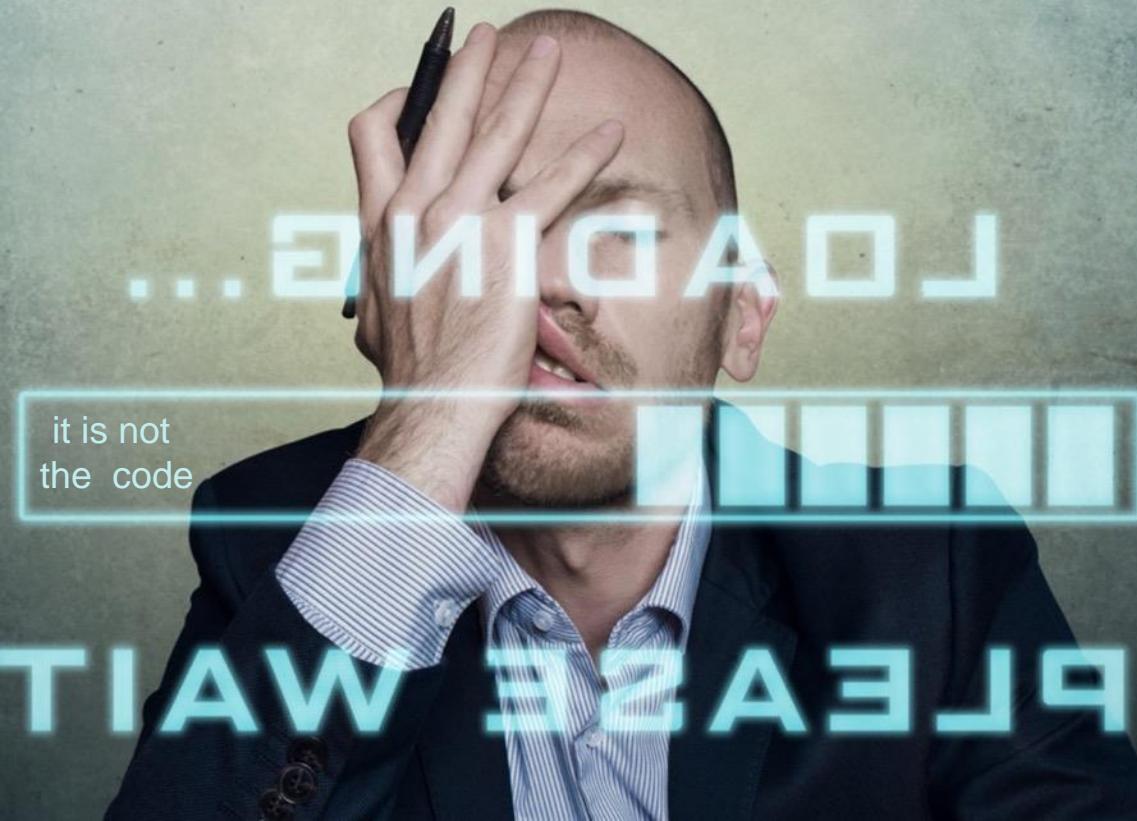


# Turbonomic ARM

**Application  
Performance  
Assurance**



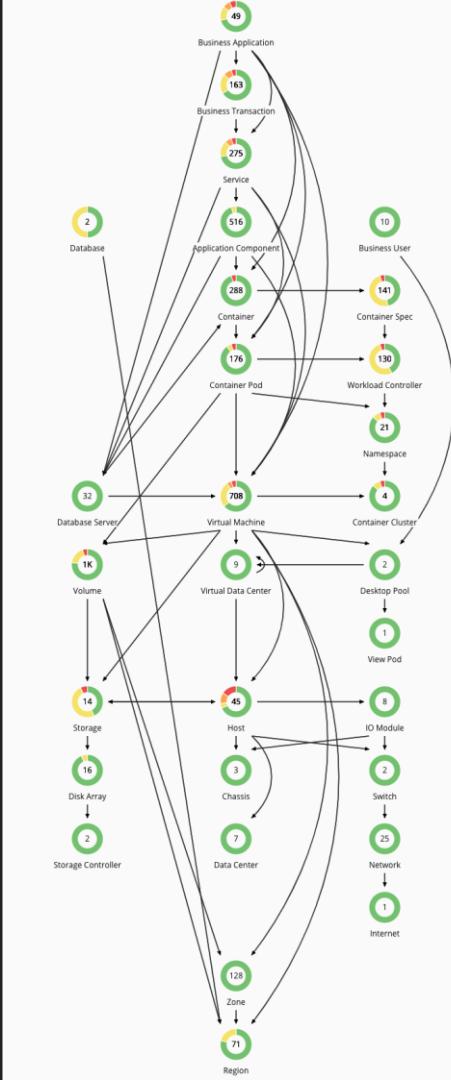
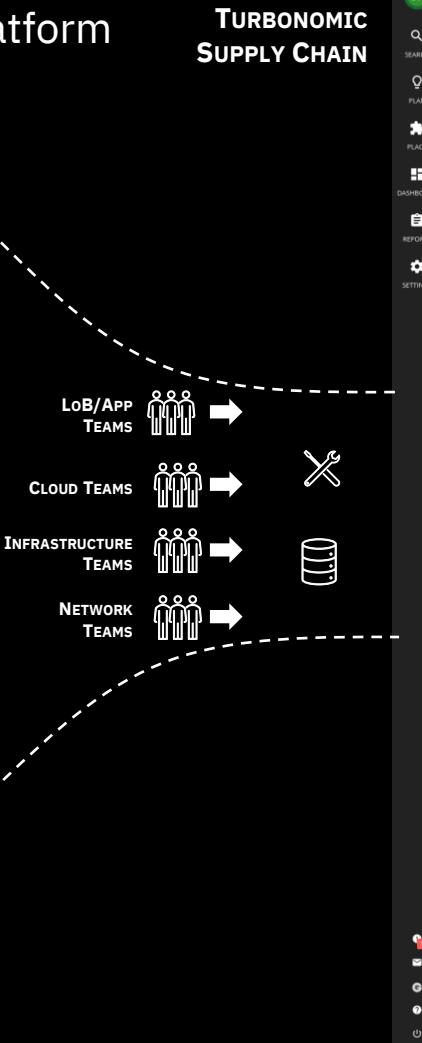
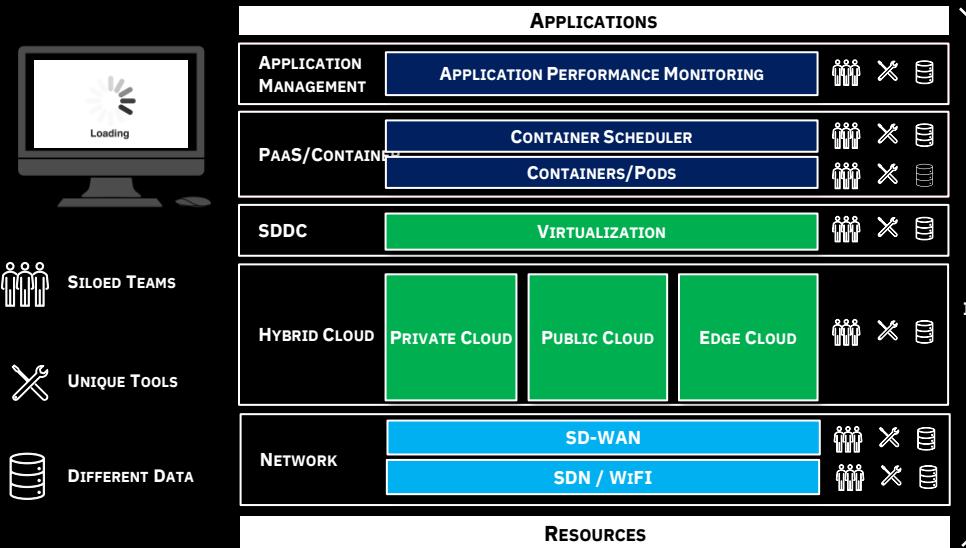
# Infrastructure resource starvation is the most frequent cause of application performance degradation



it is not  
the code

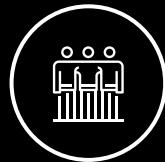
# Turbonomic Application Resource Management Platform

## *Full Stack Visibility from Apps to Infrastructure*



# Turbonomic Platform

*Assuring performance for modern applications*



Deliver a predictable and reliable end user experiences by continuously assuring application performance



Improve operational efficiency by reducing infrastructure and cloud waste



Adhere to any compliance and business policies

# Let's see it in action!



Mark

Enterprise SRE Manager

## Application performance prioritization

I want to identify the top applications where performance can be improved and assess the benefit to the end user.

## Put performance assurance on autopilot

I want to delegate next best action decisions to a trusted and proven ML and AI engine to continuously optimize performance and reduce resource utilization with low/no touch.

## Cost savings across clouds

I want to assess and optimize overall resource utilization across my cloud and on-premises deployments to reduce my overall spend.



# Let's see it in action!



Eddie  
**Application SRE**

## Assure application performance & availability

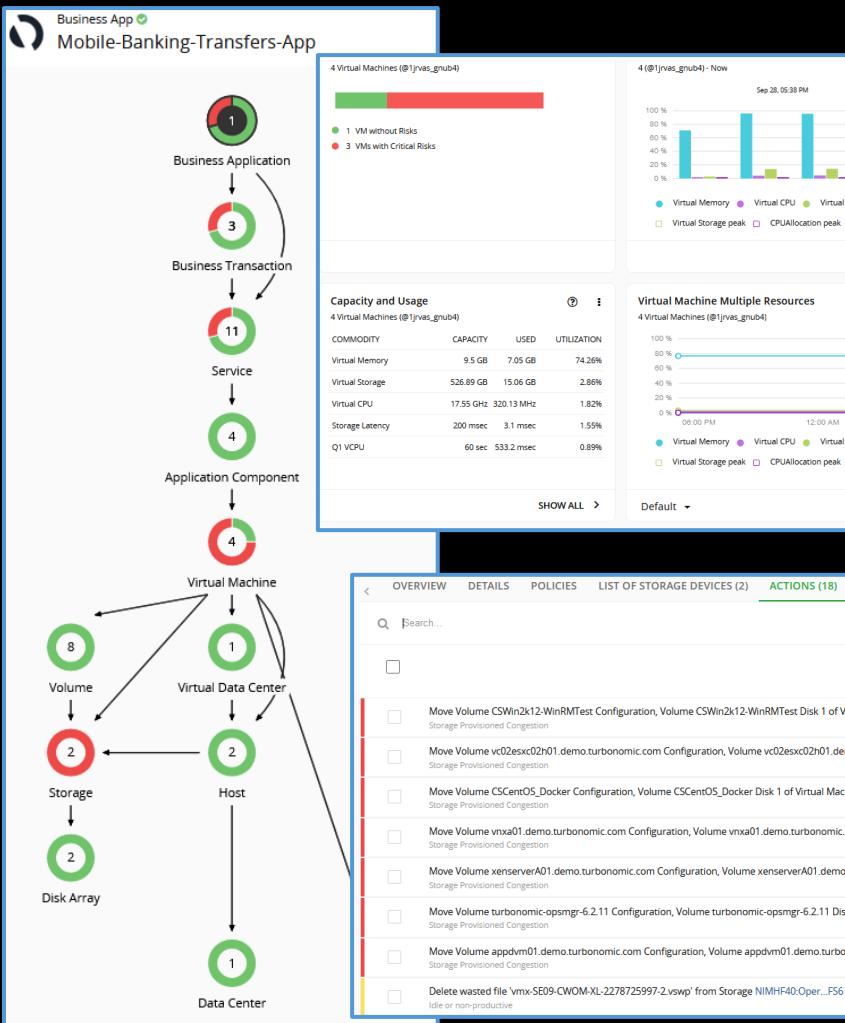
I want to define key SLOs for my application and rely on automated software to dynamically shift resources to meet them.

## Manage business application resources

I want to monitor and optimize my business application's resource usage to reduce its total cost of ownership.

## Incident prevention and assisted remediation

I want guidance on what actions to take to prevent incidents, reduce alerts, and remediate problems before they impact end users.



# Let's see it in action!



Jane

Infrastructure  
Manager

## Limit tooling sprawl

I want to integrate all my existing APM tools to visualize the end-to-end application dependencies and resource usage.

## De-risk migrations to cloud

I want to plan the resources and costs for moving VMs to the cloud and migrate to the cloud with a full understanding of the cost implications.

## Manage infrastructure changes

I want to control infrastructure changes, assess their associated risk, and simulate their cost impact before approving them.

The screenshot displays the ServiceNow interface with several key components:

- Choose Target Category:** A sidebar listing categories with icons: Applications and Databases (highlighted), Cloud Native, Fabric and Network, Hypervisor, Orchestrator, Private Cloud, Public Cloud, and Virtual Data.
- Servicenow:** A main panel showing "ServiceNow" under the Applications and Databases category.
- RESULTS OVERVIEW:** A table showing migration tasks and their cost impact:

Action	Cost Impact
Move Virtual Machine ACM-MSSql-Multi-Instance-174.23 from dc17.host...com to aws.us-east-1	\$1.00ms
Move Virtual Volume Vol-ACM-MSSql-Multi-L-D51 from NBM-D51 to aws.us-east-1	\$1.00ms
Move Virtual Machine Vol-win-mssql2017-1-DS1 from dc17.host-03.com to aws.us-east-1	\$1.00ms
Move Virtual Volume Vol-win-mssql2017-1-DS1 from NBM-D51 to aws.us-east-1	\$1.00ms
Move Virtual Machine Vol-win-mySQL8 from dc17.host-04.ang.venture.com to aws.us-east-1	\$1.00ms
Move Virtual Machine Vol-win-mySQL8 from dc17.host-04.ang.venture.com to aws.us-east-1	\$1.00ms
- CLOUD COST COMPARISON:** A table comparing costs between LIFT & SHIFT and OPTIMIZED actions:

	LIFT & SHIFT	OPTIMIZED	Difference	%
Virtual Machines with performance risks	2 Out of 85	0 Out of 85	2	-
Virtual Machines with efficiency opportunities	83 Out of 85	0 Out of 85	83	-
On-Demand Compute Cost	\$5,783/mo	\$336/mo	-\$5,447/mo	-94.2 %
Reserved Compute Cost	\$435/mo	\$622/mo	\$187/mo	+43 %
Storage Cost	\$356/mo	\$719/mo	\$363/mo	+102 %
Total Cost	\$6,574/mo	\$1,677/mo	-\$4,897/mo	-74.5 %
- VIRTUAL MACHINE MAPPING:** A donut chart showing the distribution of virtual machines across different instance types:
  - 47 m3.medium
  - 15 m5a.large
  - 37 t3a.nano
  - 15 t3a.microA separate chart shows the distribution for the OPTIMIZED scenario.

# IBM Turbonomic Key Differentiators



## **Application-driven.**

Uses application demand as the driver for making resource decisions.



## **Top-down.**

Continuously matches application resource demands to underlying supply of infrastructure.



## **AI-powered.**

Software makes the application resourcing decisions for you, automatically.



## **Common Data Model.**

Same AI Engine used to Assure Performance, provides accurate capacity planning and what-if modeling



## **Full-stack visibility.**

Understands the relationships between applications, services, containers, pods, nodes/VMs, hosts, storage, and network.



## **Agentless, auto-discovery.**

Lightweight virtual appliance discovers your applications and infrastructure in under an hour.



## **Cloud & infrastructure agnostic.**

Supports all major hypervisors, AWS, Azure, as well as all upstream versions of Kubernetes anywhere, including OpenShift, Azure AKS, Amazon EKS, and Google GKE.



## **Performance at Scale.**

Proven across over 3,000 customers, including 25% of the Fortune 500.

