

MASTERING KUBERNETES MANAGEMENT AND OPERATIONS WITH NETAPP DII

Unlock the full potential of your Kubernetes environment with Data Infrastructure Insights (DII)

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**WITH
INTELLIGENT DATA
INFRASTRUCTURE,
YOU CAN RISE TO
EVERY MOMENT**



BE THE SILO BUSTER

Deliver simplicity by managing complex workloads and eliminating infrastructure silos across apps, data, and clouds

SIMPLICITY



BE THE BUDGET HERO

Make your on-premises and cloud infrastructure spend go further

SAVINGS



BE THE SUSTAINABILITY CHAMPION

Power more sustainable operations with energy-efficient technologies, tiering, and analytics

SUSTAINABILITY



BE THE BUSINESS DEFENDER

Keep your business running with built-in security, rapid recovery, and infrastructure observability

SECURITY



BE THE AI WORKLOAD INNOVATOR

Embed intelligence into your data infrastructure to enable your AI workloads—for new levels of productivity and innovation

SMARTS

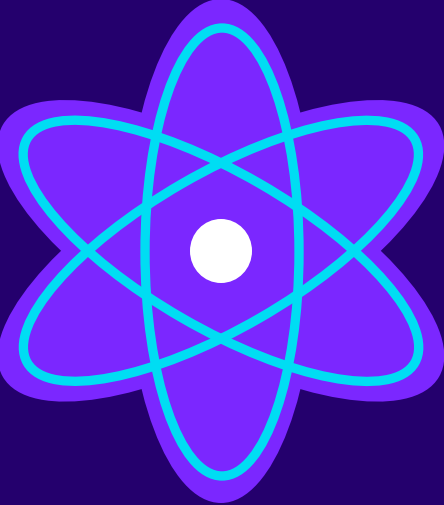


BE THE APPLICATION AGILITY DRIVER

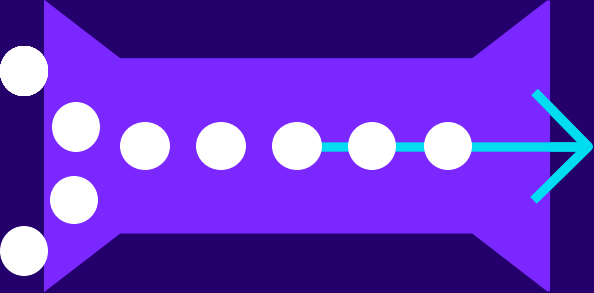
Maximize your infrastructure and applications scalability and team responsiveness

SCALABILITY


Reality of a Complex Enterprise



**COMPLEX MULTI-DOMAIN
INFRASTRUCTURE**

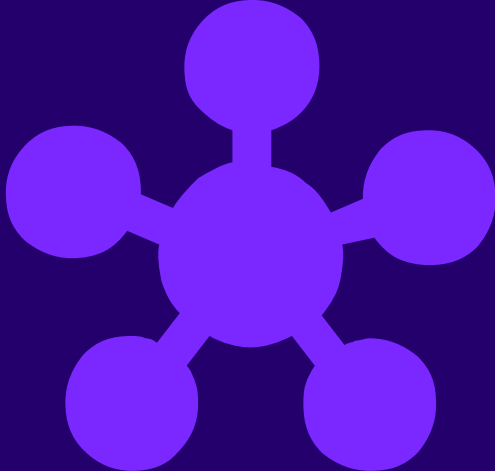


**MISSING CRITICAL
CONTEXT**



WASTE

Overcoming IT Challenges with Data Infrastructure Insights



**CENTRALIZED VIEW OF
HETEROGENEOUS
INFRASTRUCTURE**

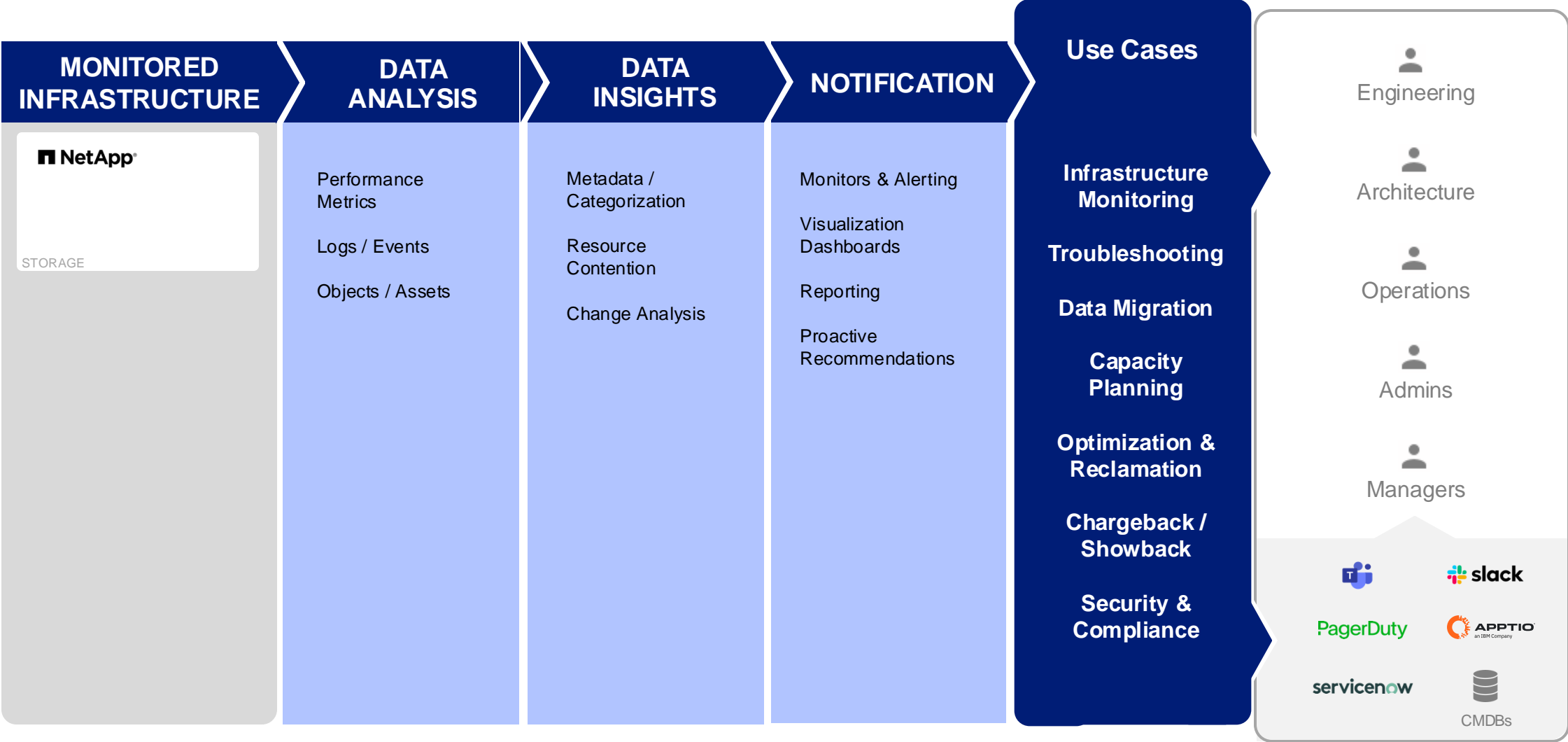


ANALYSIS ENGINE

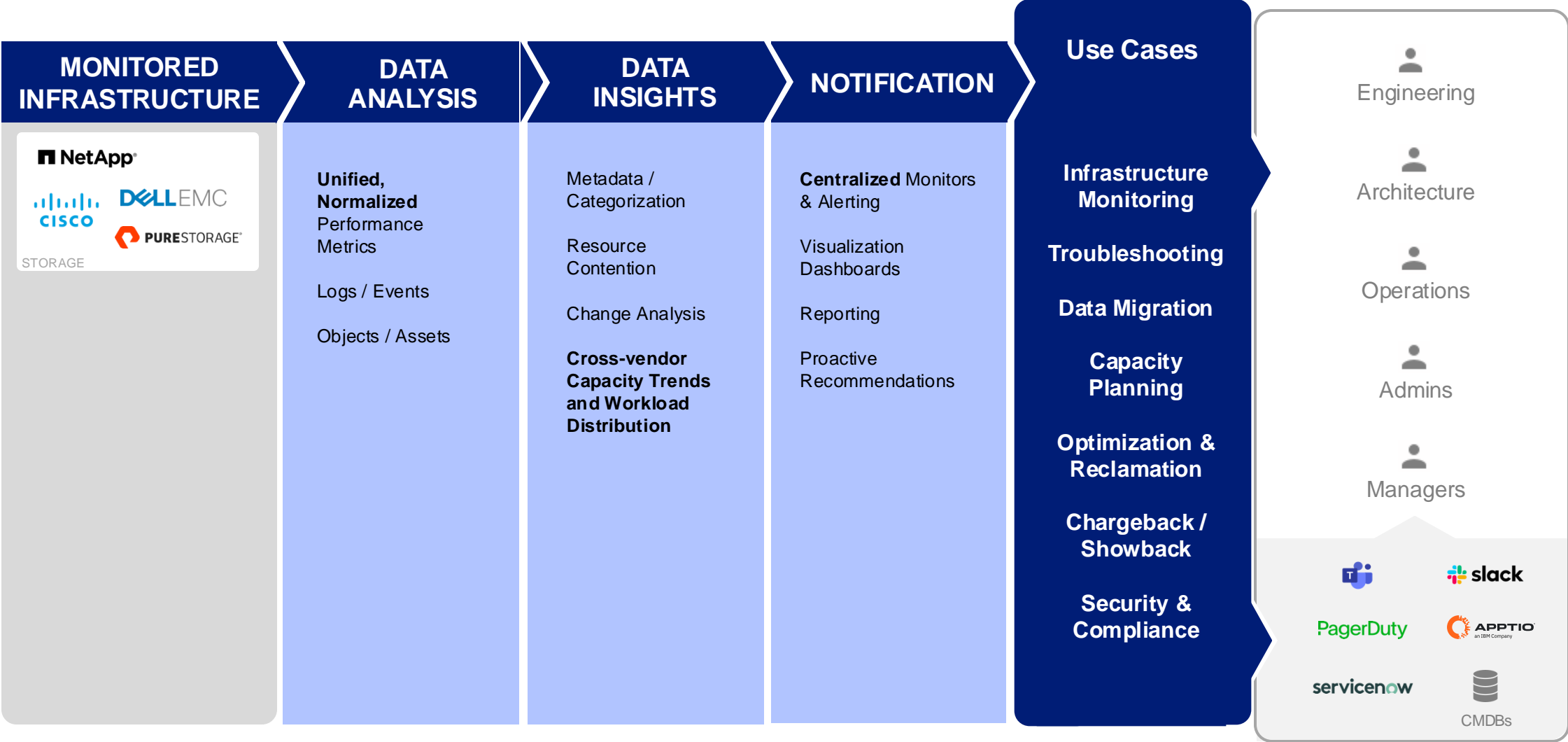


INSIGHTS TO FUEL EFFICIENCY

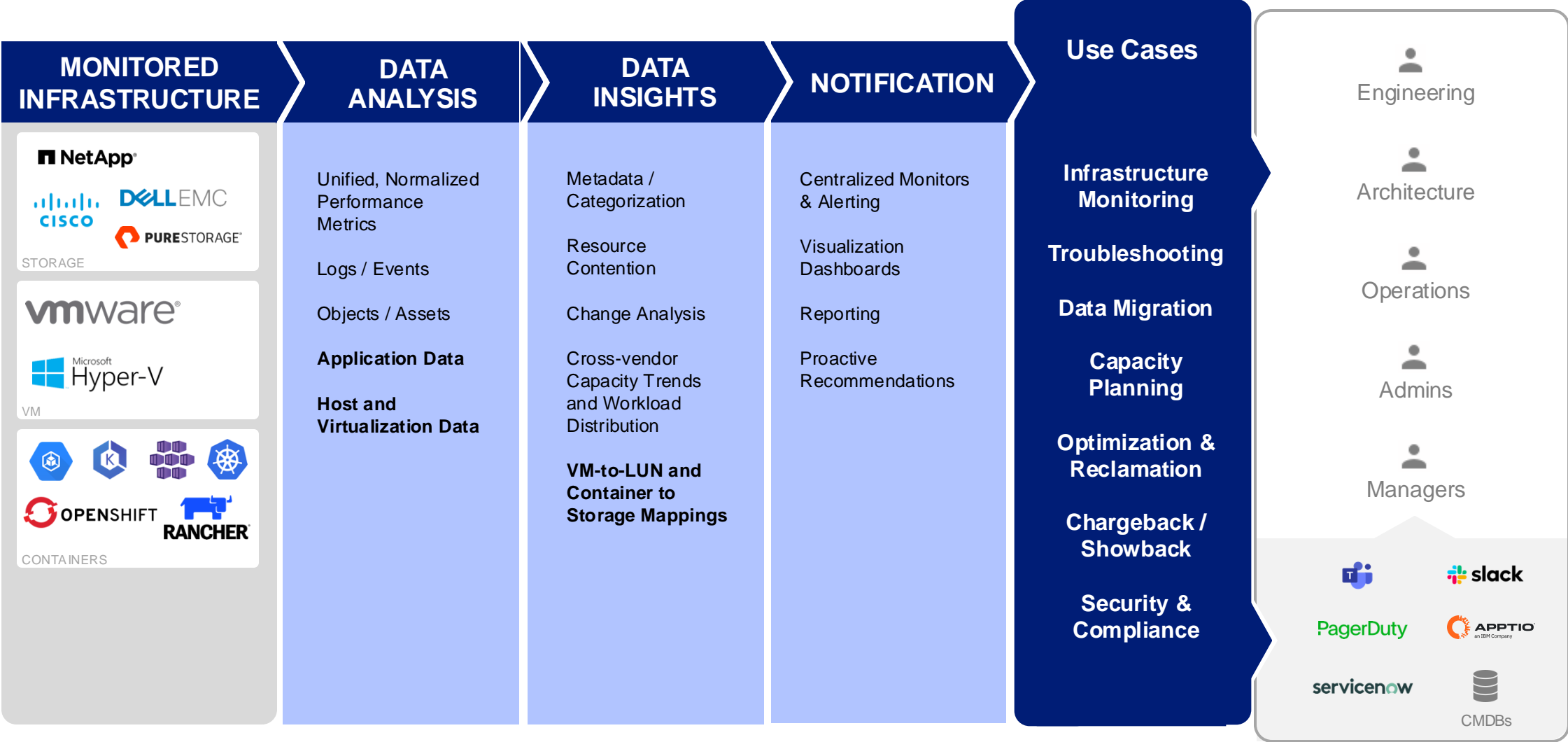
What is Data Infrastructure Insights?



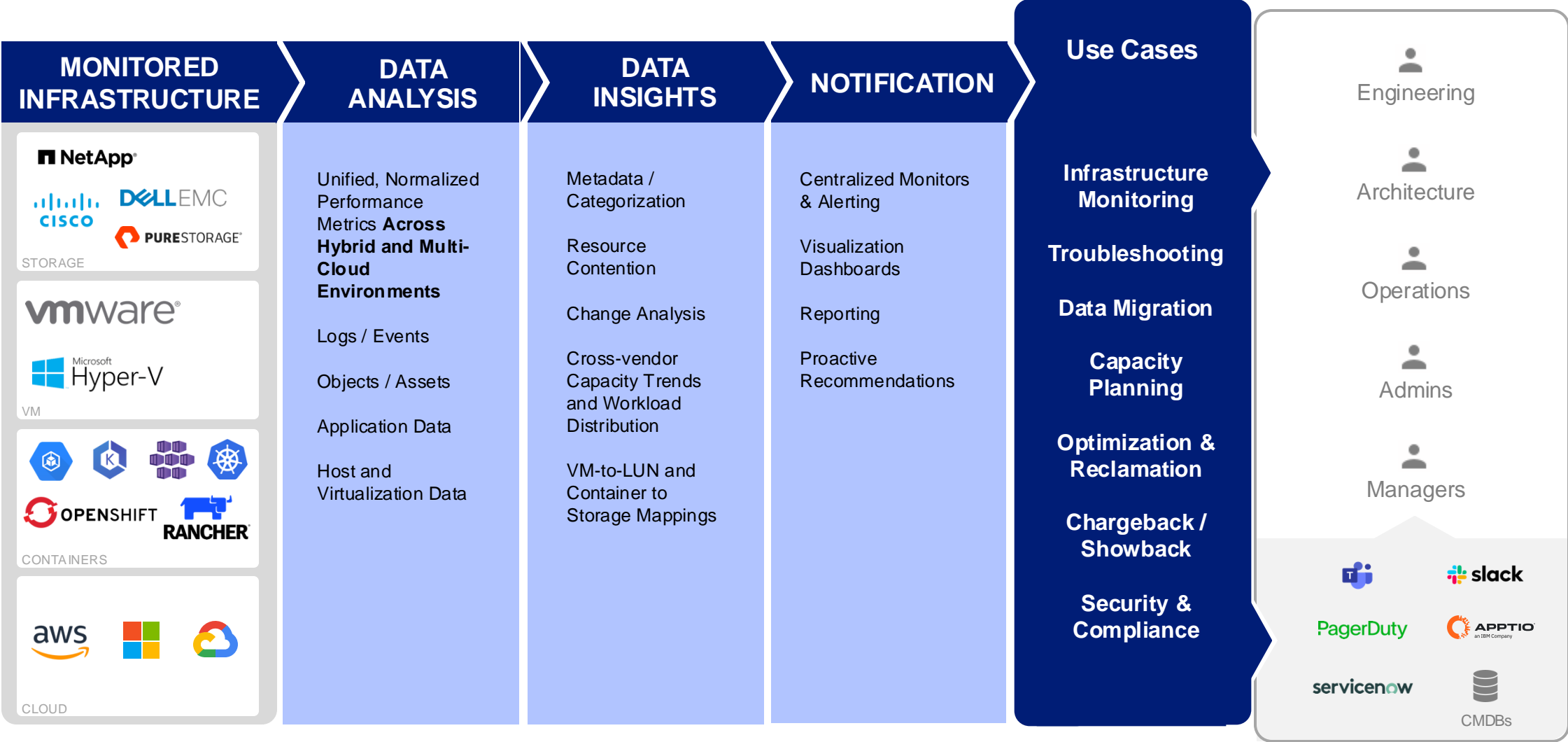
What is Data Infrastructure Insights?



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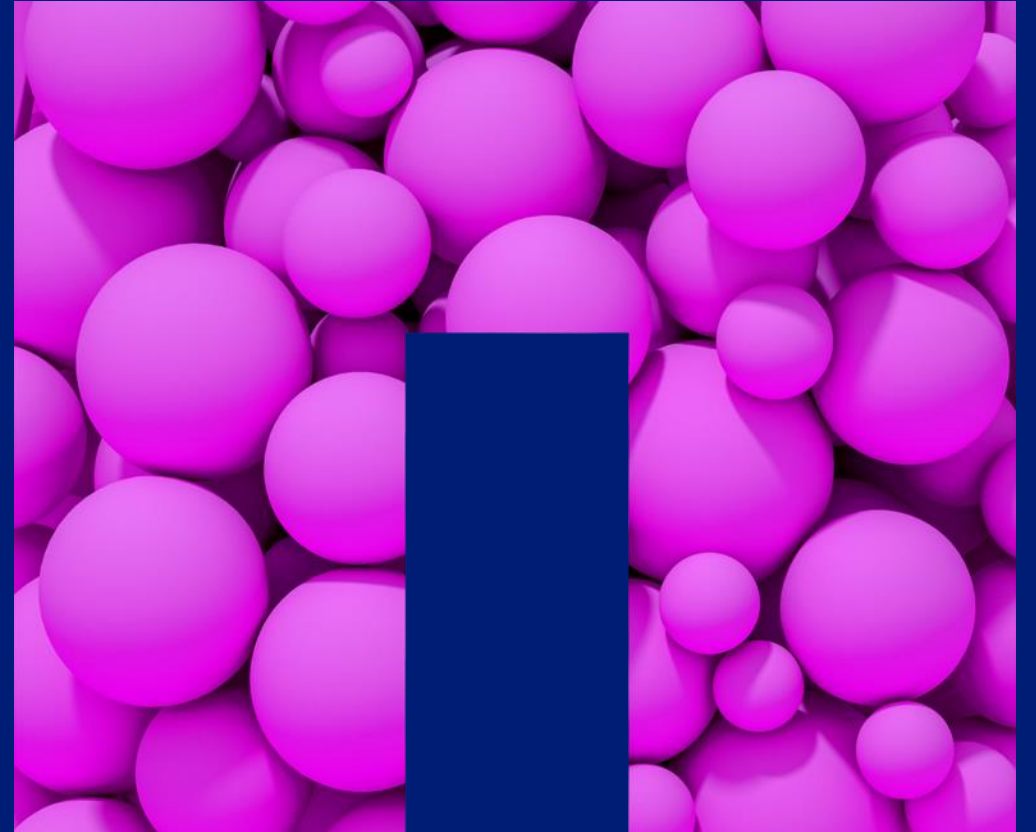


What is Data Infrastructure Insights?



DII FOR K8S

OBSERVABILITY AND OPERATIONS



Agenda

Data Infrastructure Insights for K8s

- **What is NetApp DII for Kubernetes?**
 - ~~Cloud Insights for kubernetes~~
- **What does it do?**
- **How does it operate**

[Slide reducing spoiler alert: We deploy an operator]
- **Demo**
- **Summary**

Our premise: Kubernetes is complicated and involves many fragmented tools



Network Service Mesh



Jenkins



Kubectl



Istio



git



Grafana



kibana



- Kubernetes **requires hard-to-find skills** and expertise
- Having too many **tools** results in fragmentation, inefficiency, and complexity
- **Unexpected changes** and misconfigurations affect the business
- **Resolving issues** requires understanding Kubernetes components and their underlying compute and storage infrastructure

What is the aim for DII for K8s?

*“-Now look here you little sh*ts!”*

- **Resolving issues quicker**
 - Find what (who) is wrong faster
 - Correlate issues between stack layers
 - Help with incident reporting
- **Simplify Daily operations**
 - Run a healthy Kubernetes infrastructure
 - Controlling Cluster and application state
 - Resource monitoring and planning
- **Reduce the number of tools**
 - Take away complexity and give back time
 - Decrease need to build and maintain your own
 - But the API is open if you still want!



NetApp DII for Kubernetes

• Kubernetes Topology

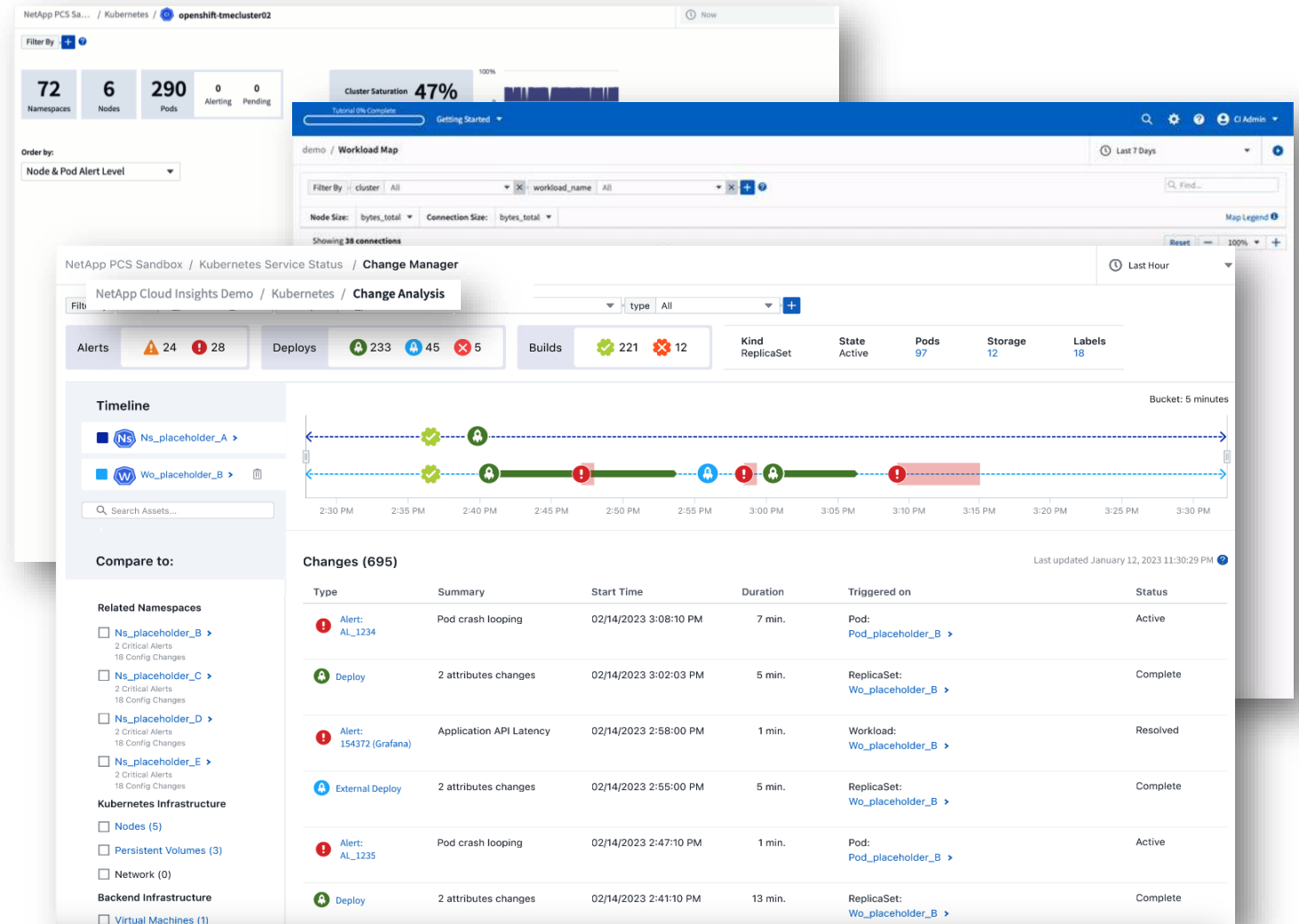
- Quickly gain overview of current state and resource utilization
- Resource utilization w/ drill down
 - Overall CPU, Memory, and Storage
 - Namespaces
 - Workloads

• Workload Monitoring and Mapping

- “What depends on what, who talks to who?”
- Understand dependencies and connections
- Network traffic

• Change Analysis

- Track deployment and configuration changes
- Insights into how changes affect Kubernetes health, availability, and performance
- Correlate these changes with incidents and alerts to resolve problems



DEMO

Kubernetes Observability

Summary

KEYNOTE @ 15.40 - Please come listen to my friend Rom Adams

- Gotten a brief overview of what NetApp is and does
- How it can help you run a healthy Kubernetes platform
- What DII can do for infrastructure monitoring, across a wide range of platforms and infra
- Find, track and resolve issues faster across the full stack
- That it can help run and deliver a enterprise level service to your business
- Resource monitoring and investment planning

To find out more and test out DII go to <https://bluexp.netapp.com>

That's all folks! o/

Come see us at the stand!

**Happy to arrange a deeper
dive, demos, POCs etc**



**KEEP
CALM
AND
WAVE
GOODBYE**