Optimization Advisor

Demo Customer

Date: January 20th, 2023

Agenda

Objectives for today

1

Review and Align

Understand the current landscape across software, hardware, licensing and usage. Align on requirements and needs

2

Detect and Connect

Identify and discuss opportunities for cost optimization, modernization and security improvements - and ensure alignment to business needs

3

Plan and Design

Agree next steps to move the current environment to the future required state unifying contracts, technology and support

Your business needs and how we can help

## We understand your business needs

- Security

  You want to ensure that your environment is protected

- Optimization

  You want to get the most out of your existing deployment

- Modernization

  You want to use the latest solutions

- Cost Control

  You want to reduce costs and best allocate spend

How we are helping you get there

1. We analyzed your environment through an environment wide assessment scanning, 9583 machines

2. Leveraging this data, we have found opportunities to better leverage your existing assets and provided recommendations to better to help in modernizing your infrastructure

3. We have recommended a set of solutions for your needs and your current infrastructure

4. Our experts are also ready to help you in other aspects of your journey, including security, architecture, and more
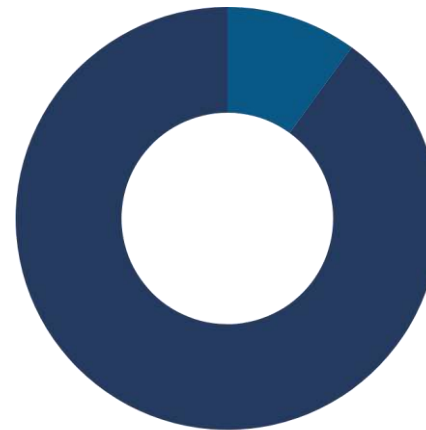
Environment Summary

1. **4661 Desktops in the environment**

2. **1636 Servers in the environment**

3. **This accounts for 90% of devices in Active Directory**

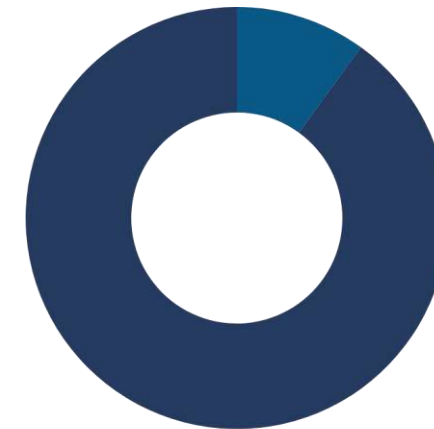4. **There were 700 Active Users discovered in your Active Directory**

Workstations — 4,661

Servers — 1,636
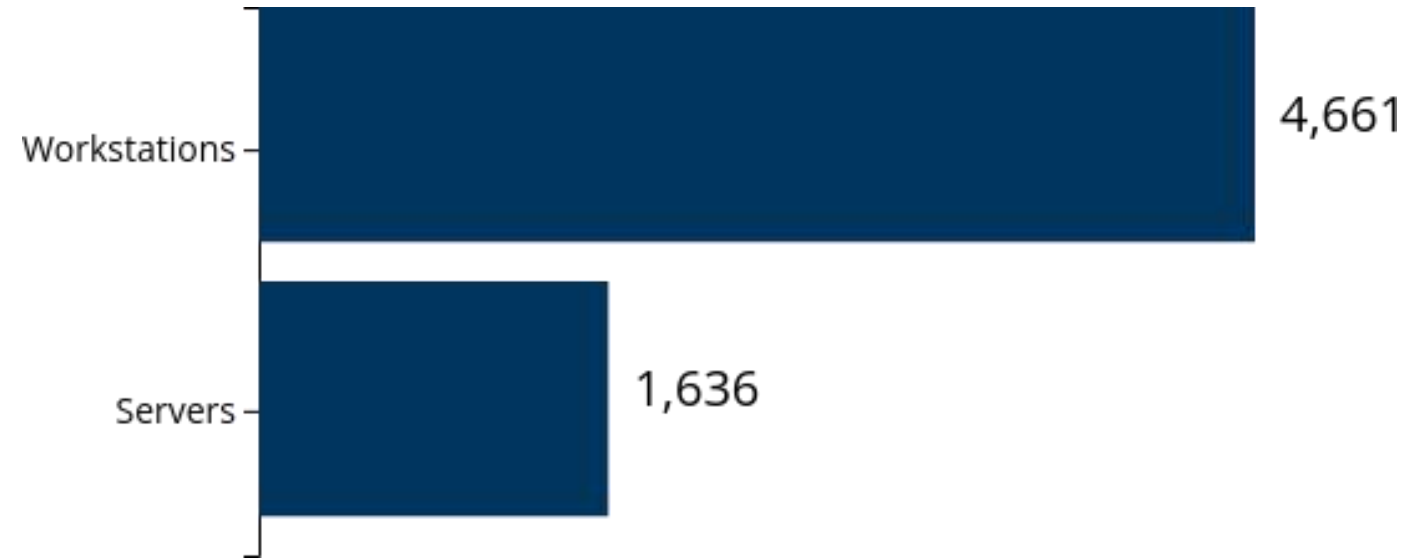
Percentage of Workstations Discovered
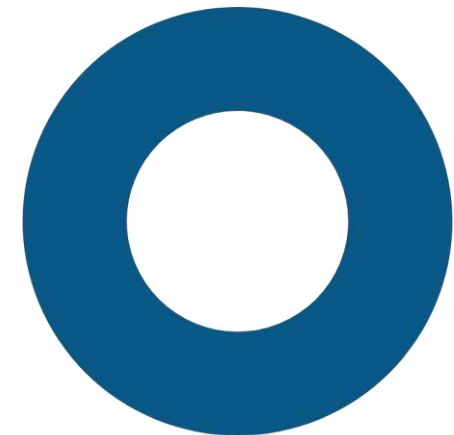
Percentage of Servers Discovered

Active Directory Users

Missing: 10%
Discovered: 90%

Missing: 10%
Discovered: 90%

Last Login > 90 Days Ago: 700 endpoints

Summary of Findings
Chapter 1 - Security

1. **Standardization & Supportability**
   0% of desktops in the environment are running an unsupported operating system. 7% of servers in the environment are running an unsupported operating system. 14 Office installs were found to be unsupported

2. **Current Threat Protection**
   191 devices discovered had no Antivirus installed

3. **Application Security**
   We have discovered 799 severe vulnerabilities on endpoints

4. **Users**
   700 Users had not logged into the network within the last 90 days

99 98 98

Users

Applications

Threat Protection

Supportability
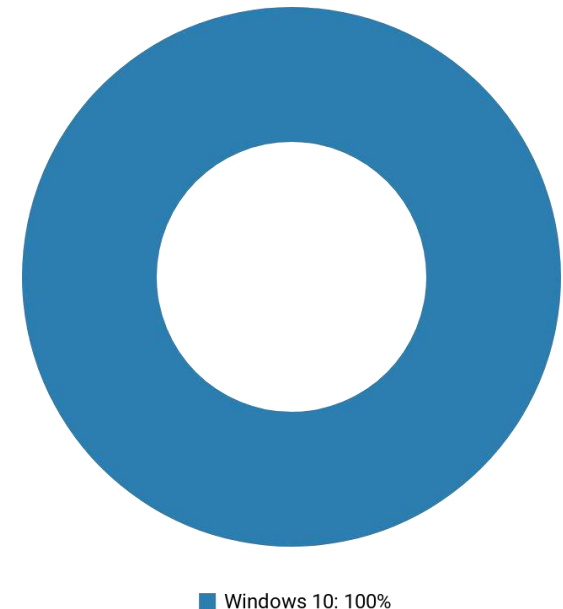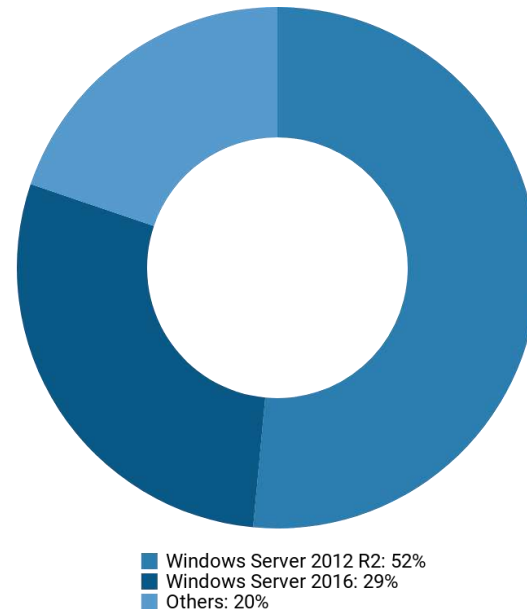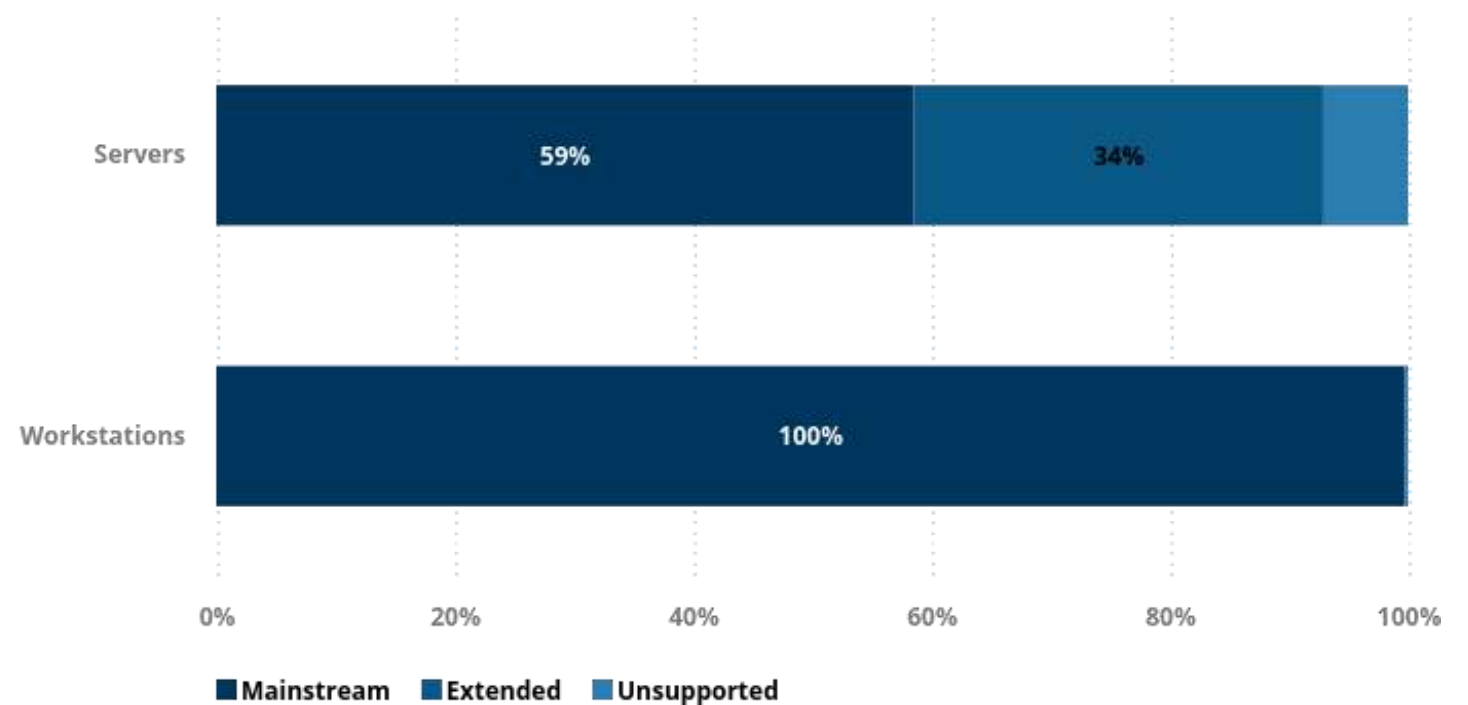
Supportability
Operating Systems

Keeping Operating Systems up to date can help minimize attack surface

1. **196 of your servers are running an out of support OS**

2. **13 of your desktops are running an out of support OS**

Operating systems follow a 10-year lifecycle. Windows 7 has been end of life since January 14th, 2020. Windows 10 will go end of mainstream support as of October 14th, 2025

Microsoft 365 provides access to the most current desktop operating systems, and includes the EMS suite

Supportability
Productivity Applications

Keeping productivity applications up to date can help minimize attack surface

1. **14 of your Office installs are running an out of support version**

2. **2 of your Visio installs is running an out of support version**

3. **1 of your Project installs are running an out of support version**

Microsoft 365 Desktop Apps and Online versions of productivity products can help negate supportability issues
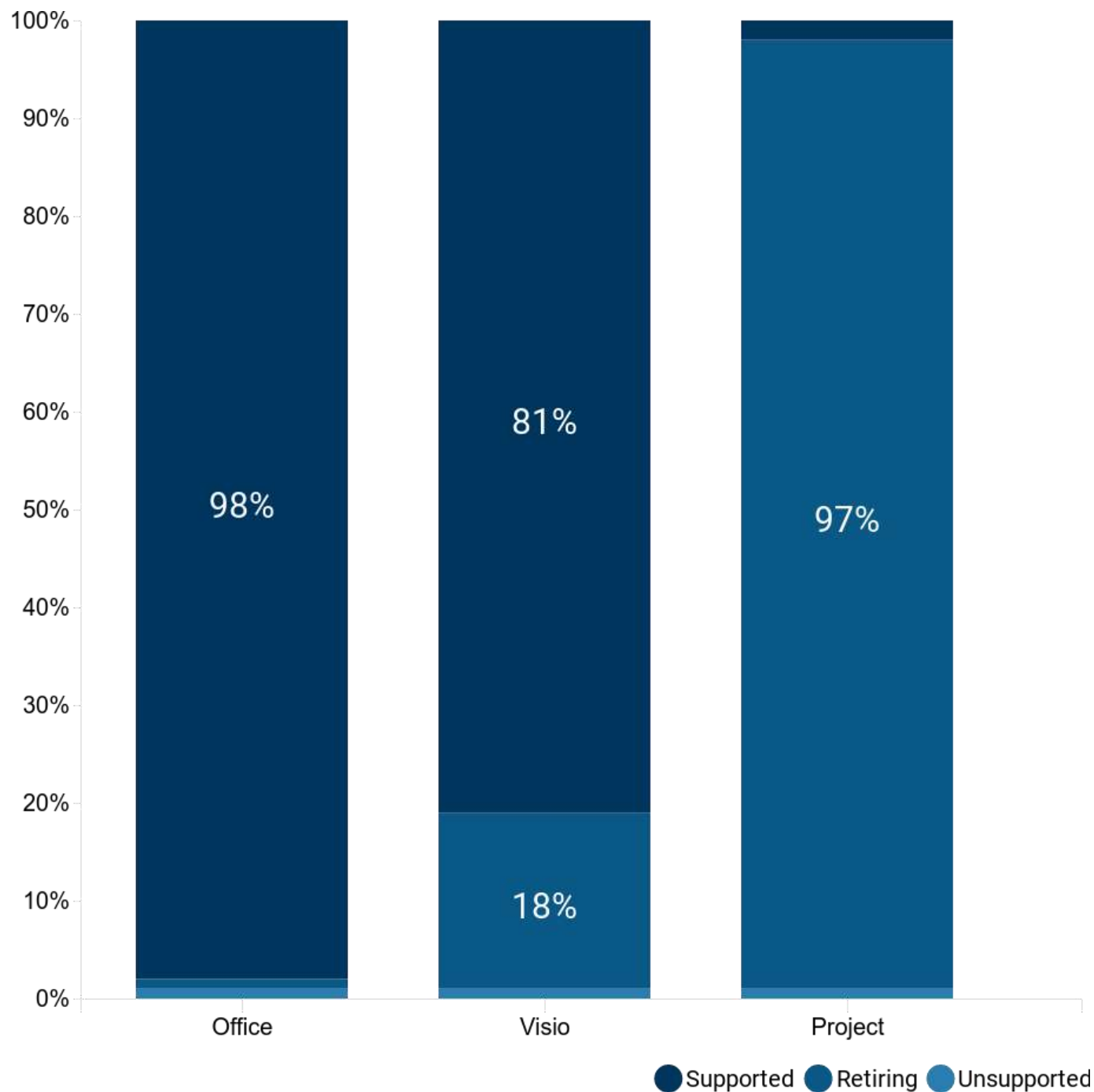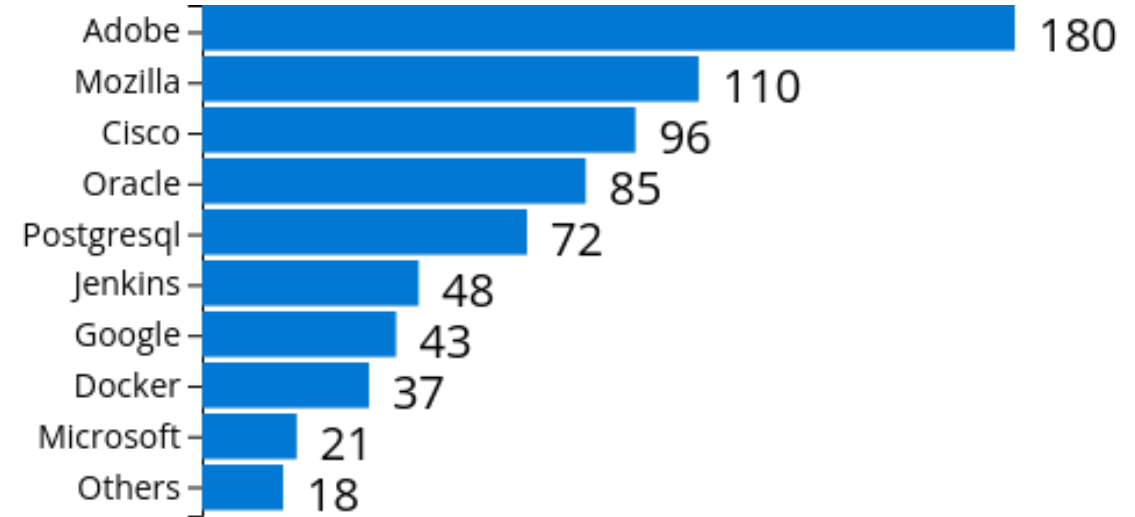
Protecting Endpoints
Application Security

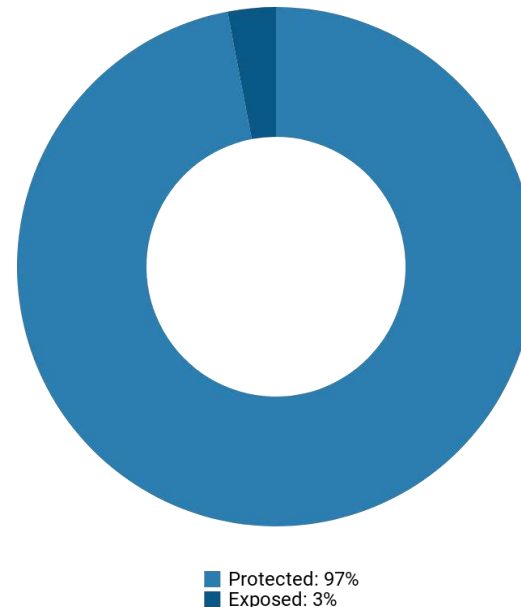**Several endpoints were discovered to have exposures at the application level**

1. **799 severe software vulnerabilities were discovered**

2. **3% of devices lacked an endpoint protection product**

3. **1% of software installations were exposed to the Log4j vulnerability**

Simplify application management by consolidating into Microsoft 365

Top software vulnerabilities

Vendor	Count
Adobe	180
Mozilla	110
Cisco	96
Oracle	85
Postgresql	72
Jenkins	48
Google	43
Docker	37
Microsoft	21
Others	18

Deployment of Antivirus

- Protected: 97%
- Exposed: 3%

Log4j Exposure

- Potentially Exposed: 12%
- Exposed: 1%
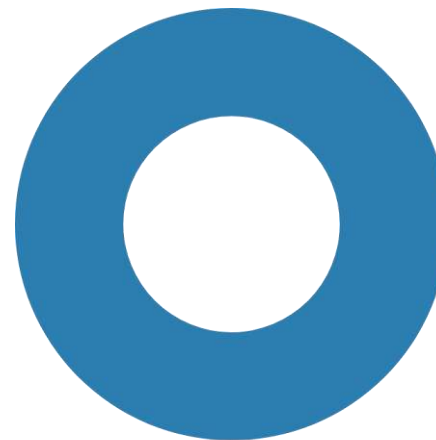- Safe: 87%
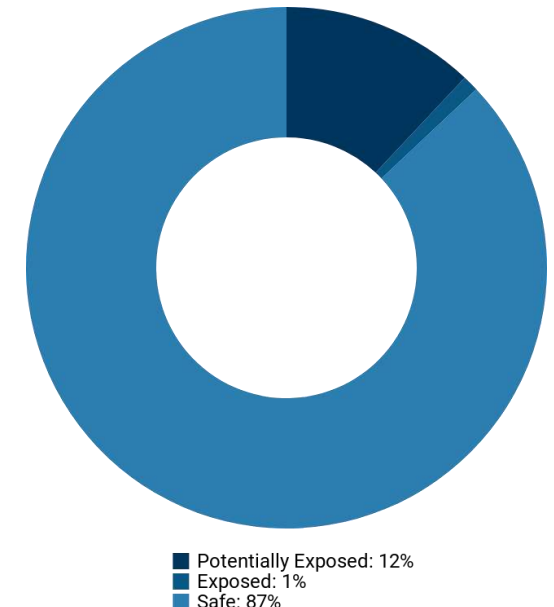
Protecting Endpoints
OS Security

Several devices appear to be exposed to OS level risks

1. **13 Workstations and 196 Servers are running end of life operating systems**

2. **21 of devices were exposed to the WannaCry & BadRabbit vulnerabilities**

3. **18 of devices were exposed to the Bluekeep vulnerability**

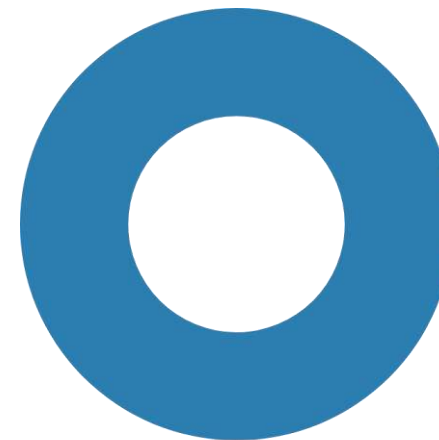Leveraging cloud-based infrastructure can help in mitigating endpoint management, streamlining business management requirements. Azure and Microsoft 365 offer several services, such as Intune, to ease the management process
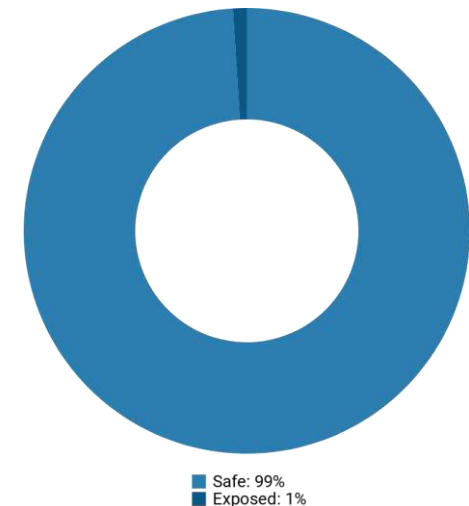
Servers — 59% — 34%
Workstations — 100%

■ Mainstream ■ Extended ■ Unsupported

WannaCry / BadRabbit
■ Safe: 100%
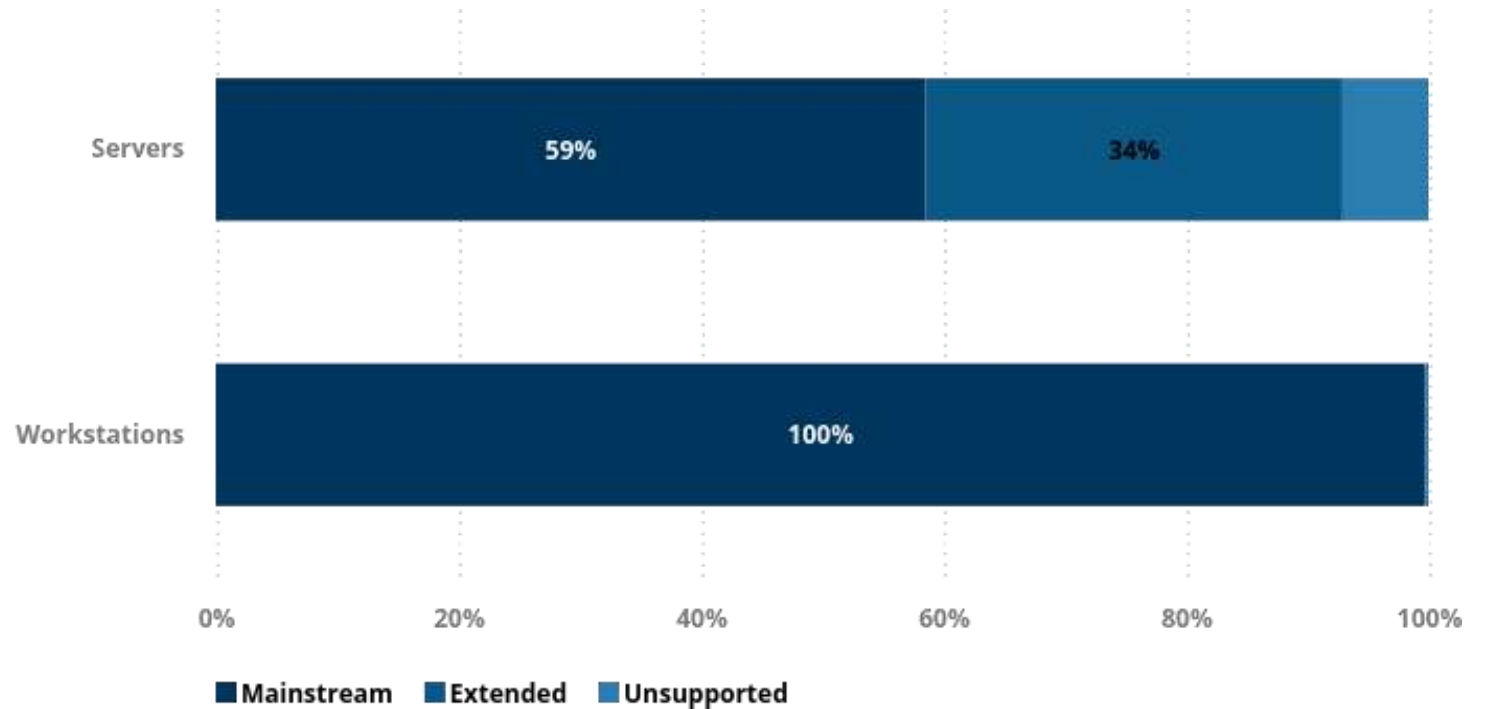
Bluekeep
■ Safe: 100%

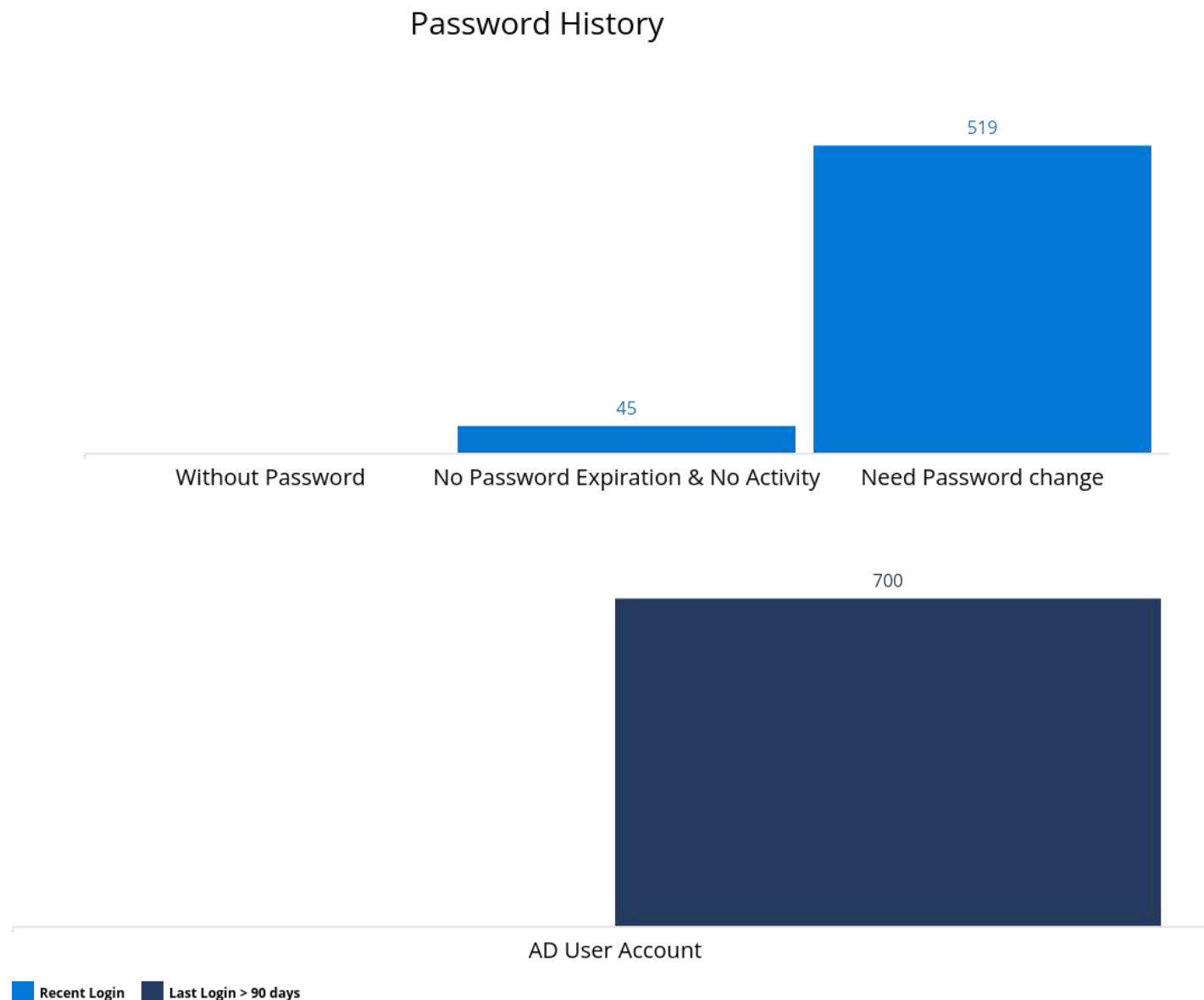**Meltdown**
■ Safe: 99%
■ Exposed: 1%

Identify Risks
User Risks

2508 User Accounts were discovered in Active Directory

1. **700 Users had not logged on within the last 90 days**

2. **0 users could login without a password**

3. **45 users had passwords that did not expire but were not active within the last 90 days**

4. **519 users had not changed their password in the last 2 years**

Active monitoring and maintenance of Active Directory accounts, coupled with effective authentication policies is critical for securing the environment. Azure Active Directory can assist with managing users access and accounts, including Multi Factor Authentication for increased security

Password History

519

45

Without Password   No Password Expiration & No Activity   Need Password change

700

AD User Account

■ Recent Login   ■ Last Login > 90 days

Summary of Findings
Chapter 2 - Optimization

1. **Server Sizing**
   There were 137 servers that were underutilized and could benefit from downsizing. There were an additional 70 servers that were over utilized and could benefit from upsizing
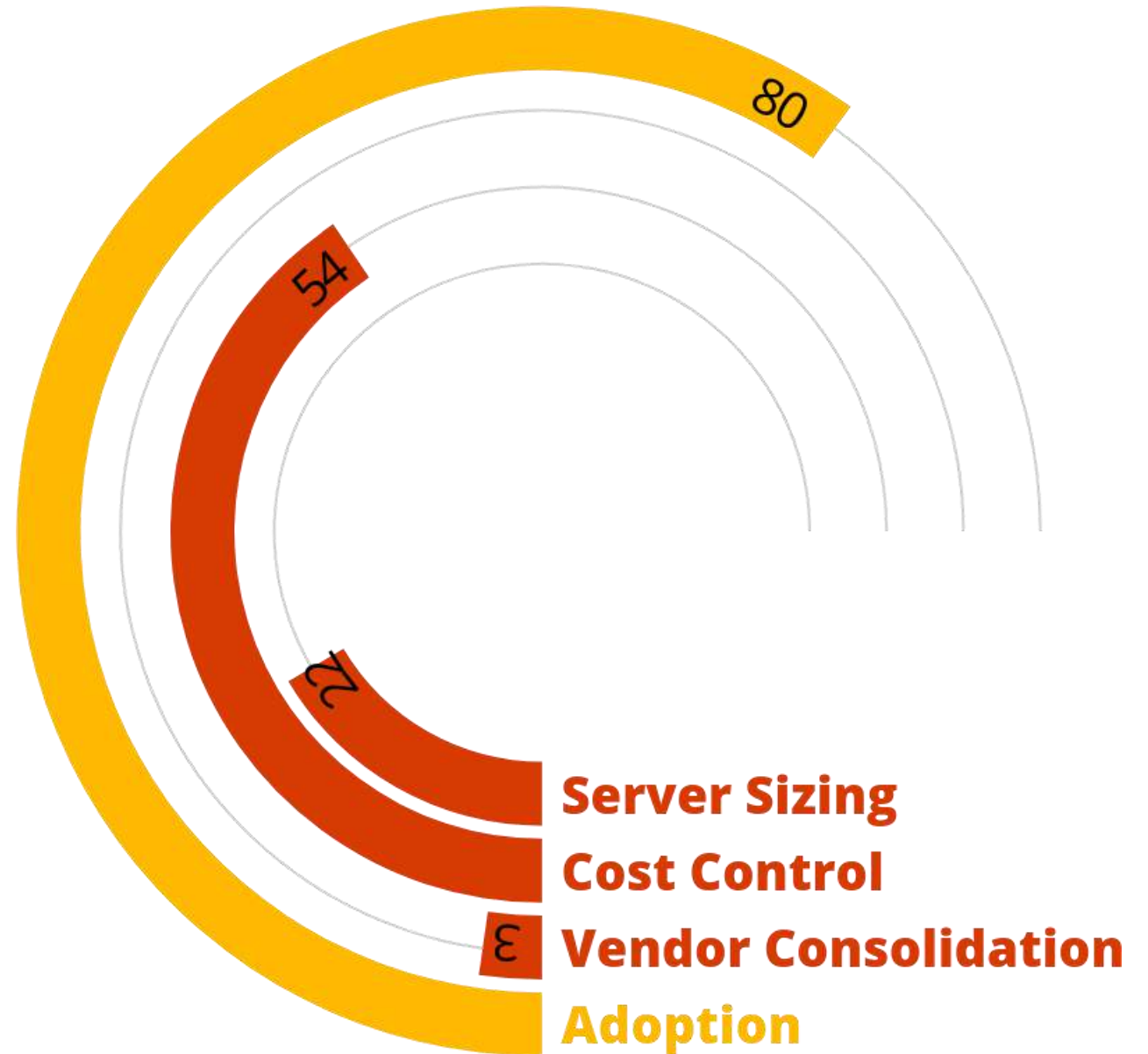
2. **Cost Control**
   Based upon Azure profile recommendations, Azure cost could be reduced by up to 54%

3. **Vendor Consolidation**
   We found 39 products from 36 vendors that could be consolidated into Microsoft offerings

4. **Adoption**
   Several users had not yet utilized their existing Microsoft 365 services. 80% of Teams users had yet to leverage the service

Server Optimization
Insights

We found four key optimization opportunities:

1. **124 Windows Servers could be downsized:**
   71% less CPU cores and 82% less RAM

2. **13 SQL Servers could be downsized:**
   88% less CPU cores and 66% less RAM

3. **66% of Windows Servers will be out of support by 2026:**
   Extend by 3 years for free in Azure

4. **71% of SQL Servers will be out of support by 2026:**
   Extend by 3 years for free in Azure

Server Utilization

Supportability
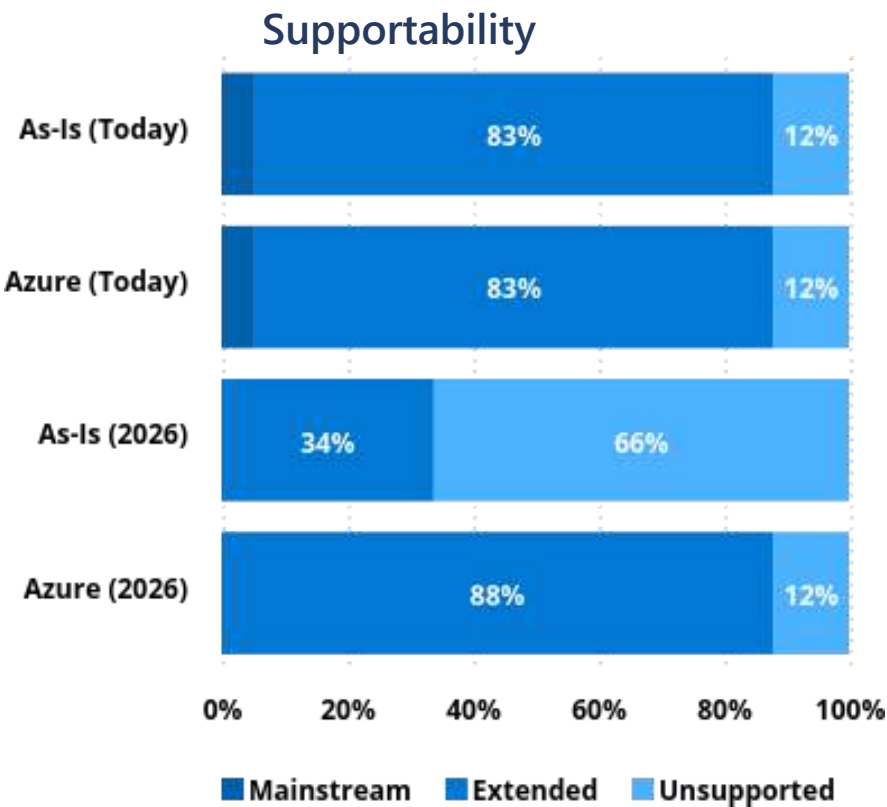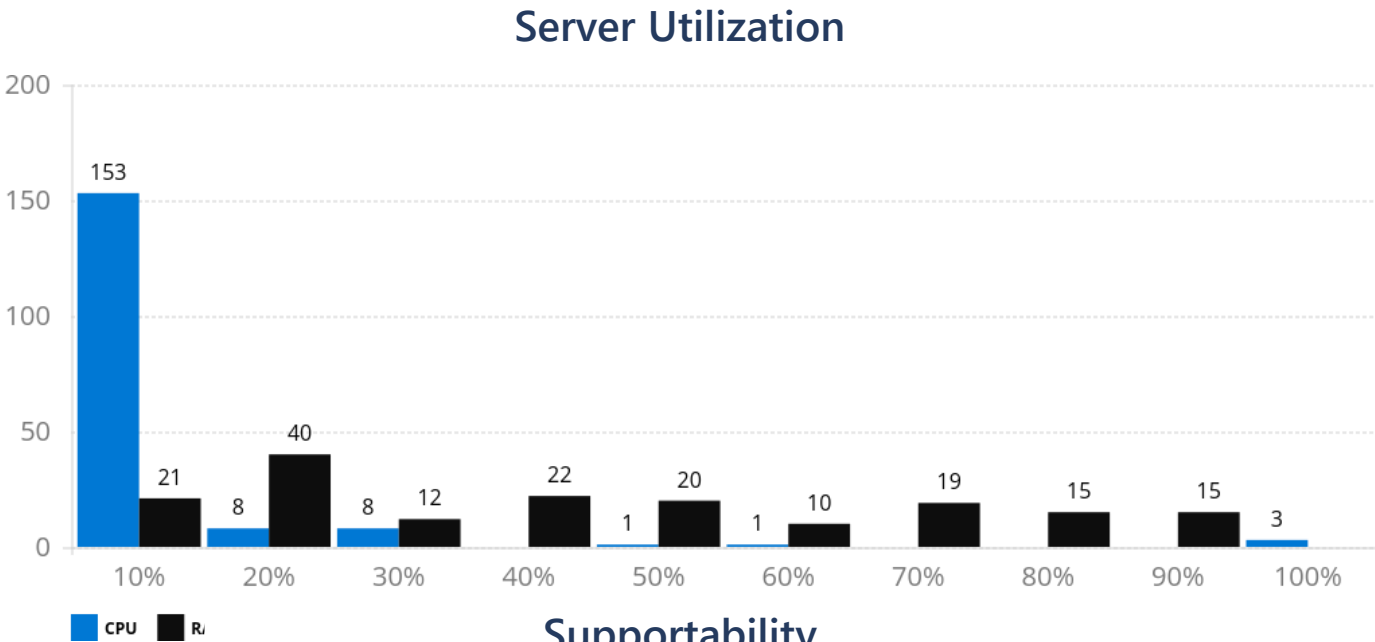
Server Optimization
Azure Costs

We found four key optimization opportunities:

1. **67 Servers in the environment were over utilized. Over utilized severs can cause unnecessary strain on your environment, impacting business operations, which ultimately affect revenue**

2. **Taking your existing resource usage into consideration, right sized Azure recommendations have been produced. These findings can reduce your annual Azure Spend by up to 66% per year**

3. **Right Sizing servers can reduce unnecessary on-premise hardware spend and offer flexible solutions to maximize your investment**

Server Utilization
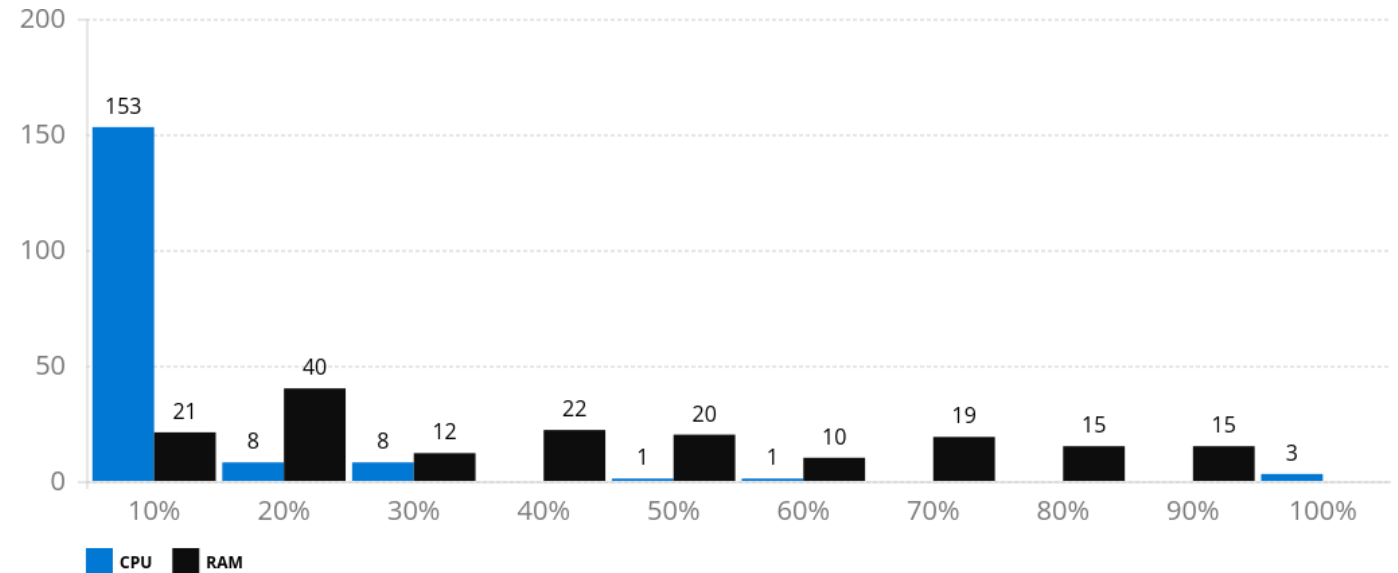
Annual Azure Costs
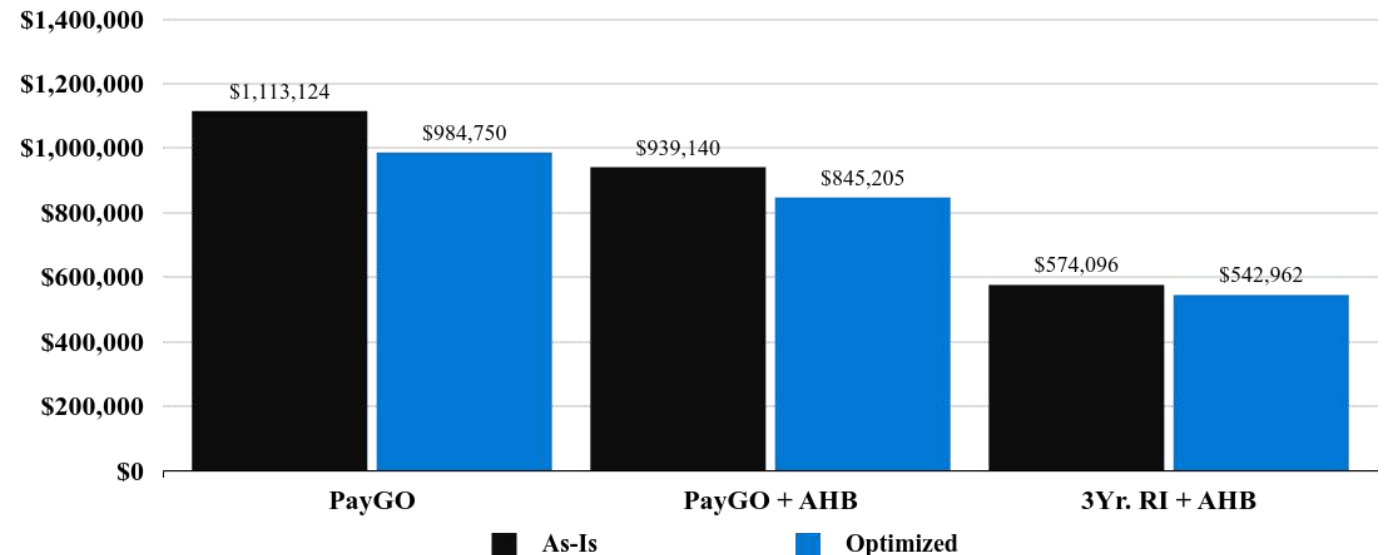
Microsoft 365
License Insights

Optimizing licenses helps ensure proper usage while saving costs and protecting sensitive data.

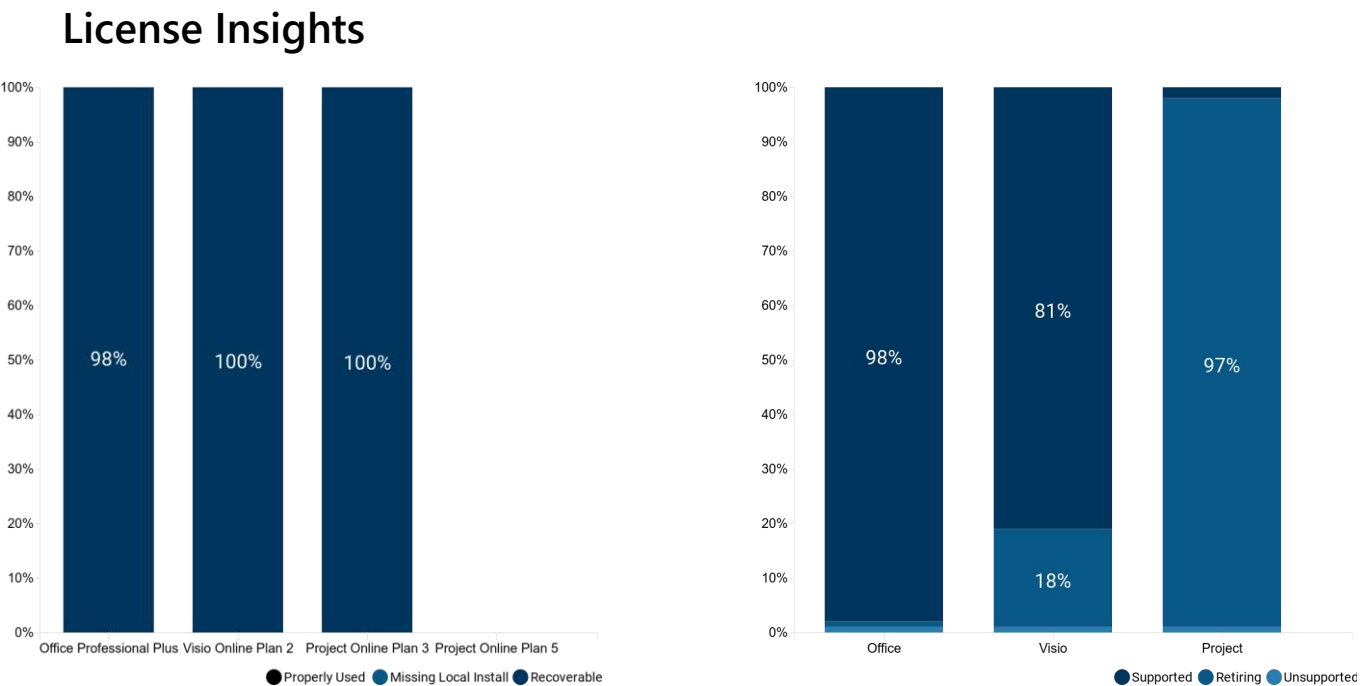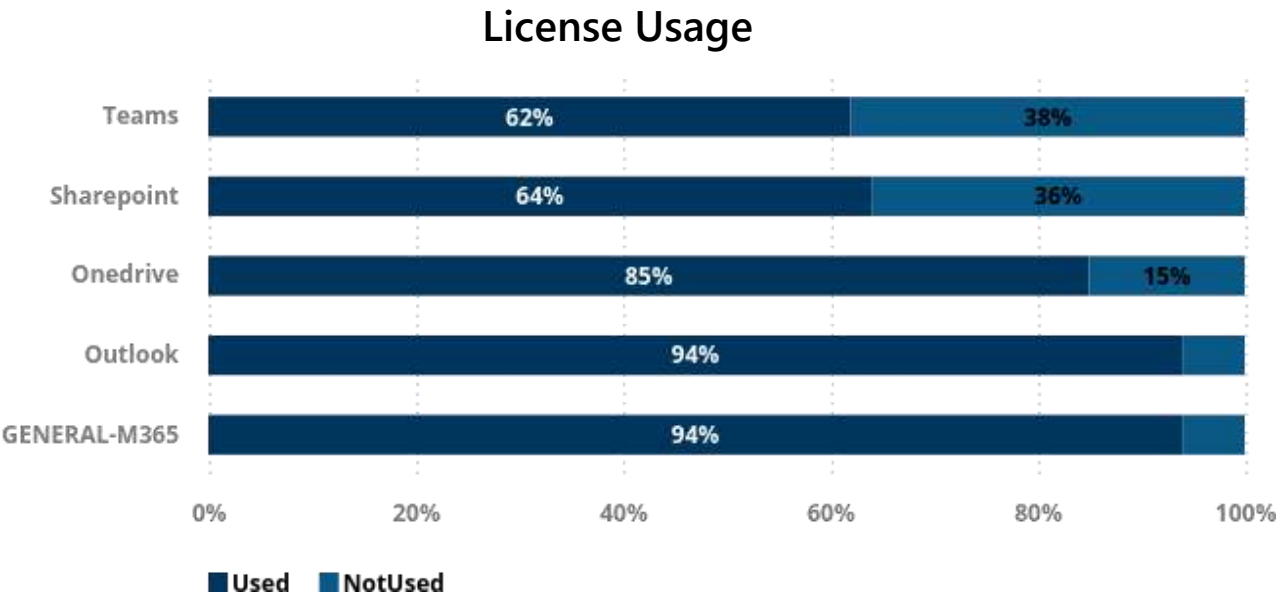1. 62% of your current Teams licenses are in use, 38% are inactive or unused.

2. 85% of OneDrive licenses are in use. 15% are not in use.

3. Additionally, 0% of your Office licenses looked to be improperly provisioned

4. We recommend that you either replace unused licenses or ensure that users are following best practices to ensure proper governance of data.

Consolidating licenses can save approximately $24,300 per year.

Notes: Costs for Microsoft solutions are only a reference, accurate pricing should be provided by your partner

License Usage

	Used	NotUsed
Teams	62%	38%
Sharepoint	64%	36%
Onedrive	85%	15%
Outlook	94%	
GENERAL-M365	94%	

License Insights

Office Professional Plus 98% | Visio Online Plan 2 100% | Project Online Plan 3 100% | Project Online Plan 5

● Properly Used ● Missing Local Install ● Recoverable

Office 98% | Visio 81% / 18% | Project 97%

● Supported ● Retiring ● Unsupported

Vendor consolidation
Security insights

Reducing the number of security vendor tools can reduce cost and simplify management

1. **We detected 20 different vendors being used for security**

2. **Current security management costs are approximately $463,863, while information protection costs are approximately $184,926**

There are multiple scenarios for consolidating to Microsoft. There are $710,040 per year in potential costs savings

Notes: Costs for Microsoft solutions are only a reference, accurate pricing should be provided by your partner

Threat Protection	Security Management	Information Protection	Systems Management
Crowdstrike	Netskope	Mimecast	Microsoft
Microsoft	SolarWinds		Flexera
Symantec			Lansweeper
Avast			
$60,756 spent per year	**$463,863 spent per year**	**$184,926 spent per year**	**$495 spent per year**

Vendor consolidation

Productivity and collaboration insights

Reducing the number of productivity and collaboration tools can reduce cost and simplify management

1. **We detected 16 different vendors being used for productivity and collaboration**

2. **The current spend on collaboration is approximately $1,037,260 and cloud file transfer is approximately $88,742**

There are multiple scenarios for consolidating to Microsoft. There are $1,127,322 per year in potential costs savings

Notes: Costs for Microsoft solutions are only a reference, accurate pricing should be provided by your partner

Collaboration	Screensharing & Remote Control	Cloud File Transfer
Cisco	TeamViewer	Box
Microsoft	Splashtop	Filezilla
BlueJeans Network		Google
Zoom		Apple
$1,037,260 spent per year	**$1,320 spent per year**	**$88,742 spent per year**

Chapter 3 - Modernization
Summary of Findings

1. **Consolidating SQL**
   There were 29 underutilized SQL servers in your environment

2. **Client Hardware**
   191 devices discovered had no Antivirus installed

3. **Client Sizing**
   There were 187 clients that were underutilized and could benefit from downsizing. There were an additional 150 clients that were over utilized and could benefit from upsizing

4. **Line of Business Applications**
   There were 2 Line of Business Applications in use. Consolidation of these applications could lead to $0 of potential savings
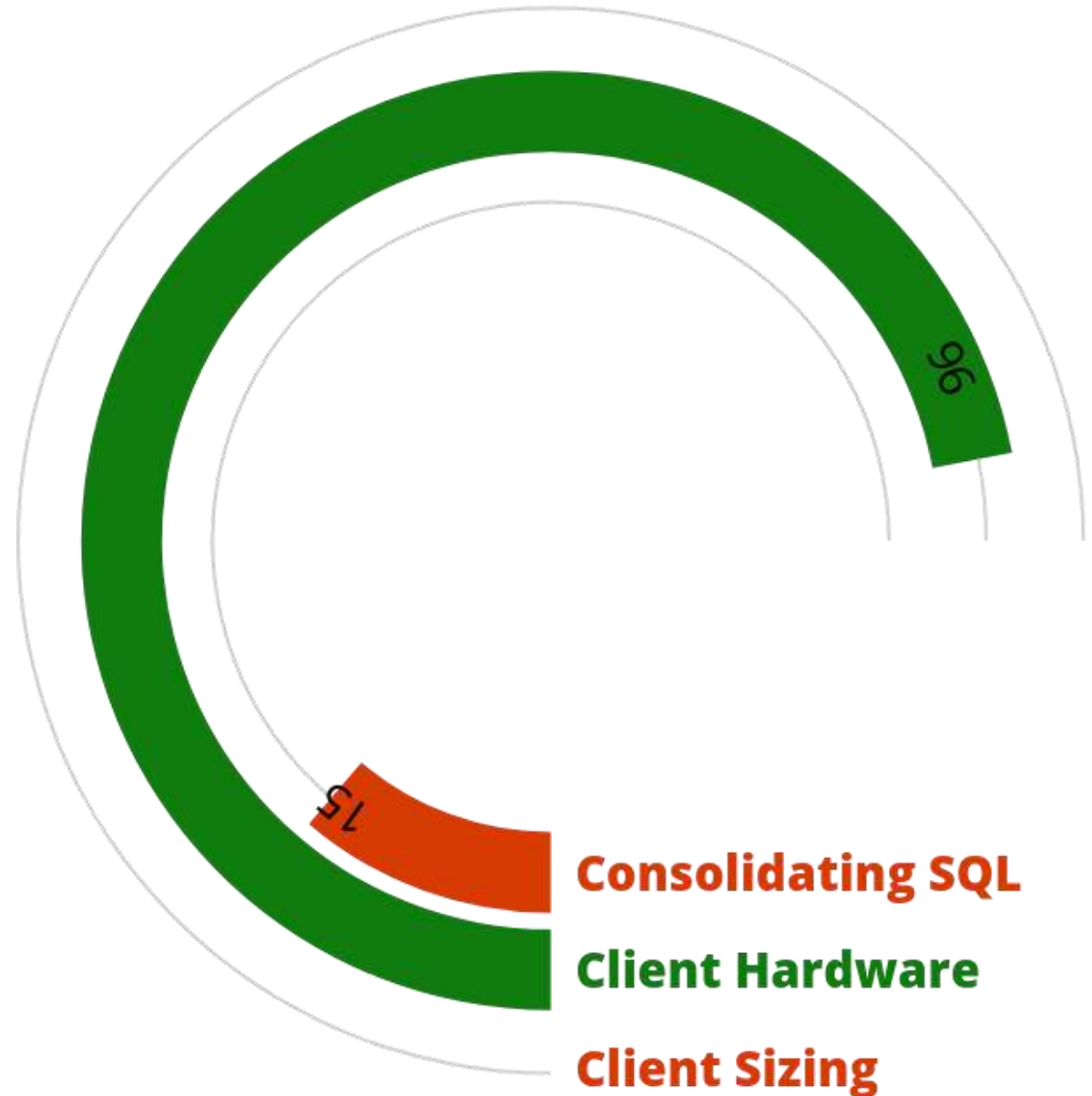
Consolidating SQL
PaaS Insights

SQL Instance Pools can offer a way to consolidate your SQL server footprint

1. 29 SQL servers used below 25% of both their allocated CPU and RAM. An additional 23 machines were seen to spike infrequently

2. 125 versions of SQL server in your environment were discovered to be end of life. SQL Instance Pools offer managed support to ensure the most up to date versions of SQL are always in use
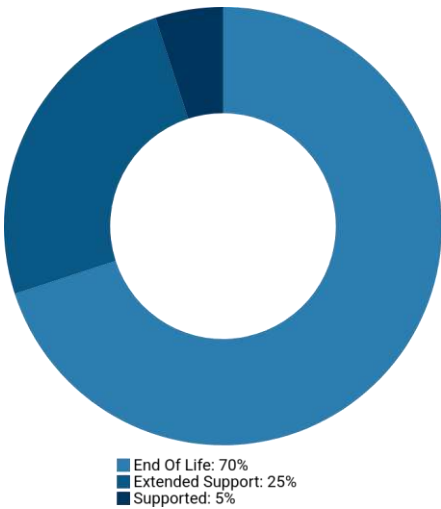
Consolidating these machines into a PaaS offering could reduce the number of SQL servers required by 50%

Server Utilization

CPU ■ RAM ■
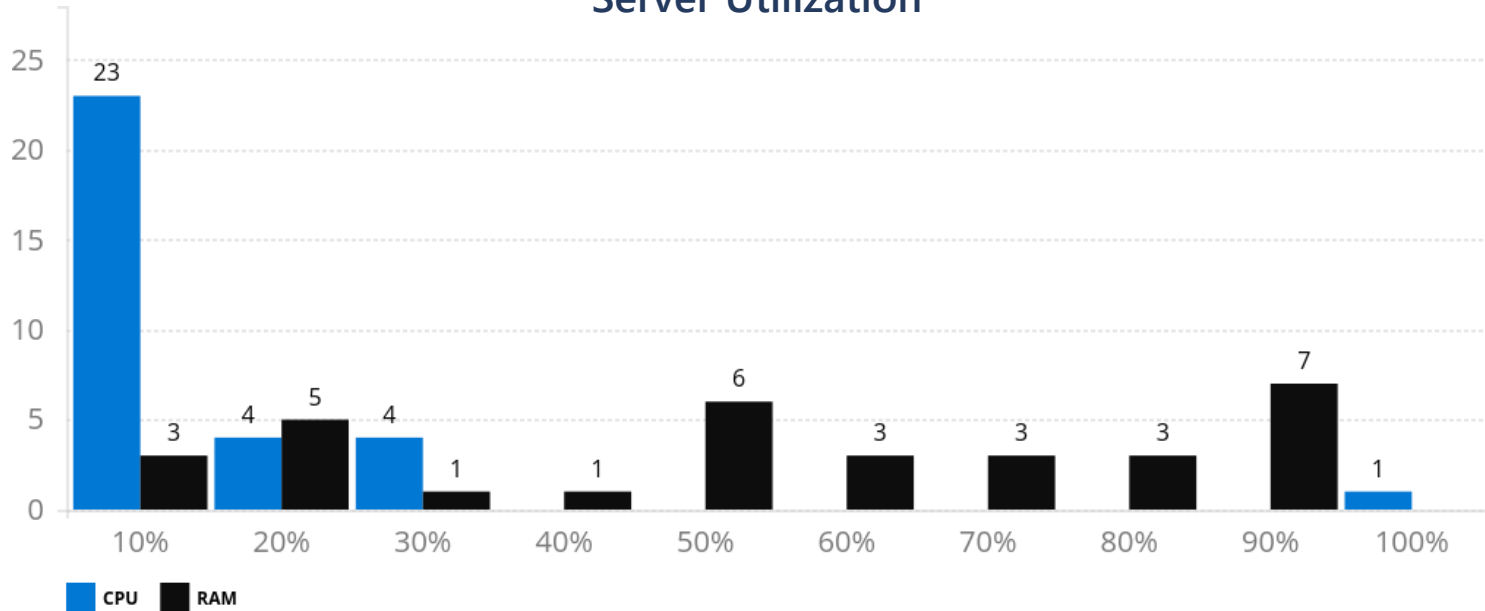
	Before	After	Efficiency Gained
Servers (IaaS)	32	32	0%
Pools / Servers (PaaS)	32	32	0%

SQL Server Supportability

■ End Of Life: 70%
■ Extended Support: 25%
■ Supported: 5%
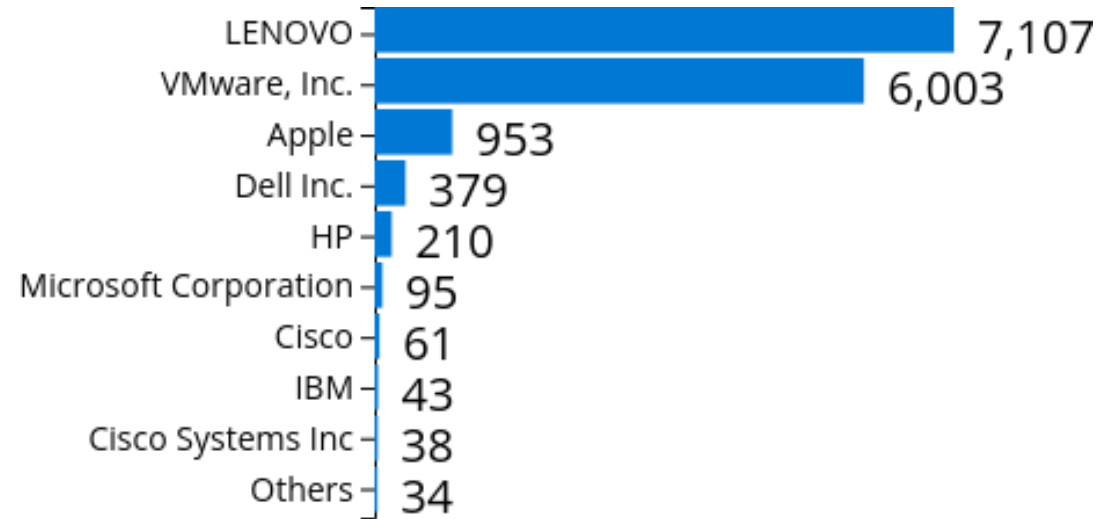
Aging Hardware
Warranty Insights

Standardizing on a single manufacturer and ensuring your fleet is protected can reduce downtime risks and allow for consolidated purchasing power

1. **We detected 10 different vendors being used hardware**

2. **100% of client hardware discovered was out of warranty. 100% of servers discovered were out of warranty**
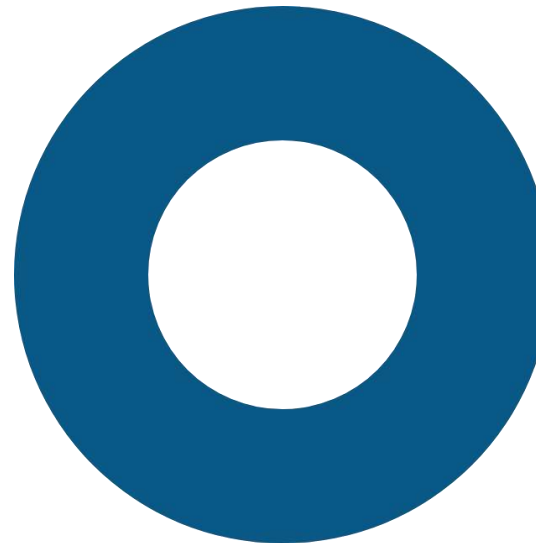
Out of Warranty hardware should be replaced. Microsoft Surface can be a robust solution that integrates with all of your Microsoft solutions

Out of Warranty servers are candidates to move to Azure, in order to increase the support of these machines and avoid any hardware failure risk

Hardware By Vendor

Vendor	Count
LENOVO	7,107
VMware, Inc.	6,003
Apple	953
Dell Inc.	379
HP	210
Microsoft Corporation	95
Cisco	61
IBM	43
Cisco Systems Inc	38
Others	34

Warranty of Workstations

■ Out of Warranty: 100%

### Warranty of Servers

■ Out of Warranty: 100%

Client Devices
Azure Virtual Desktop

Azure Virtual Desktop offers an efficient and scalable way to deploy client resources in Azure

1. 137 client workstations were underutilized. 70 workstations were seen to be overutilized

2. Azure Virtual Desktop is a cloud-based solution for hosting Client solutions that can be provisioned in as quickly as 15 minutes

3. Consolidating underutilized workstations to pooled instances can consolidate the resource requirements for the environment

4. Providing over utilized machines with a personal instance can lead to greater efficacy for those users

Client Utilization
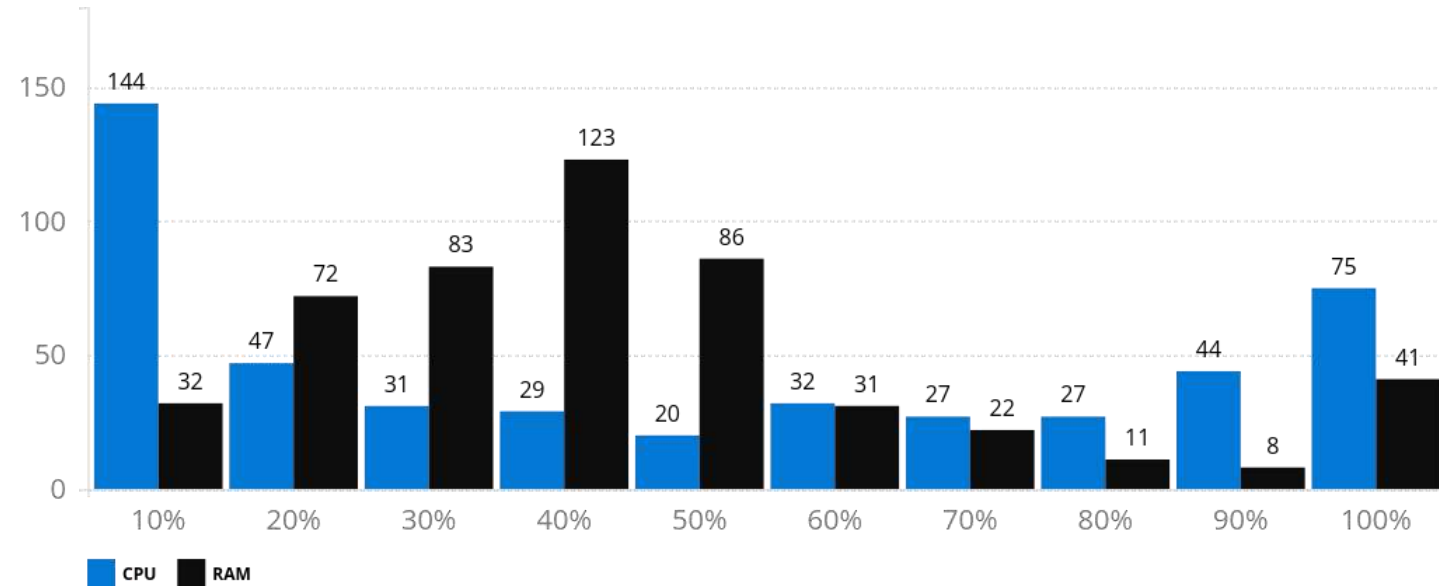
Montly AVD Cost
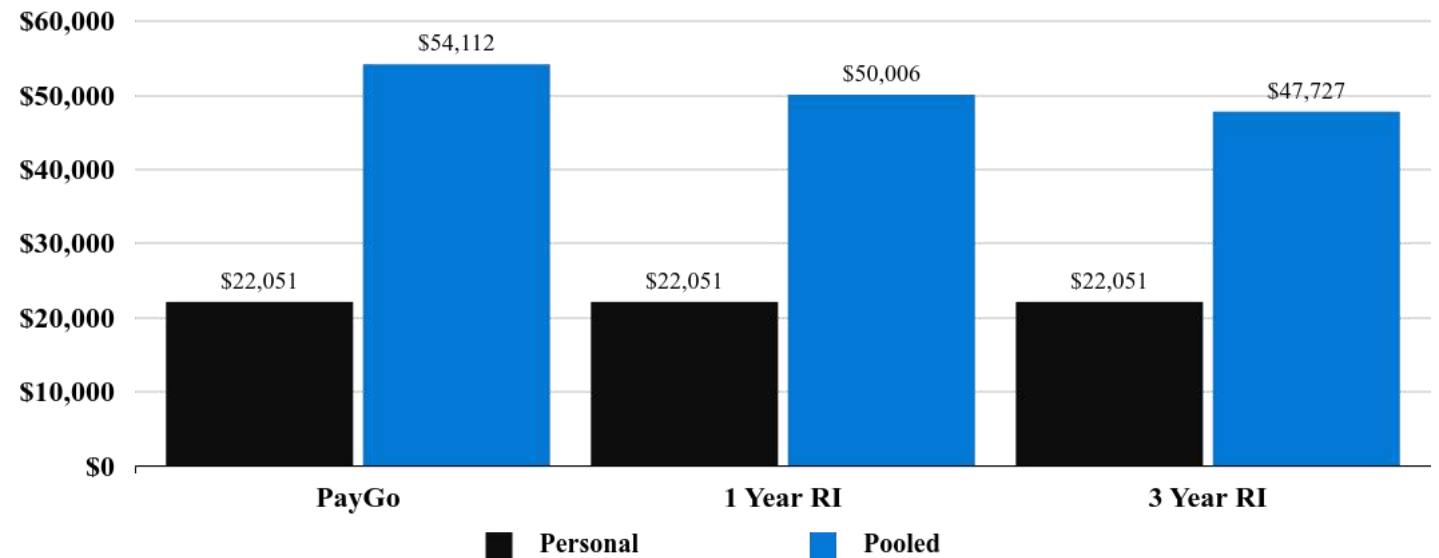
Vendor consolidation
Line of Business Applications

Reduce IT management and maintenance with seamless integration with Microsoft 365, Power BI and the Power Platform

1. **We detected 3 different products that could be replaced by Dynamics 365**

2. **Your current spend on Line of Business applications is estimated at $658 per year**

3. **0 of your users already have access to Power Platform**

Centralized reporting is a requirement for all businesses. Dynamics 365 can act as a singular source of truth for your business. Power Platform can help automate these reports by eliminating redundant tasks

Notes: Costs for Microsoft solutions are only a reference, accurate pricing should be provided by your partner
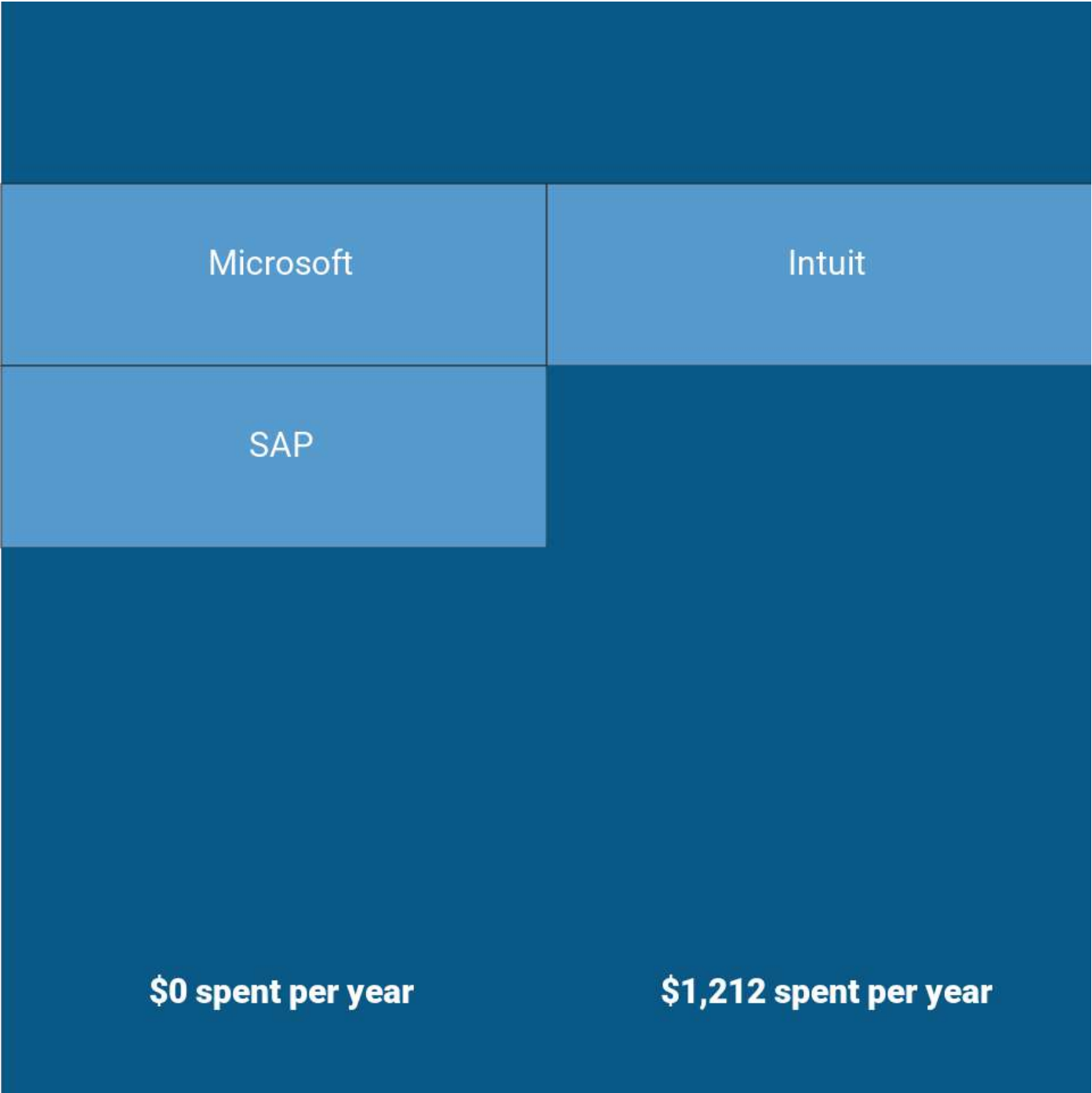
Our expert technology consultants support every step of your cloud journey

Our ETC team can help you move to the cloud and modernize your workplace in these areas:

Cost optimization:
We can help you build a strong business case on the ROI of modernizing your IT.
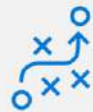
Security workshop:
We'll help you mitigate current risks and build a cybersecurity roadmap.

Cloud architecture design:
We'll build with you an initial, high-level blueprint for your cloud migration.

Proof of concept plan:
We will help you plan a small cloud migration as a test, reducing risk.

Skilling and training:
We'll help give your employees the skills they need to operate your new technology.

We can also support just about every aspect of your technology journey; let us know what your concerns are and what you need.
We are here to help!

Microsoft 365   Microsoft Azure   Dynamics 365   Microsoft Surface   Power Apps   Power BI