



Office Resource and Performance Optimizations

Terry Yang
Senior Product Manager

Agenda

Resource and performance optimization overview

Resource and performance optimization practices in M365

Office add-ins performance optimization

Best practices

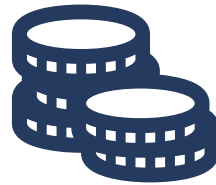


Resource and performance optimization overview

Why resource and performance optimization



SCALABILITY

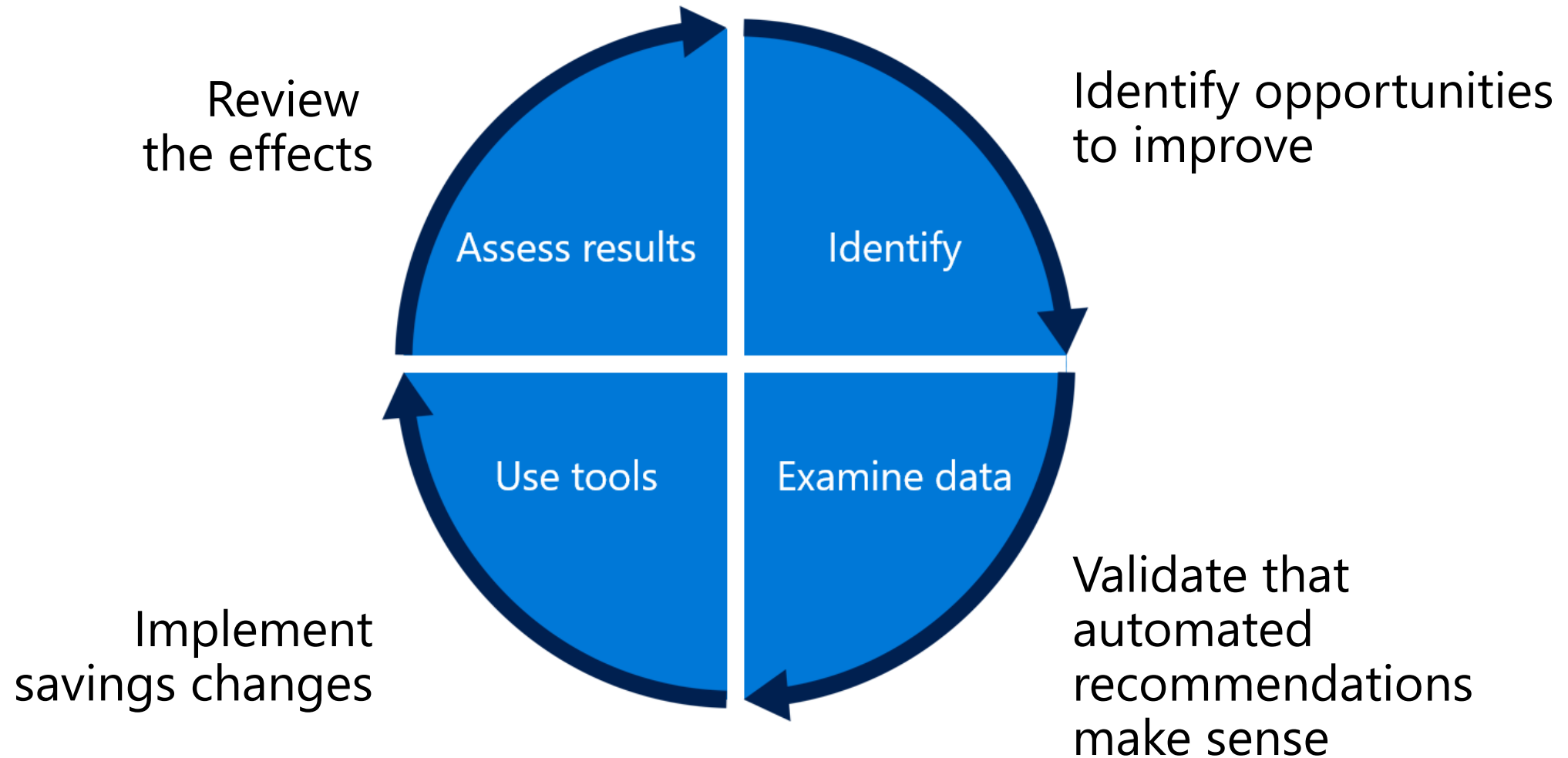


TCO



CUSTOMER EXPERIENCE

Lifecycle of resource optimization



Resource Optimization Guiding Principles

1) Resource

Optimization: Identify resources that aren't **fully utilized**, remove undesirable **redundancies** and **right size** computing resources. Duplication, undesirable redundancy, duplicate functionality, cost take out, improve utilization.



2) Value Extraction:

Look at Microsoft platform digital capabilities for **added value** that lead to operational efficiencies. Extract more value through operational efficiency. Improved decision making, agility, speed of execution and improved business value outcomes.



3) Architectural

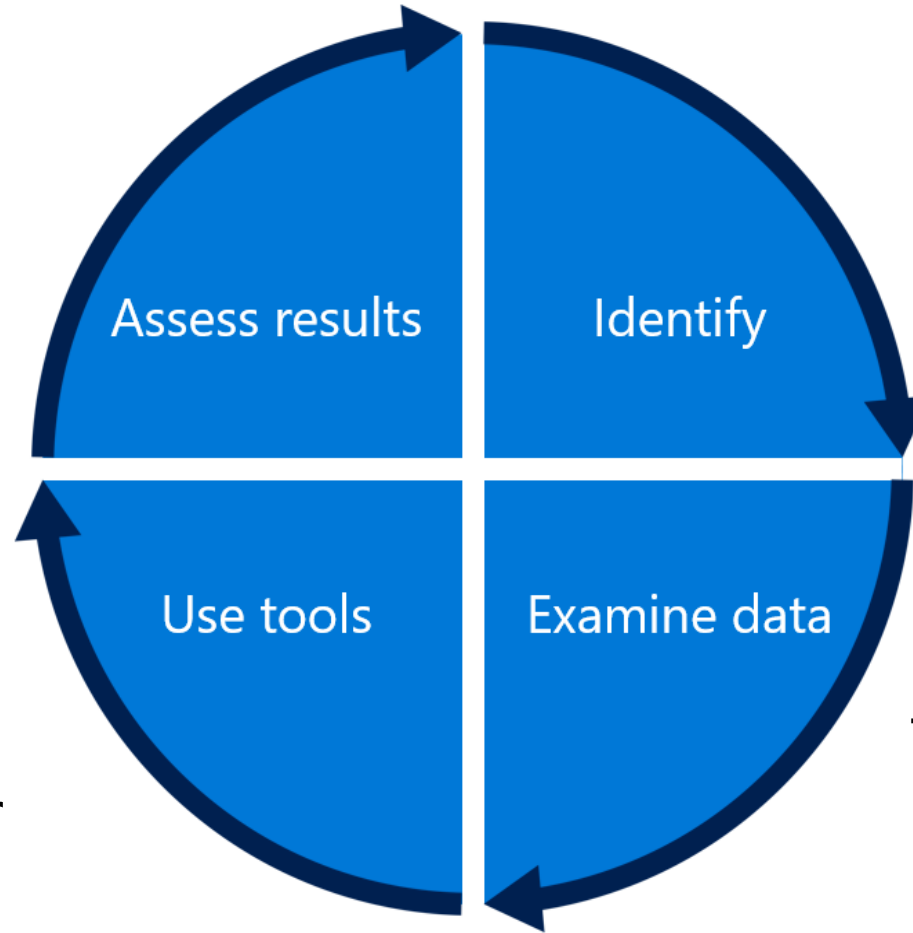
Enablement: Resource optimization and value extraction are enabled by a sound architectural blueprint that defines the service delivery model and resilience of your digital platform. Transforming the organization. Creating new business products and services enabled by technology.



Resource and performance optimization practices in M365

Optimization practices in M365

Results monitoring
and feedback loop
for further
recommendations

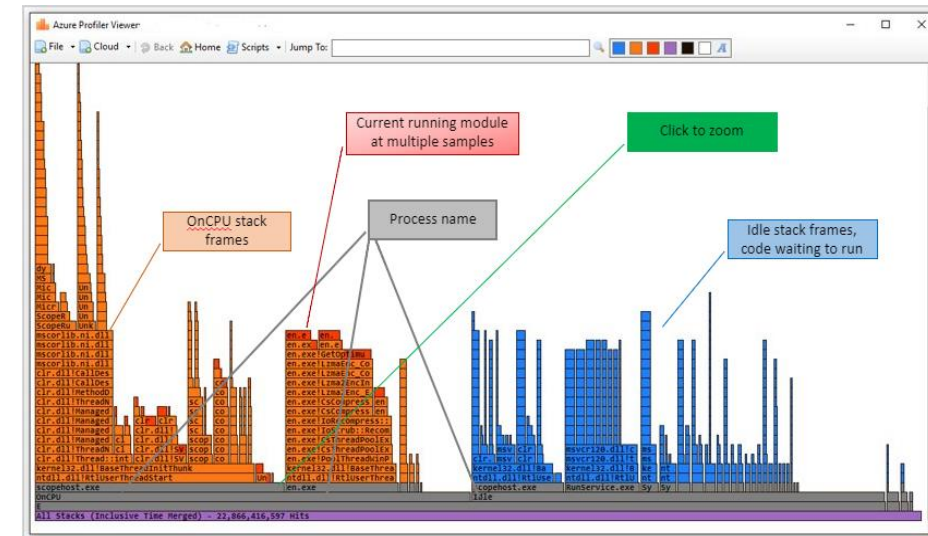
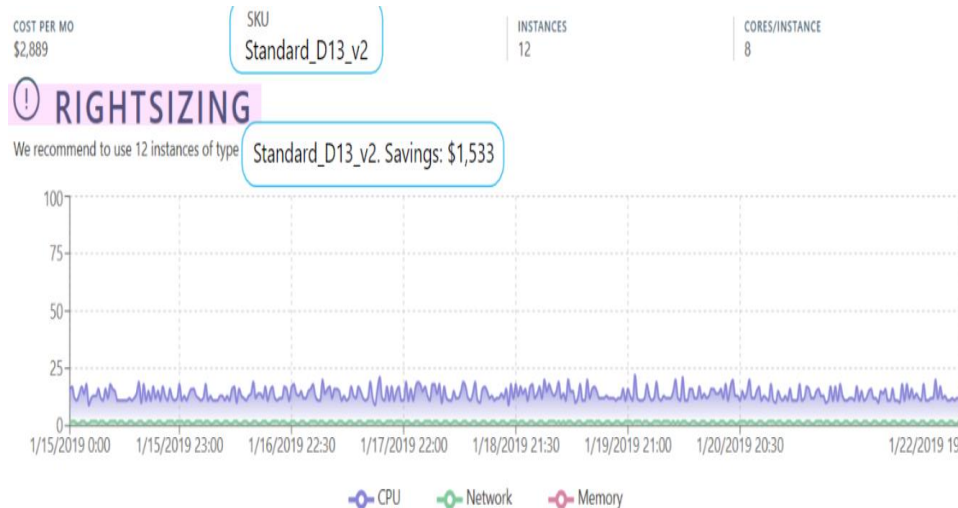
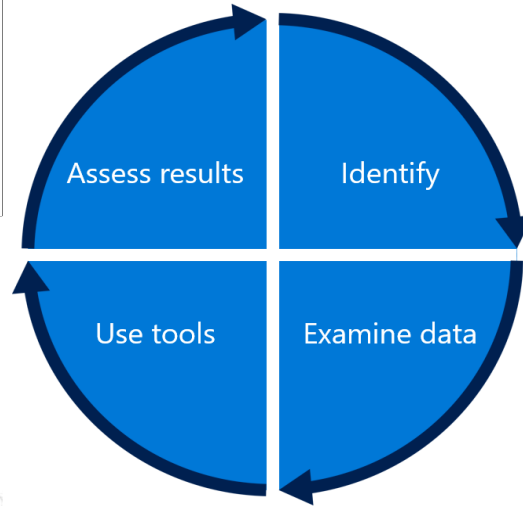
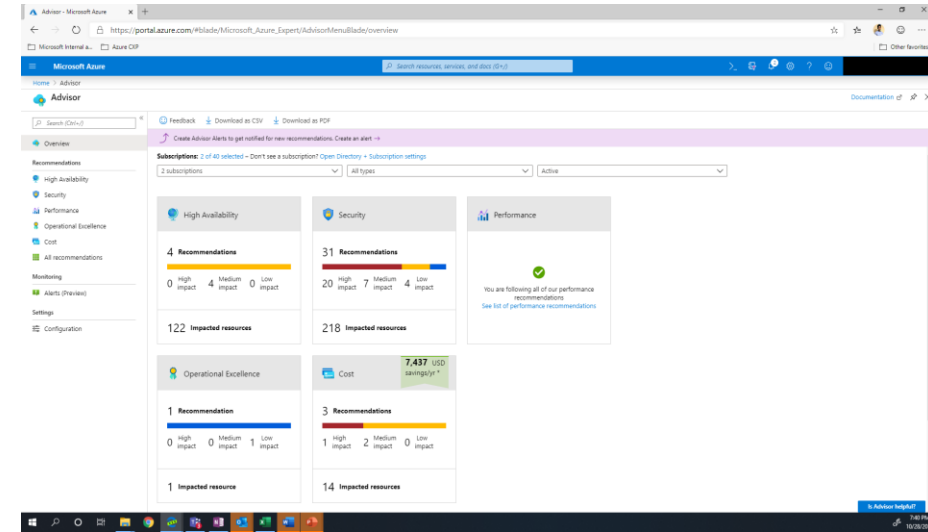
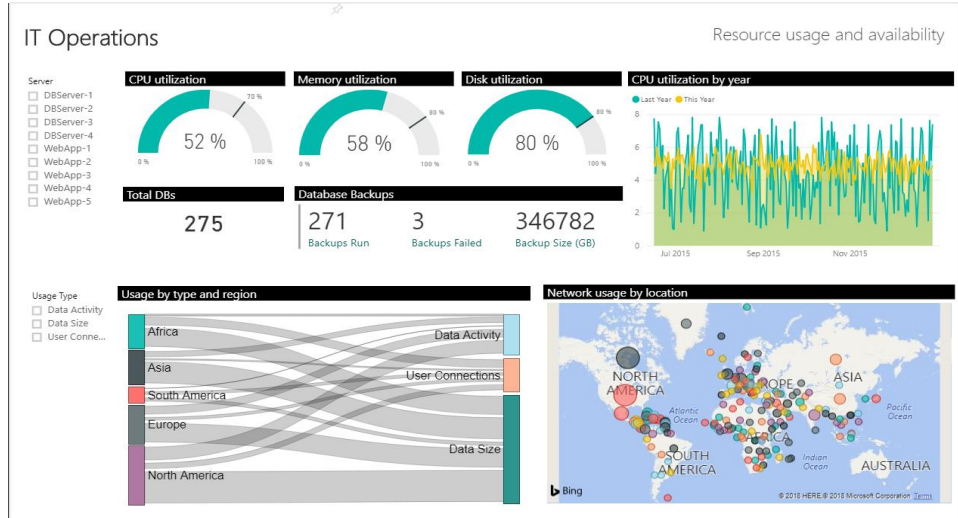


Infuse AI/ML to
guiding efficiencies and
identifying
opportunities

Automated
pipeline for
applying
optimizations

Tools for profiling,
debugging, and
benchmarking

Optimization practices in M365



Office add-ins performance optimization

Office add-ins performance optimization

Resource usage limits

- **CPU core usage** - A single CPU core usage threshold of 90%, observed three times in default 5-second intervals.
- **Memory usage** - A default memory usage threshold that is dynamically determined based on the available physical memory of the device.
- **Crash tolerance** - A default limit of four crashes for an add-in.
- **Application blocking** - Prolonged unresponsiveness threshold of 5 seconds for an add-in.

Add-in performance optimizations

- **Identify** – use Azure Monitor to observe and monitor application behavior and health
- **Examine data** – several options to collect application performance data for application profiling such as Application Insights Profiler, Remote Profiling, diagnostics tool
- **Use tools** – fix and publish App in Visual Studio, scale the app, or use AutoHeal to recycle the app
- **Assess results** – continues to use Azure Monitor to tracking application health

Best practices



Resource:

- Azure first mindset
- Monitor and rightsize resources proactively
- Automate resource optimization process

Performance:

- Ensure that all user interactions respond in under one second, and provide loading indicators for long-running operations
- Monitor your service health, and use telemetry to monitor user success
- Follow standard web practices to optimize your web page
- Use Azure Application Insights Profiler to identifying code/performance bottlenecks

Resource & Performance:

- Use Azure Advisor for intelligent recommendations

Thank You!