Hewlett Packard Enterprise

Elopak's erfaringer med HPE Nimble Storage og InfoSight

Lær af Elopak og få tips til optimering af dit datacenter

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ELOPAK
Together we make packaging work

Elopak is an international supplier of paper based packaging solutions for liquid food

ELOPAK
Together we make packaging work

ELOPAK storage simplified

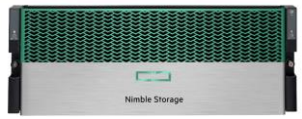
Okt 2017

Production

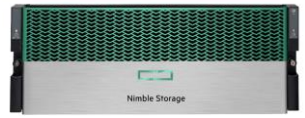
2019

Added Secondary site with Veeam backup

today



Production



Secondary site with Veeam backup

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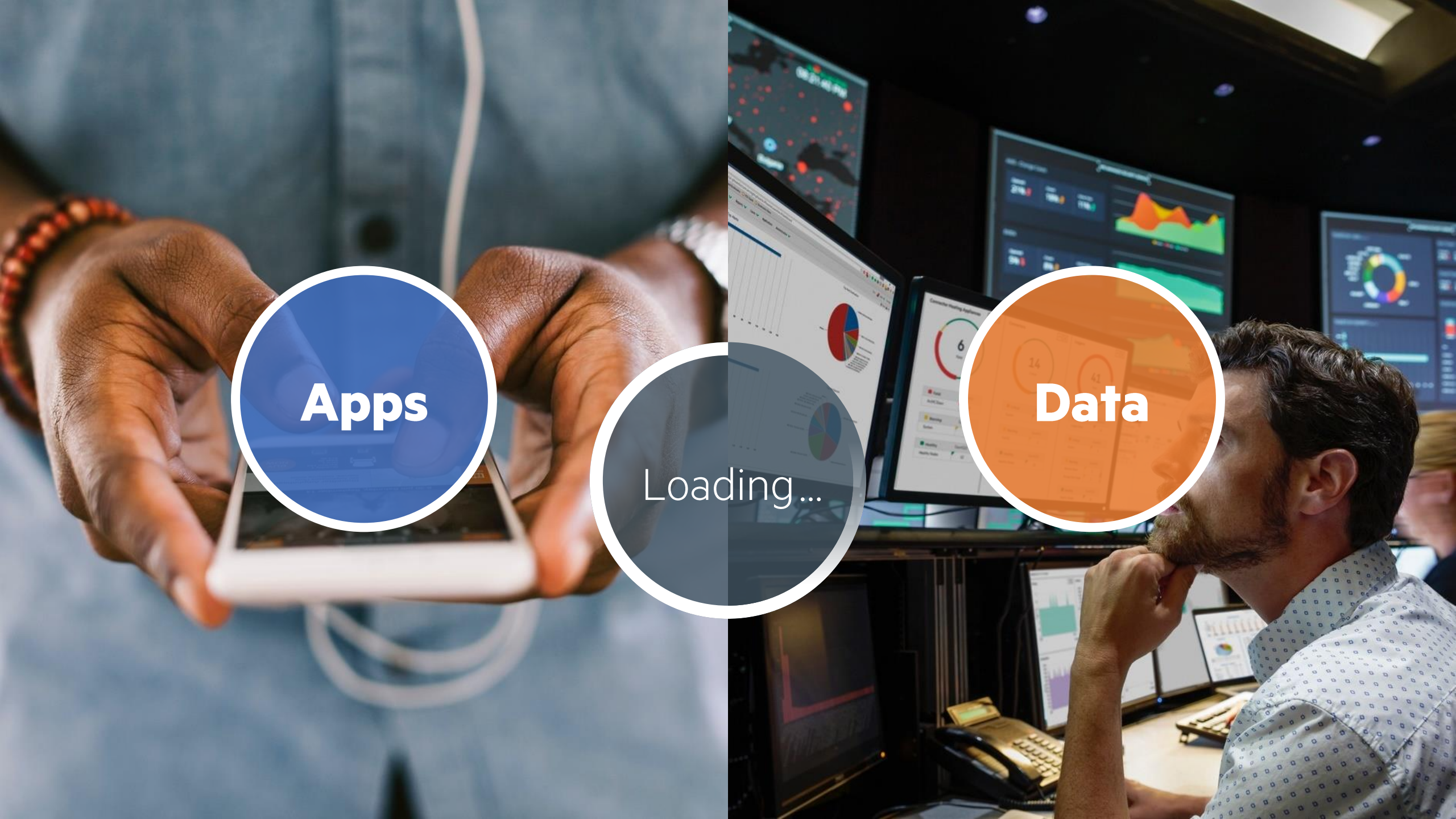
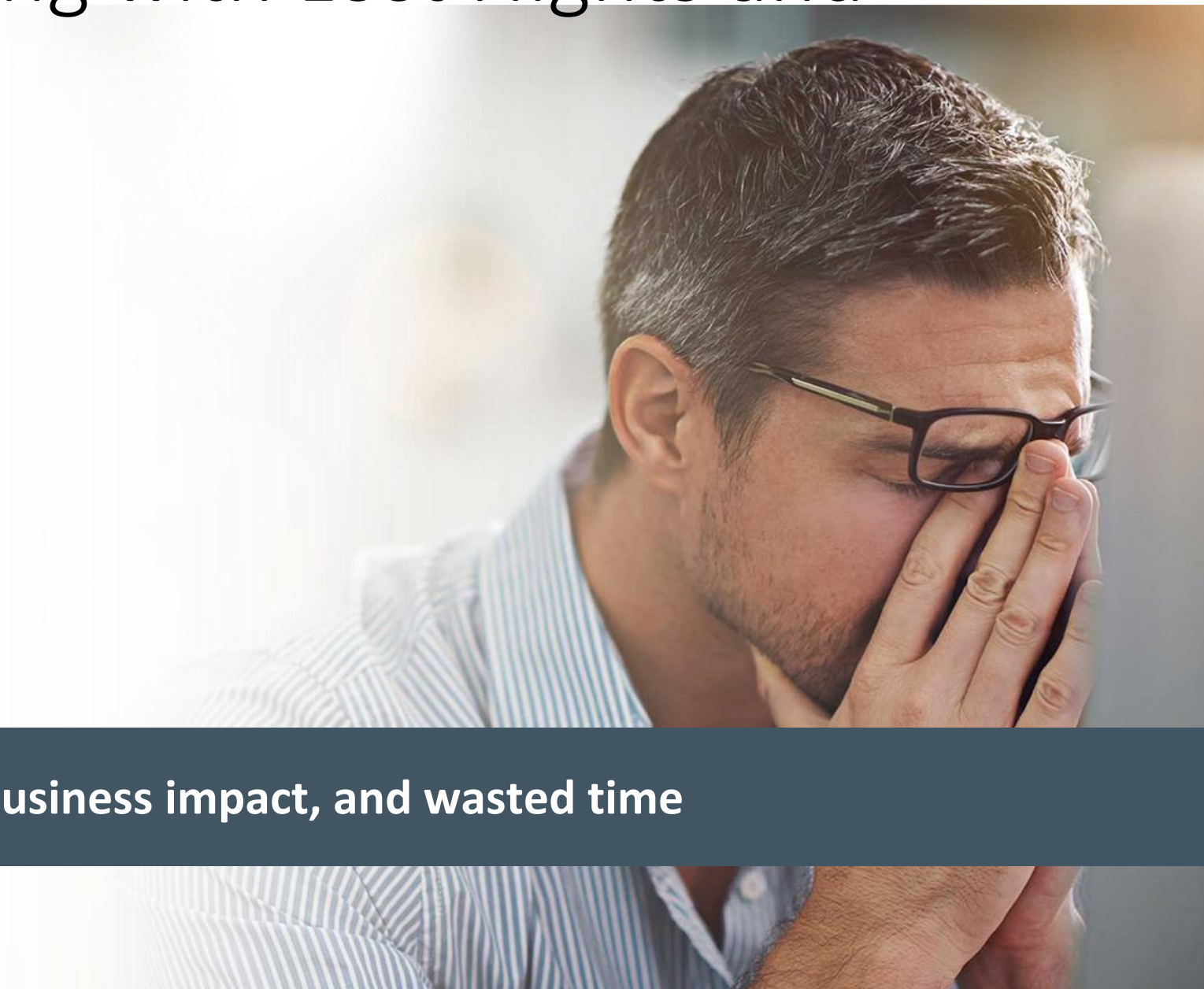
Preemptive Recommendations in Use Everyday

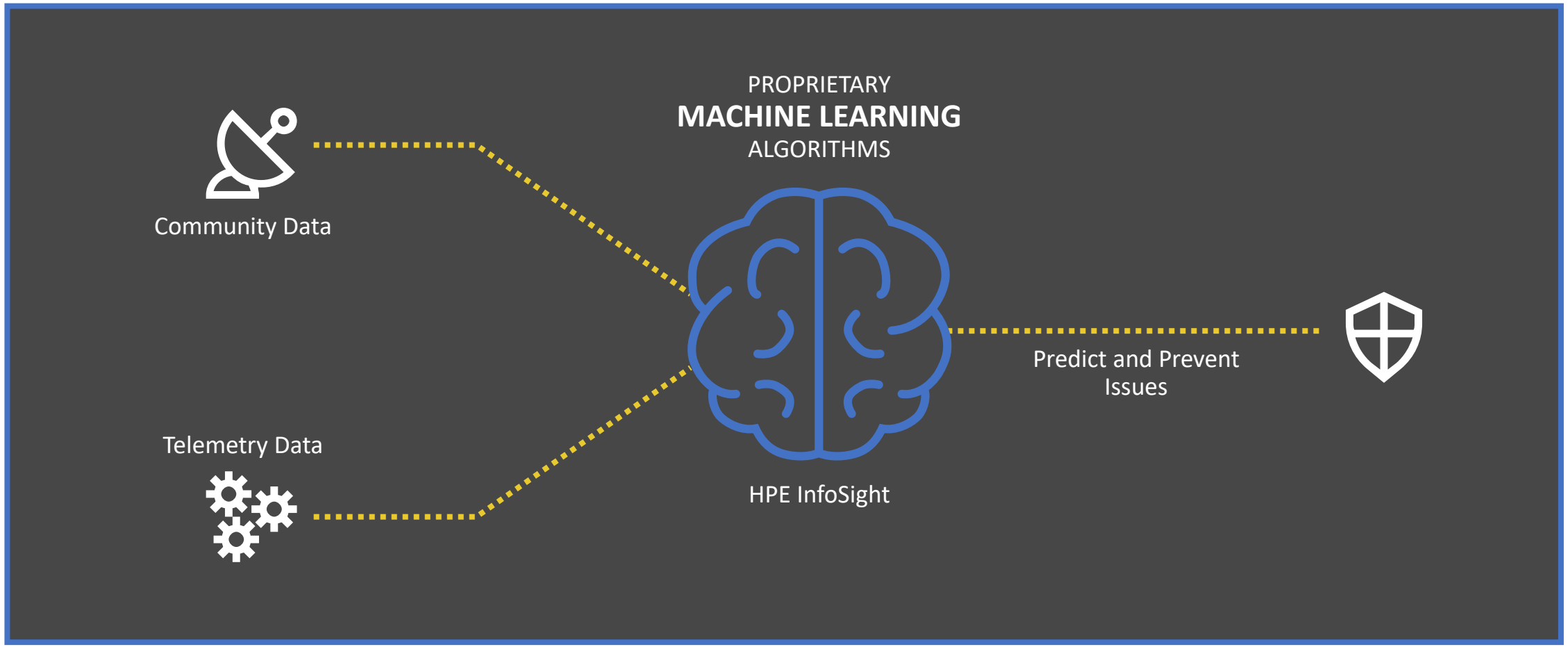

Apps
Loading...
Data

Endless Fire-fighting with Lost Nights and Weekends

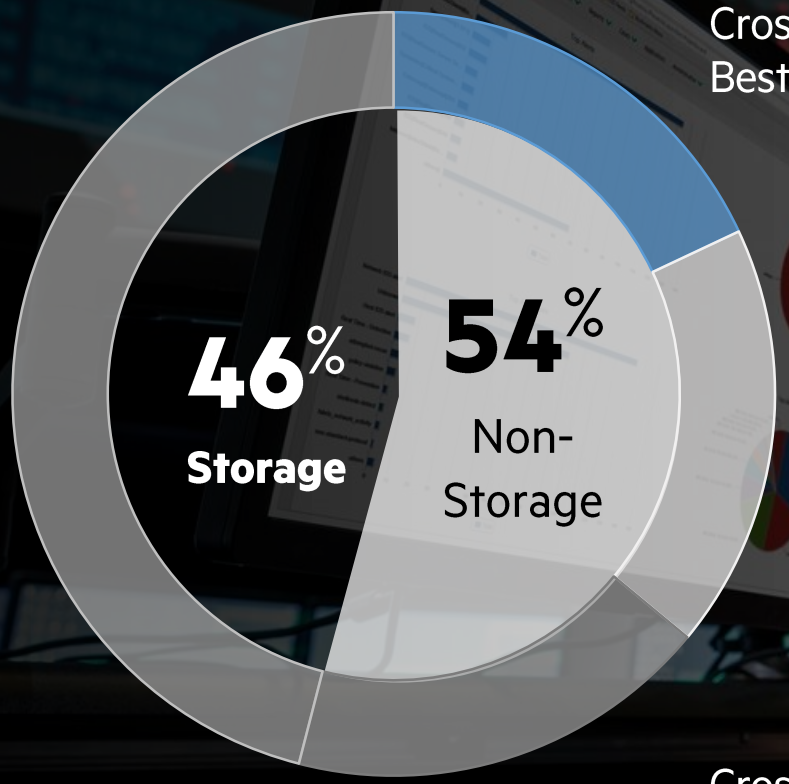
1. Reacting to unexpected problems
2. Spending countless hours interpreting graphs and logs
3. Calling vendor support adds to the frustration



Disruptions, business impact, and wasted time


PROPRIETARY
MACHINE LEARNING
ALGORITHMS
Community Data
Telemetry Data
HPE InfoSight
Predict and Prevent
Issues

There is no one cause...



Cross-stack Best Practices

Cross-stack Resource Contention

Cross-stack Interoperability

Source: InfoSight analysis HPE customer base

Cross-Stack Telemetry

vmware | docker | ORACLE | Microsoft SQL Server

Compute | Network | Storage

HPE INFOSIGHT HPE NIMBLE STORAGE

Transformed Support Experience

One call to level 3
No support tiers

Average hold time
<1 minute

93% cases opened
automatically

>4.91 out of 5 in
customer satisfaction

86% cases provide
solution automatically

85 NPS customer loyalty

54% issues solved are
outside of storage

>99.9999%
availability

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HPE InfoSight ™ Dashboards Infrastructure Resources

Nimble Storage Customer
Nimble Storage - Infosight

VMware Datacenters Clusters ESXi Hosts Datastores VMs

VM cs-opsa1

vCenter: cs-vcenter.cbcng.local Datacenter: DC1-ConvergedSystem Cluster: ConvergedSystem Host: cs-esx-main4.cbcng.local Datastores: 2

VM SUMMARY		CAPACITY		PERFORMANCE (PAST 24 HRS AVG)		
4 CPU COUNT	24.0 GiB MEMORY	81.4 GiB USAGE	200.0 GiB ALLOCATED	150.10 AVG IOPS	0.18 ms AVG LATENCY	3.00 ms MAX LATENCY

Performance Capacity VMDKs

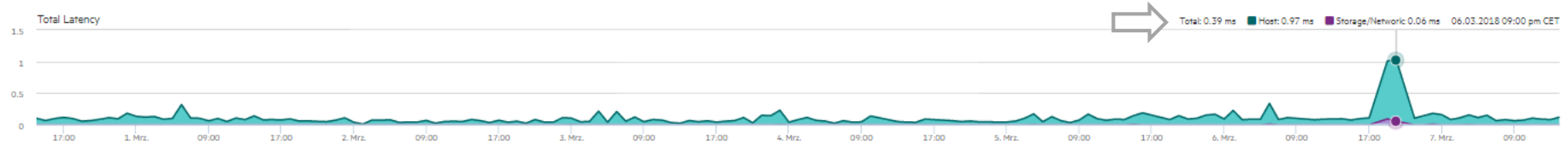
InfoSight Cross-Stack Analytics for VMware Environments

Shows you a detailed breakdown of your VM

Time Range: 28.02.2018 17:08 CET to 07.03.2018 17:08 CET

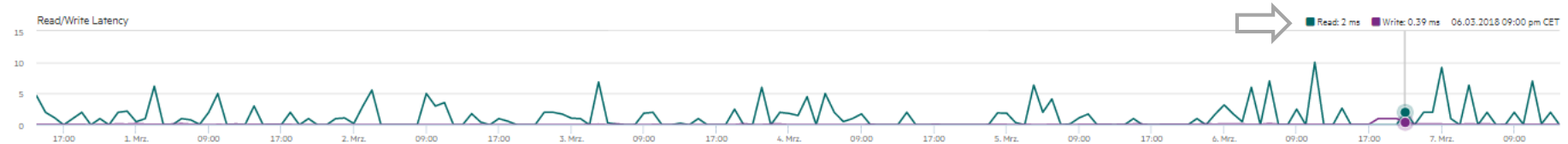
1D 1W 1M 3M Custom

Latency



Average Host
0.1 ms

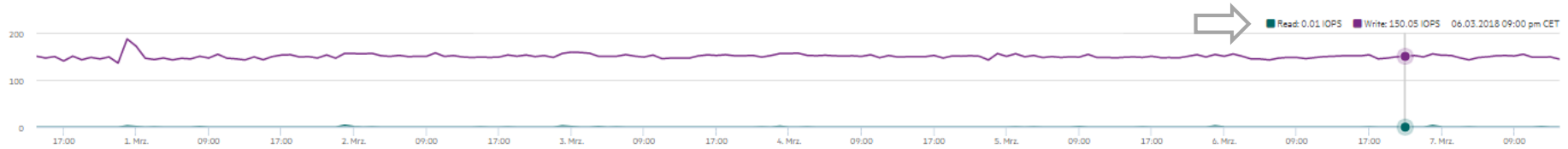
Average Storage/Network
0 ms



Average Read
2.16 ms

Average Write
0.1 ms

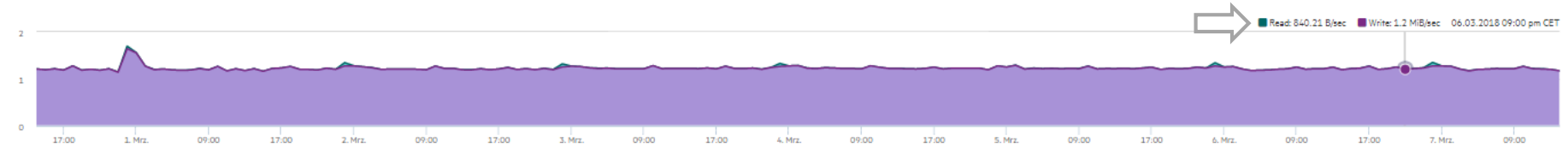
IOPS



Average Read
0.22 IOPS

Average Write
150.04 IOPS

Throughput



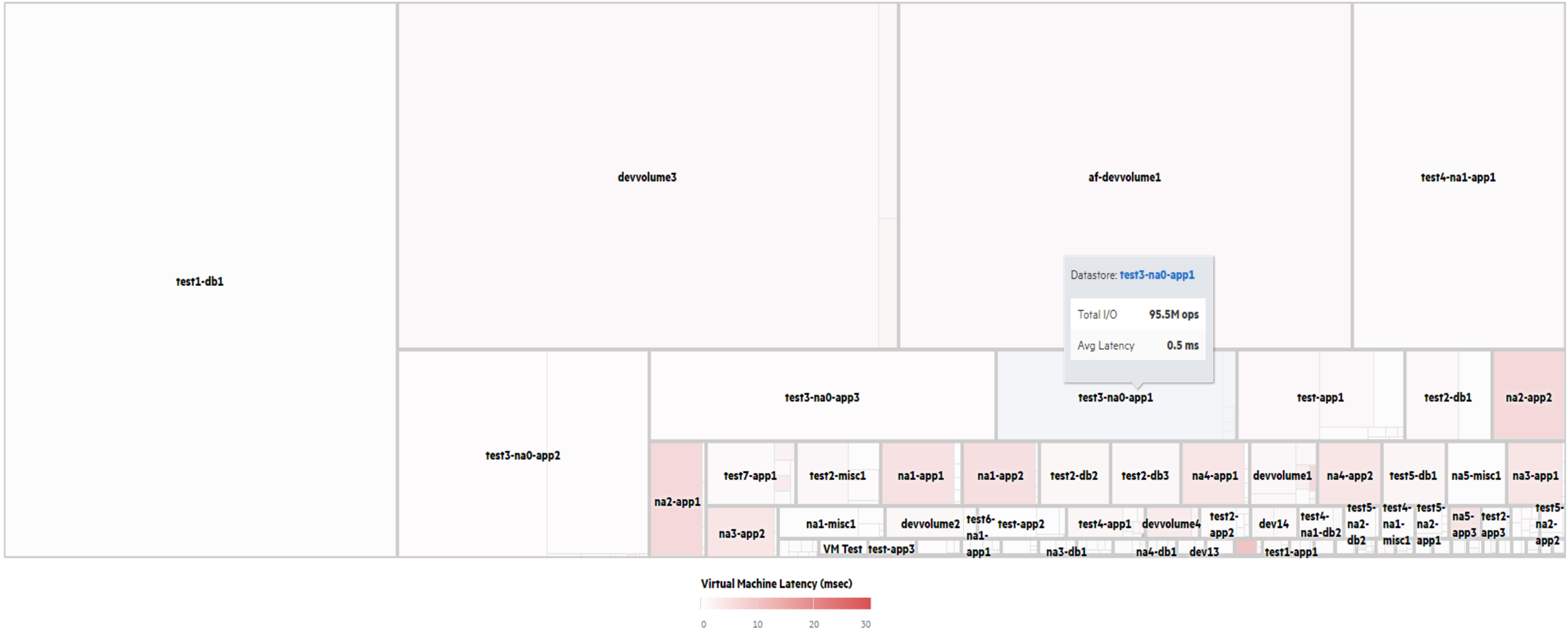
Average Read
3.43 KiB/sec

Average Write
1.23 MiB/sec

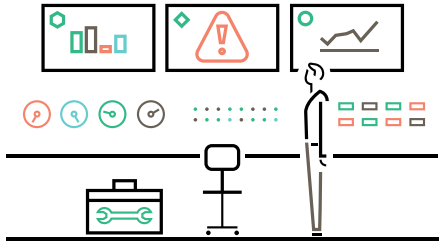
View VM I/O Contention Treemap For vCenter is-vcenter.lvs.nimblestorage.com

VM I/O and Latency grouped by Datastore

Past 24 Hours



AI Recommendation Example:



1

Prediction

Data availability
disruption due to obscure memory leak

2

Diagnostics

Signature matching
60+ memory allocation sensors forecasted over time, correlated across the installed base

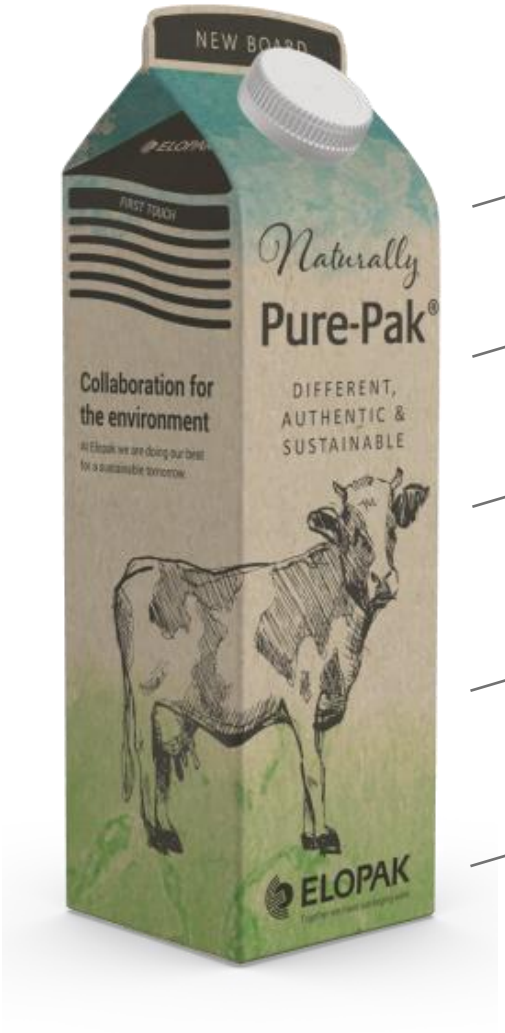
3

Recommendation

40 Customers
Received an automatic case sent to apply non-disruptive update to avoid impact

How did Infosight impact the Elopak IT infrastructure

Some few examples:



Dashboard : Visibility - quick and easy check of current status

Alerts : When action is needed

Visual : Using intuitive graphs and visual representations of the current situation

L3 Support : Not only focused on Nimble, but helped with cases that didn't relate to storage.

Result: Insight

The industry's *broadest* and *deepest* flash portfolio

Affordable acceleration

HPE MSA

Built for enterprise HCI

HPE SimpliVity 380

Simplicity and a new approach to storage and support with HPE InfoSight

HPE Nimble Storage

Flexibility with Mission-Critical Redefined

HPE Primera

Extreme availability

HPE XP7

Predictive	Cloud Ready	Timeless

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HPE Nimble Storage

HPE Store More Guarantee	Storage Class Memory and NVMe Ready	Next Generation hardware	Inline always-on dedupe on Adaptive Flash arrays
Buy with confidence. Deploy the most efficient all-flash array.	Future-proof investments	All Flash platform that delivers up to 220%[1] better price-performance	Industry's most efficient hybrid arrays

1) Based on internal HPE product comparisons

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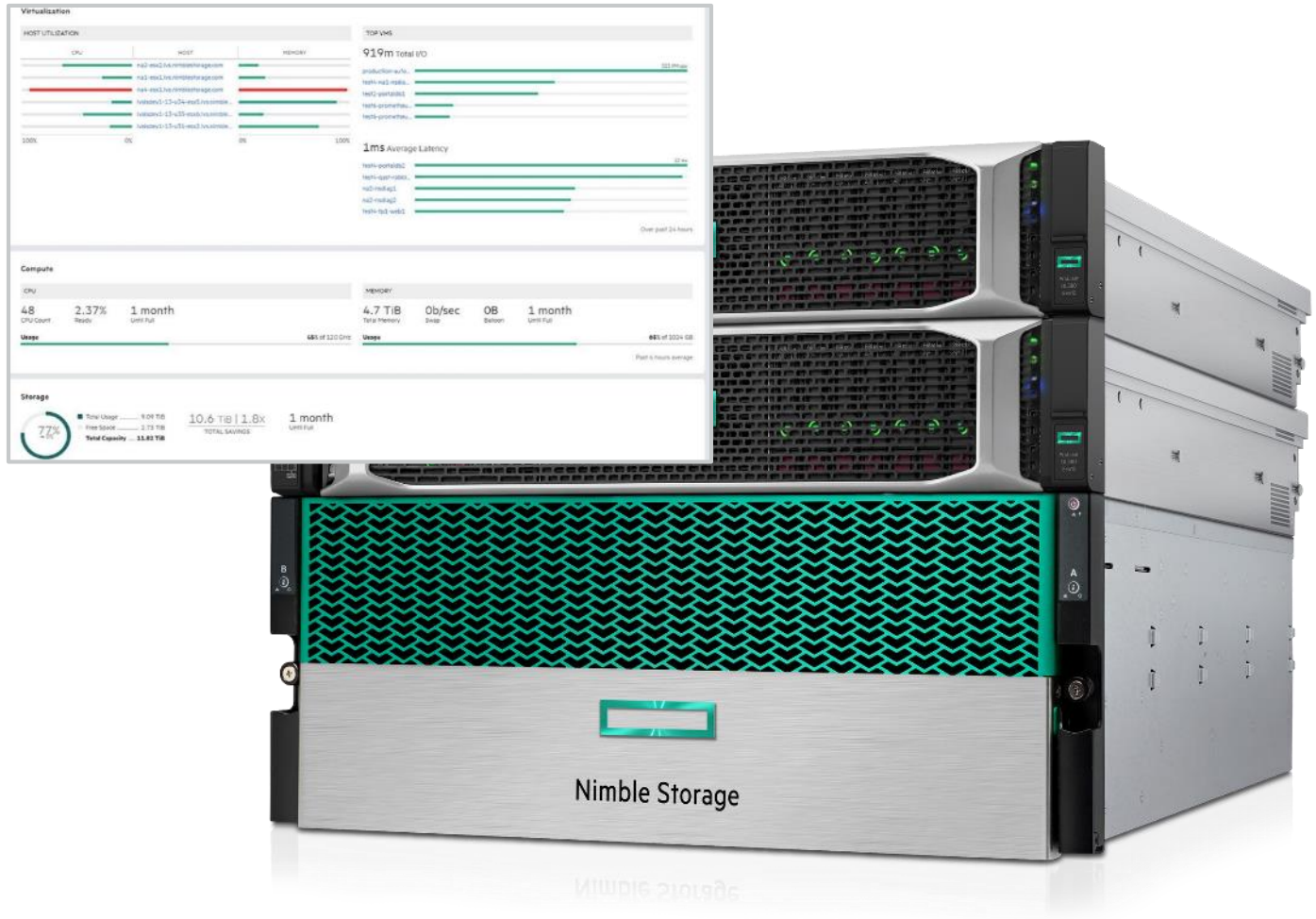
HPE Nimble Storage dHCI

Flexibility of Converged. Simplicity of HCI.

Intelligently Simple

Absolutely Resilient

Efficiently Scalable

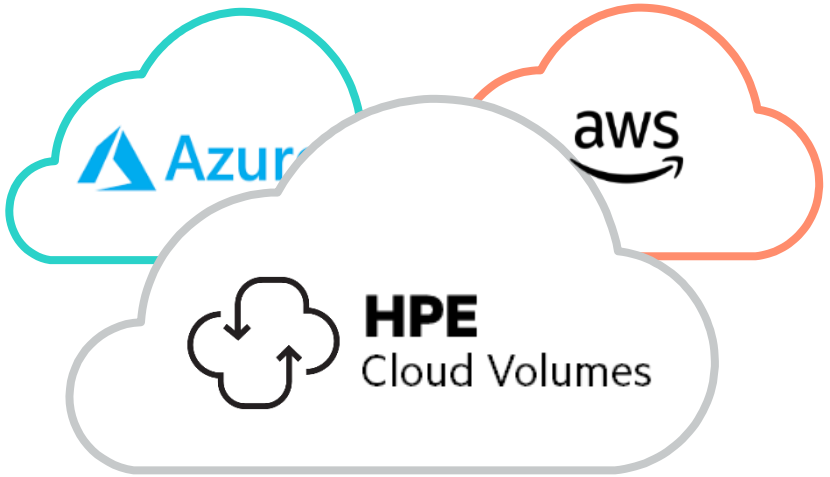


HPE Nimble Storage dHCI *efficiently scalable*

Easy workload mobility across hybrid cloud with HPE Cloud Volumes

Native bi-directional

data mobility



Hybrid Cloud Backup and DR	Agility for DevOps	Hybrid Cloud Container Apps

Round up & findings :

Learnings and situation today:

- Only one admin -> shifting focus to business and security
- Simplified overview and administration
- Predictive maintenance
- Delivery and implementation
- Backup and restore – Veeam integration and speed

HPE Storage – Going beyond Flash

Predictive	Cloud Ready	Timeless
AI for the data center to predict and prevent issues and eliminate the pain of support	On-premises infrastructure that enables easy mobility between on-premises and the public cloud	Future-proof your investment with all-inclusive licensing, guaranteed availability flexible upgrade and payment options

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Thank you

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