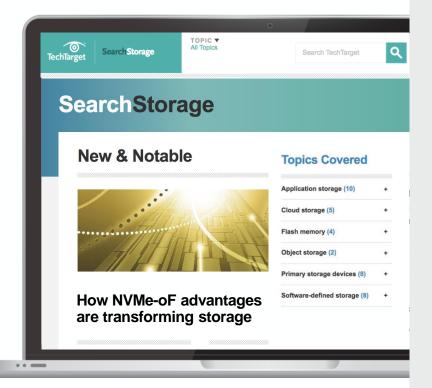
**Storage and infrastructure buyers** active in the last 90 days1

151,810 **North America** 

63,397 **EMEA** 

3,835 LATAM

18,200 APAC



650K+

SearchStorage.com monthly page views

#### NVMe & NVMe-oF appetites increasing

2.6M +

**Activities taken around** Flash & NVMe in the past year<sup>2</sup> (up 24% YoY)

90%

Increase in NVMe/ NVMeoF activities since last year<sup>2</sup>

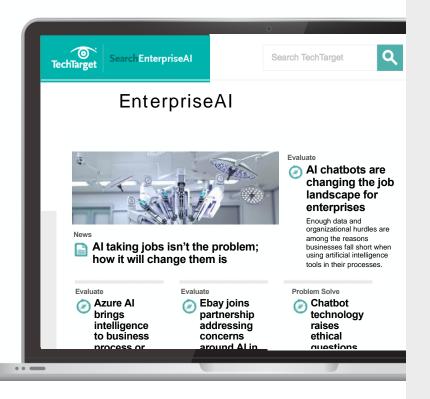
580+

Flash and NVMe related pieces of content published on the TechTarget network in the last year alone

### TechTarget's AI/ML audience

1.7 million+ page views in the 1<sup>st</sup> year post site launch

Al/ML Total Addressable Market in the last 90 days<sup>1</sup> 112,000+ 62,100+**North America EMEA** 35,400+ **APAC** 2,400+LATAM



**SearchEnterpriseAl.com** 142K+ monthly page views

55%

**increase** in page views across Al-related content in the past 3 months

11,800+

accounts active around AI/ML in the last 90 days (NA)

82%

**Net new** researchers on SearchEnterpriseAl since last year

## **About TechTarget Research & Data**

We sit on a vast amount of research and purchase Intent Data that allows us to analyze the latest trends, behavior and insights from our wide range of audiences

- Annual IT Priorities Survey is fielded to 4000+ global technology and LOB buyers to gather market insights on broad initiatives, technology adoption, budgets, and plans for the upcoming year
  - Regions surveyed 35% NA; 30% EMEA; 30% APAC; 5% LATAM
  - Company sizes range from large enterprise to SMB (50% from \$10M+ annual revenue)
- Quarterly Pulse Surveys are fielded to 300+ respondents across targeted markets to better understand emerging techs, market disruption and key areas of change
  - Recent Pulse Surveys include: Al/ML, SAP, MSP, Flash & NVMe, DevOps)
- Qualified Sales Opportunities Data taken from 32K projects over the last 12 months across 80 technology markets
- **Priority Engine intent data** garnered from 200+ topically focused segments that represent the most active organizations week over week

**20 years** of publishing technology-specific content

150+
global B2B websites
covering over 5,000
technology topics

19.7M

IT and Business professionals opted-in and GDPR compliant

#1

**B2B Marketing Data Provider** (Forrester Wave 2018)



Worldwide ©TechTarget 6

#### AI/ML State of the Union

#### Al unlocks the value of data to transform business in totally new ways

- Al is about Automation, Optimization, Prediction, Efficiency and Re-Imagination
- Al is gaining fast tracking, but still early innings...
  - Most orgs have yet to feel the full effect of AI, still determining where/how it can be most effective.
  - There's still a lot that algorithms don't know (training data limitation, algorithmic bias, ambiguity in how to apply results)
- Has led to a narrower "think big, but start small" project mindset
  - Further emphasis placed on aligning projects with improving business goals.
- Looking ahead to 2H 2019, topical areas of focus include:
  - Digging further into deep learning technology and use cases
  - Machine learning frameworks platforms, uses, do's and don't
  - Al in robotics and process automation
  - General coverage of AI tech advances, new uses in business

>50% of Fortune 500 CEOs say their company is using Al

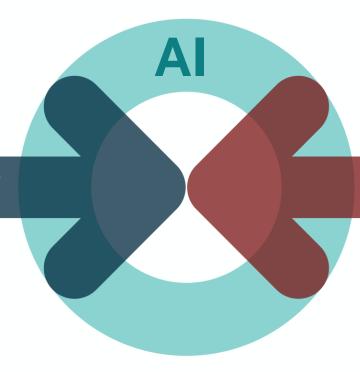
60% Use AI to **improve** efficiency and reduce costs

22% use Al to create new products and services

#### Entry Point #1

#### Al that better enables enterprise IT

- Adding AI as a feature of existing technology to automate/improve the efficiency of IT systems, software and development efforts
- Key technologies with AI functionality:
  - Systems Management & Monitoring
  - **Application Performance** Management
  - Security Analytics/Threat detection
  - **Predictive Storage**
  - Networking/CDN
  - **Business Apps** (CRM, ECM, HR, ERP)



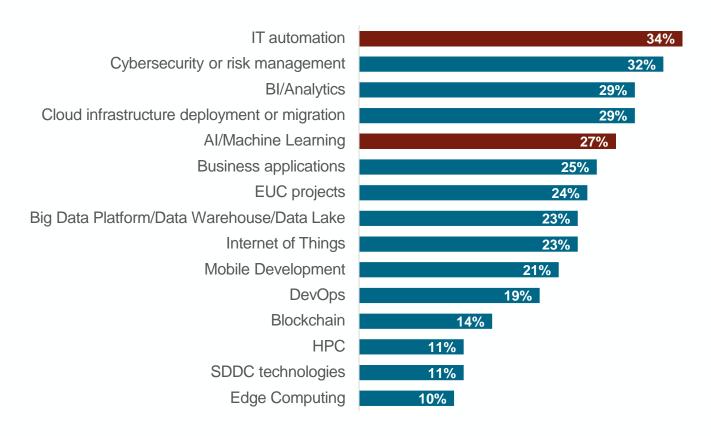
#### Entry Point #2

#### Al that creates new business opportunities, revenue streams

- Al's impact on business operations, Al strategies, use cases, (online search, HC, self-driving cars, HR)
- Natural Language Processing (industry-specific use cases, building a chatbot strategy)
- Data Science Platforms software for analytical insight, predicting supply/demand, fraud detection
- Machine Learning Platforms, algorithm training & modeling, supervised learning
- Building versus buying AI, vendor landscape, OS tools
- Facial/audio/voice recognition (Apple, crime prevention

# IT Automation & Al/Machine Learning both make the top 5

Which of these **broad initiatives** will your company implement in 2019?

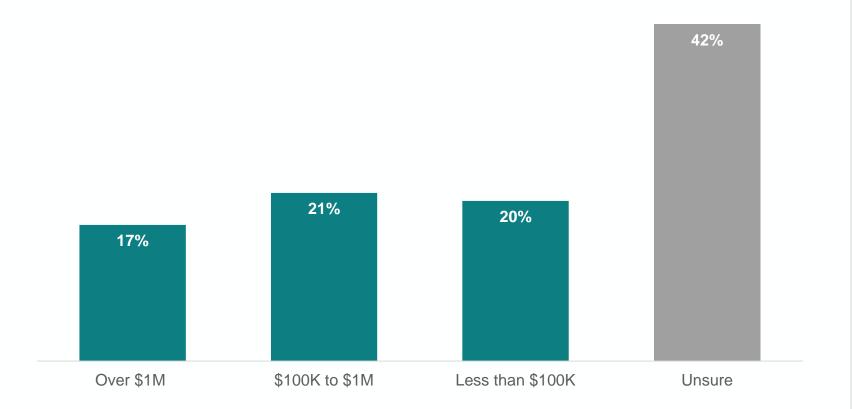


# Al/Machine Learning

was the #1 Growth Initiative in 2018 and continues to be the **most wide**spread feature driving interest in software application upgrades, supplanting cloud

## **Budgets for Al are Increasing**

How much budget do you plan to spend on Al this year?

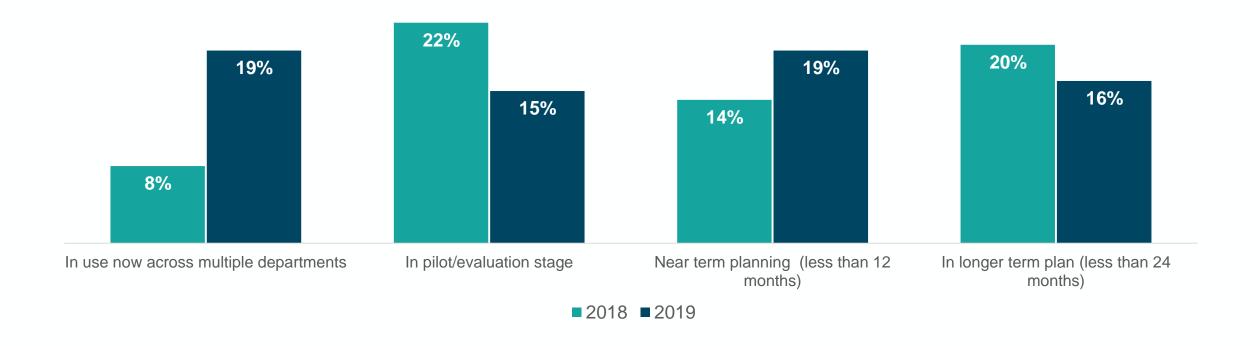




25%
companies plan to spend over \$500K on Al this year, compared to only 12% in 2018.≈

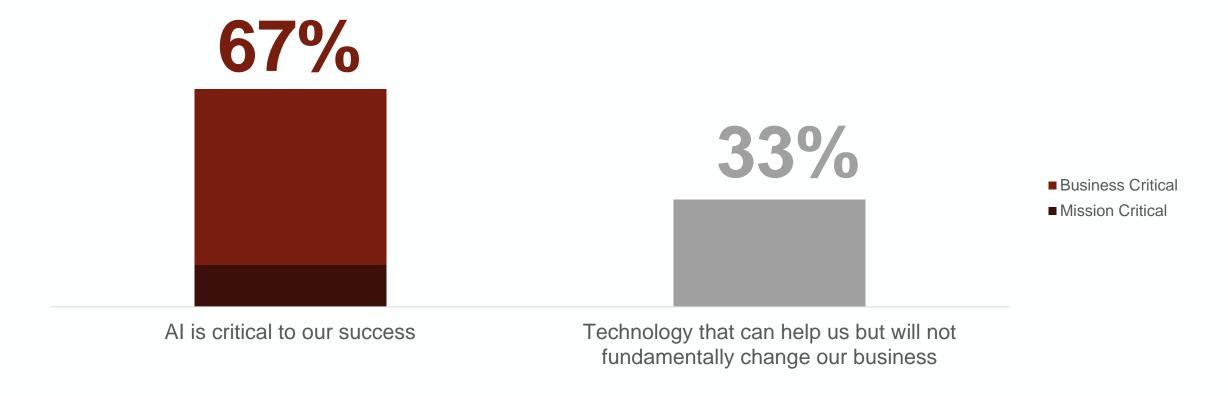
## Status of Al/Machine Learning adoption

Which of the following best describes your organization's level of Al/Machine learning adoption?



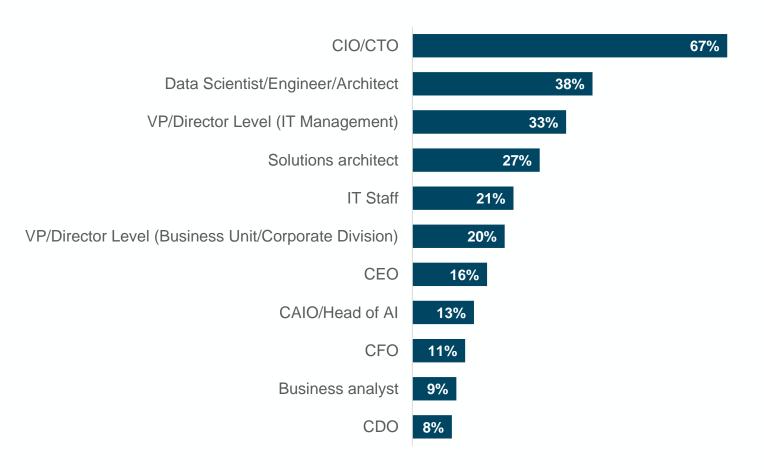
# Al's Perceived Importance to the Business has Increased

Which of the following statements best describes the importance of AI to your organization as a whole?



# The AI Tech Buying Team looks Technical

Who's involved in the tech purchase decision making process for Al-related solutions?

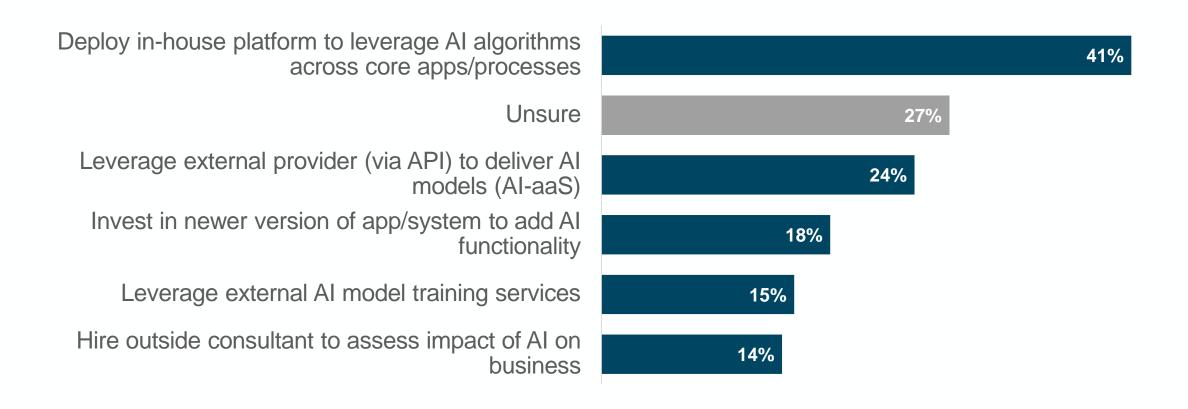




- NA respondents regard the CIO/CTO as leading the charge for AI projects
- While AI is a horizontal endeavor, with strong input/visibility/influence from corporate LOB teams, not unlike cloud, it is ultimately technical pros who are deciding which solutions are purchased..

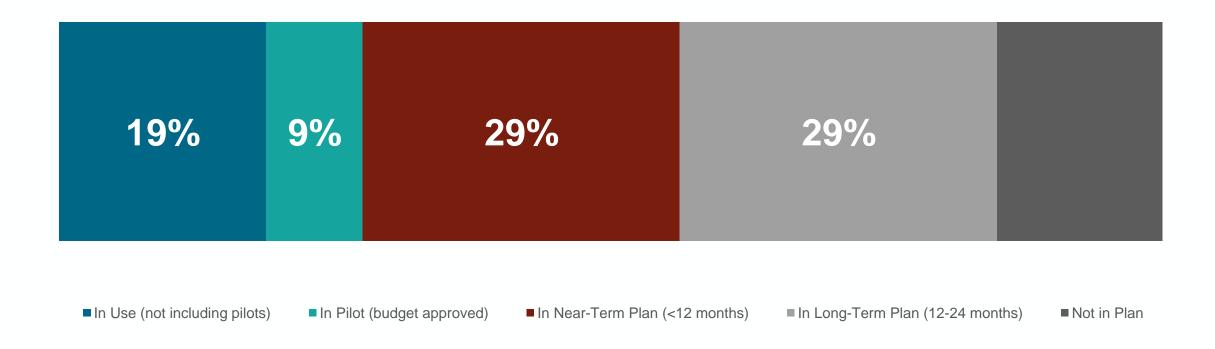
# Al will be deployed via in-house platform but many will turn to external providers for services

How do you plan to access/deliver Al across your organization?



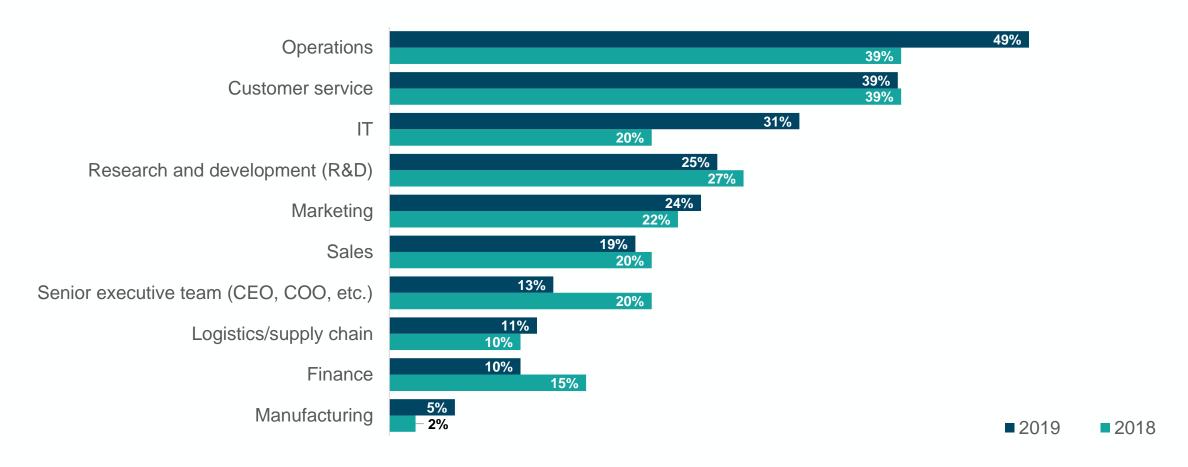
#### **North America**

# **Current status of AI Hardware/Infrastructure Adoption**



## Who benefits most from AI / Machine Learning?

Which of the following depts/business units will benefit most from your planned AI/ML investment?



# Top barriers to adoption shift for 2019 Skills takes new foothold

What are the top barriers to achieving true value from Al adoption at your organization? (Choose up to 3)

45%

lack of talent/ skills/expertise 33%

complexity/ advanced data management 23%

lack of internal IT infrastructure

### **Top Four AI / ML investment drivers**

What are the drivers prompting your decision to invest in Al/machine learning technologies? (Choose up to 3)

40%

Improve customer experience

34%

Enhance operational efficiency

29%

Reduce operating costs through digitization

29%

deliver new products/ services

# Al and data analytics grow in importance among primary storage buyers

**Hyper-converged** Infrastructure

+200%



1H 2018

2H 2018

Buyers citing the need for embedded Al-powered /machine learningbased algorithms as a desired purchase feature

Converged Infrastructure

+167%



1H 2018

2H 2018

Buyers citing the need for embedded Alpowered/machine learning-based algorithms as a desired purchase feature

**Object Storage** 



Buyers citing the need for data analytics capabilities as a desired purchase feature

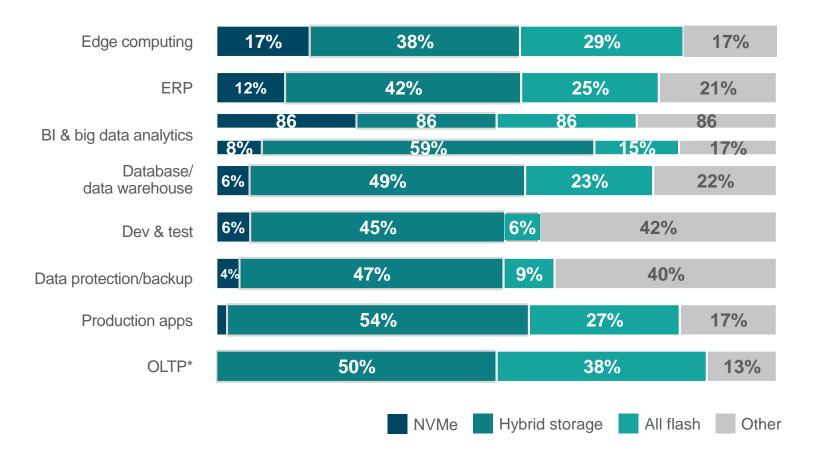
**All-Flash Arrays** 



Buyers citing the need for built-in storage analytics as a desired purchase feature

# **NVMe** scoring higher with Edge, **ERP and Big Data Analytics**

For these workload(s), which of the following is primary storage.



#### **Key Takeaways**

 47% of NVMe adopters plan to implement through storage array vs DAS



# Thank you.

Jillian Coffin VP & Publisher, Storage