In-Memory Computing SUMMIT VIRTUAL EVENT 2020

The Big Memory Movement

Charles Fan

CEO, MemVerge

MemVerge | intel

Content

Big Memory Computing

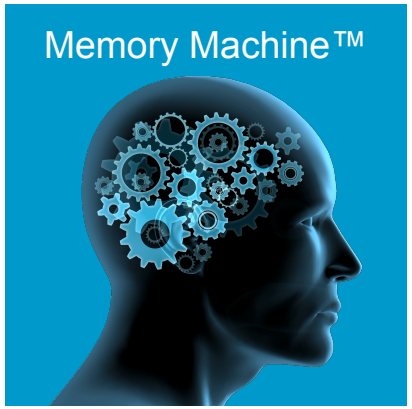
=

Big Memory Hardware

intel
OPTANE™
PERSISTENT MEMORY

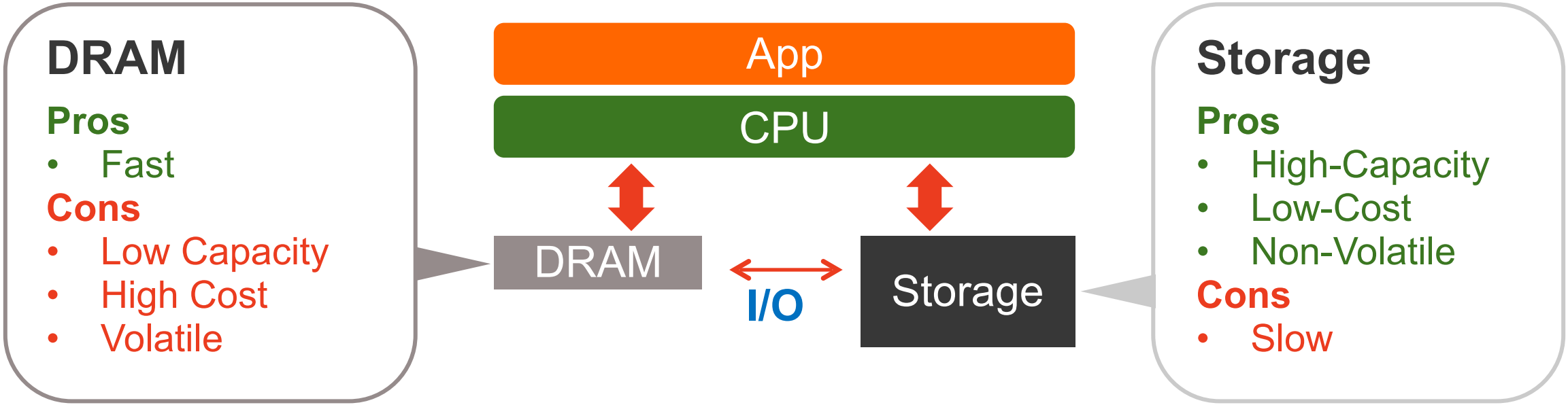
+

Big Memory Software



Today's Computer

Apps Run in DRAM



Data Has Become Big & Fast


Big Data Analytics

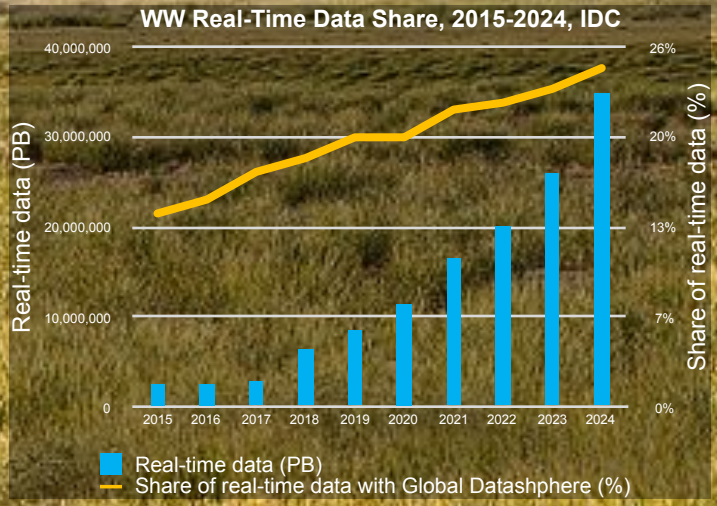

AI/ML Inference


Capital Markets


3D Animation


Virtual Servers


Oil & Gas



Our BIG MEMORY vision

All applications live in memory

MemVerge


Intel® optane™
persistent memory
Revolutionizing memory

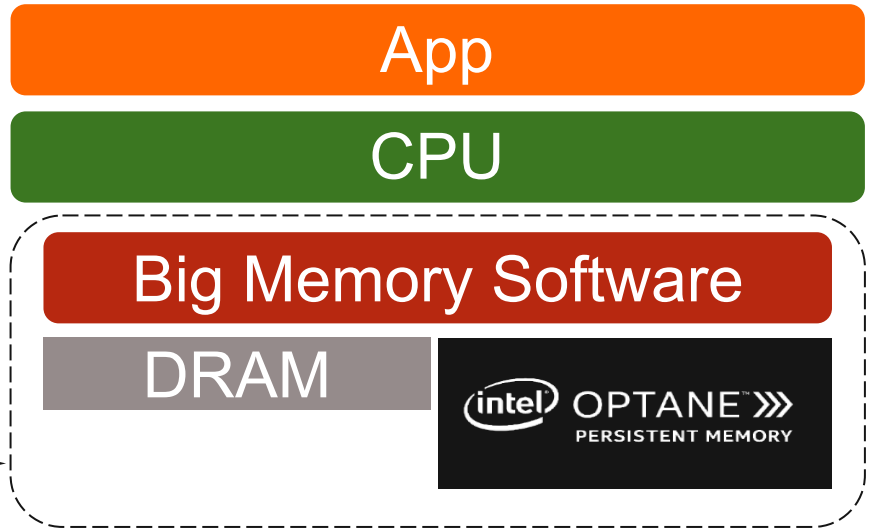
The Rise of Big Memory Computing

Apps Run in DRAM *and* PMEM

DRAM + PMEM

Pros

- Fast
- High-Capacity
- High-Density
- Non-Volatile



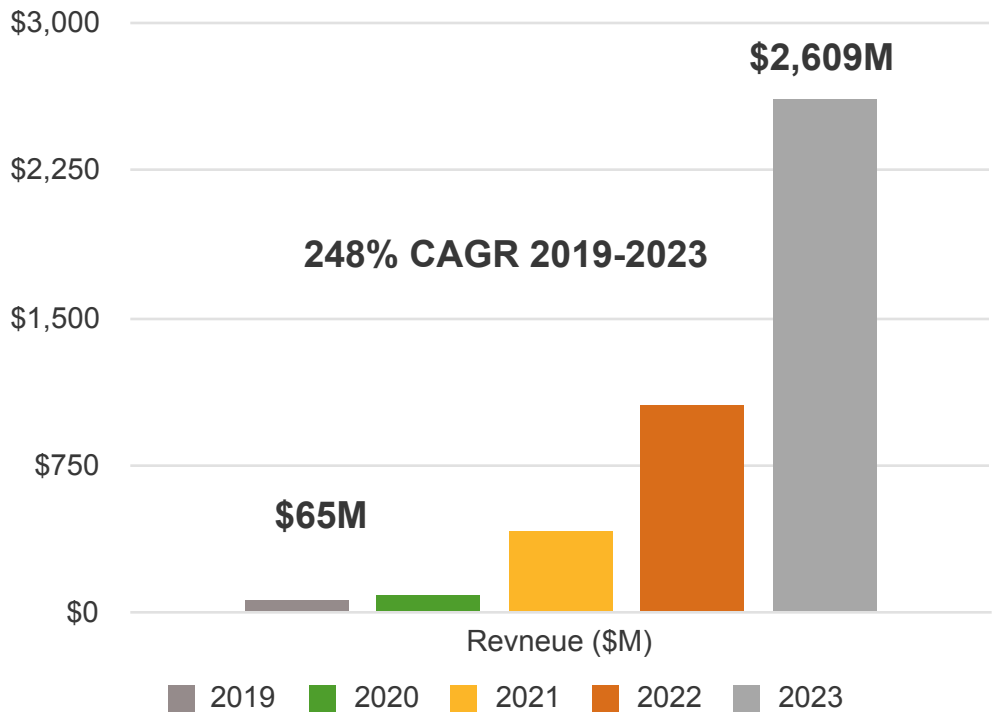
Big Memory is Massive

$2.6B by 2023

$25B by 2030

IDC: Byte-Addressable Persistent Memory

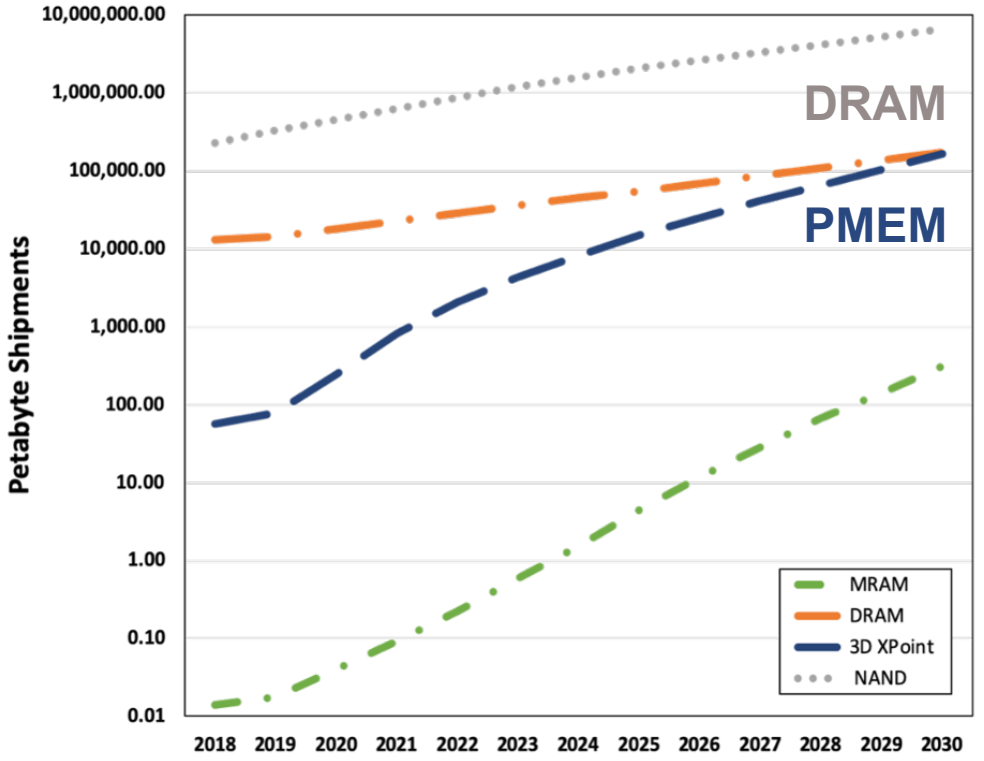
Revenue ($M)



IDC: Digital Transformation Driving New “Big Memory” Requirements

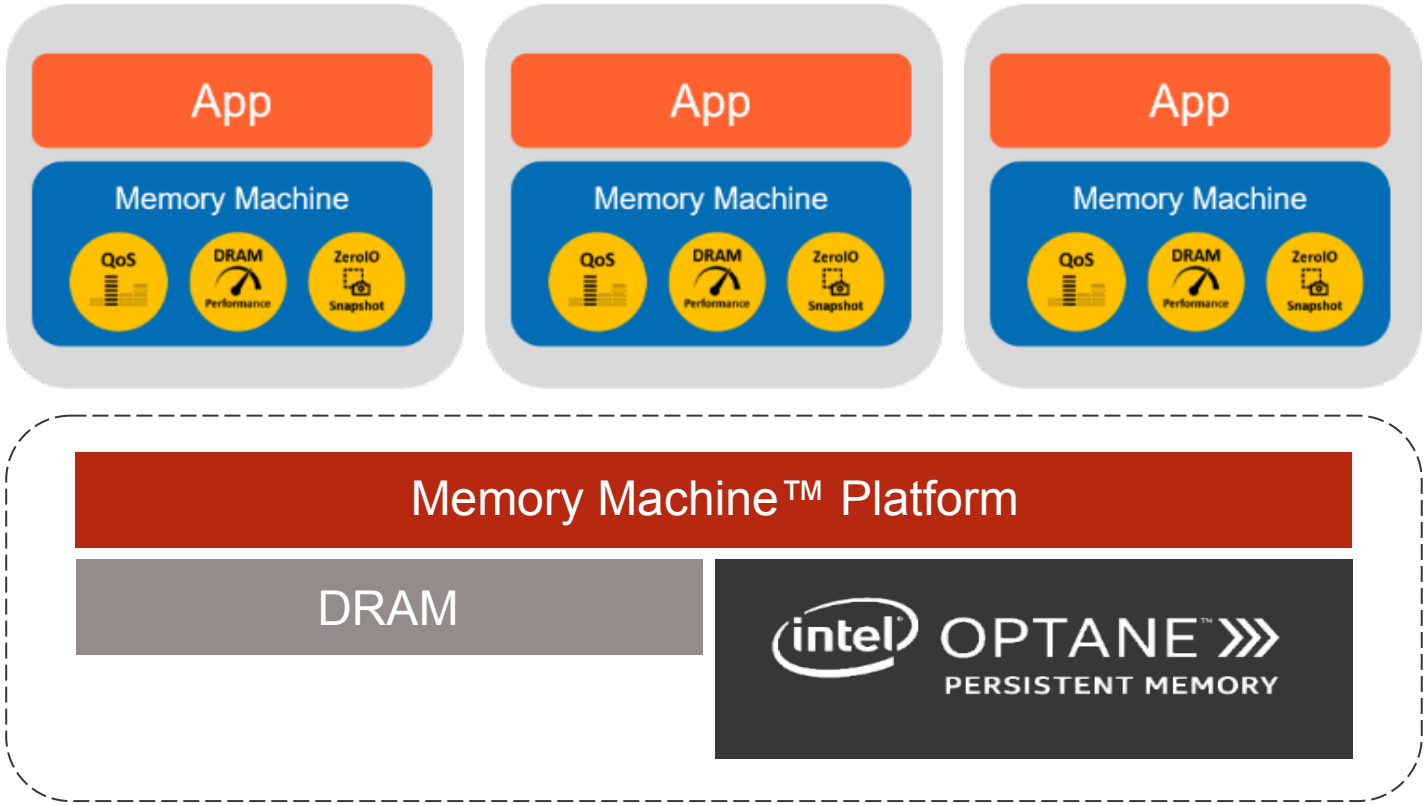
Forbes: Emerging Memories

Shipments (PB)



Emerging Memories Find Their Direction: Objective Analysis and Coughlin Associates

MemVerge Memory Machine™



Bigger Memory at Lower Cost without Performance Compromise

- Up to 9TB memory/2-way server
- 30-50% Memory Cost Savings
- DRAM-Performance

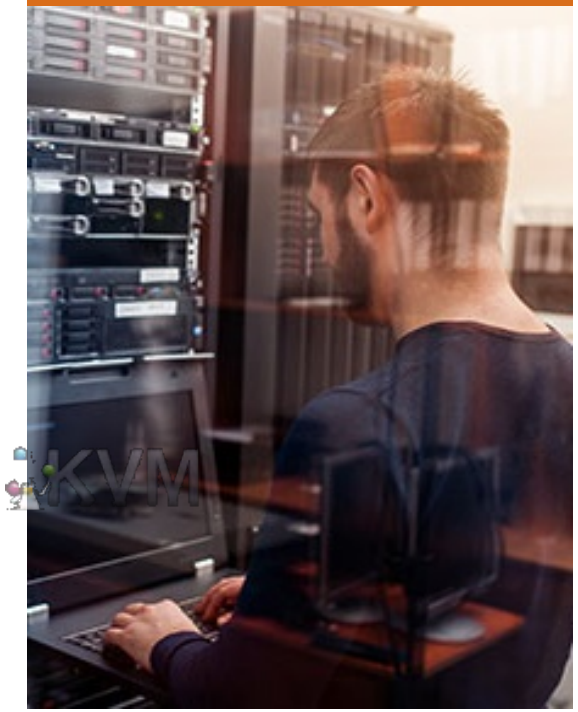
Persistence On-demand

- ZeroIO™ In-Memory Snapshot
- Fast Crash Recovery
- Thin-Clones

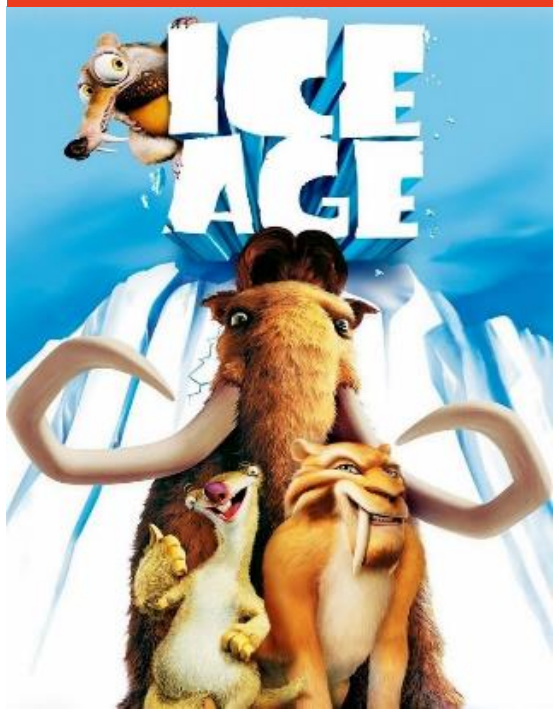
No Application Change!

Early Adopters

Cloud Service Providers

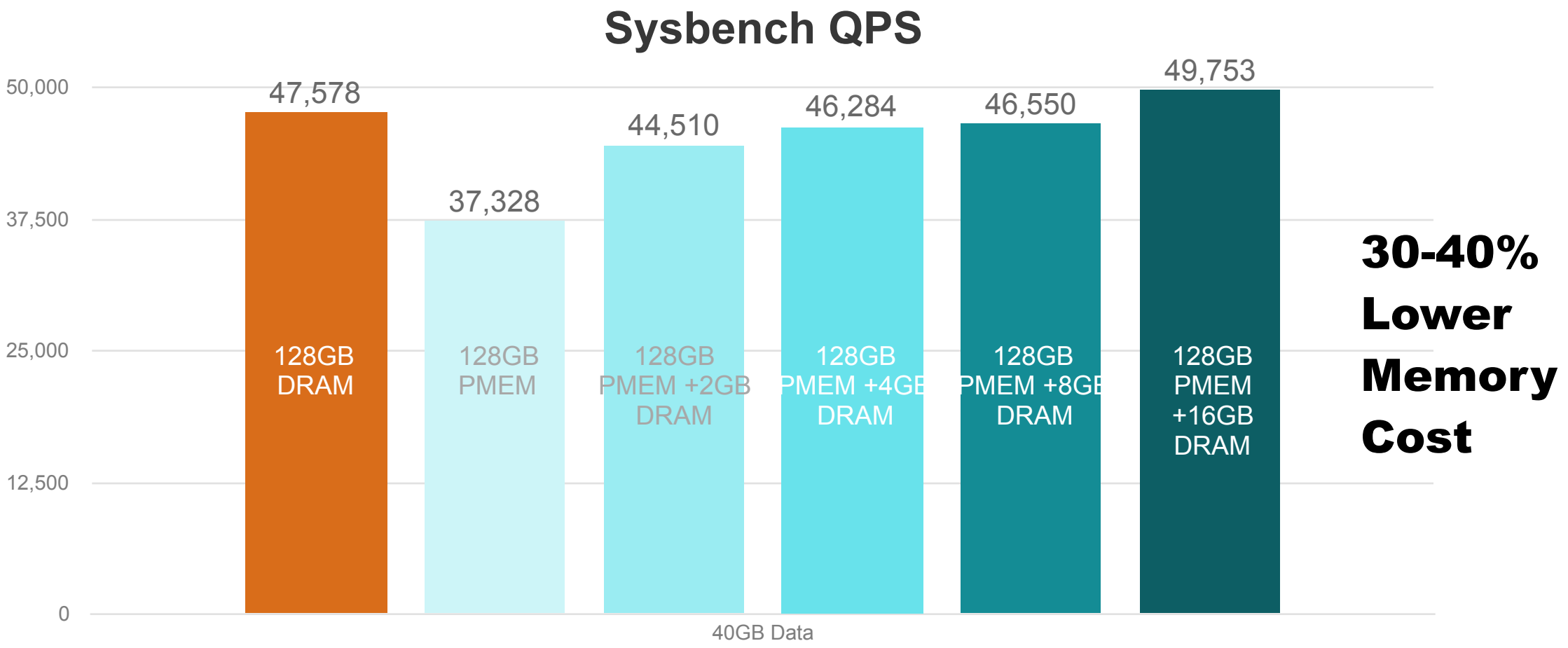


Movie Studios



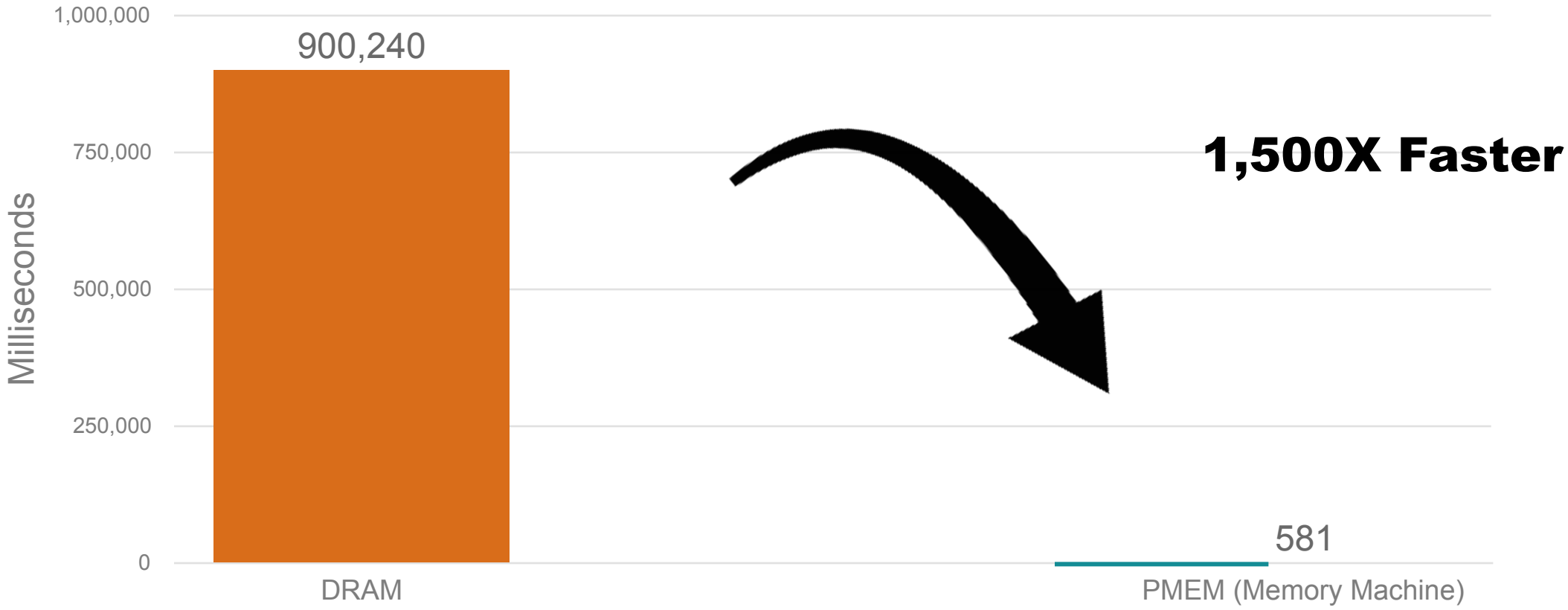
Financial Services

Example: Lower TCO Cloud MySQL Deployment



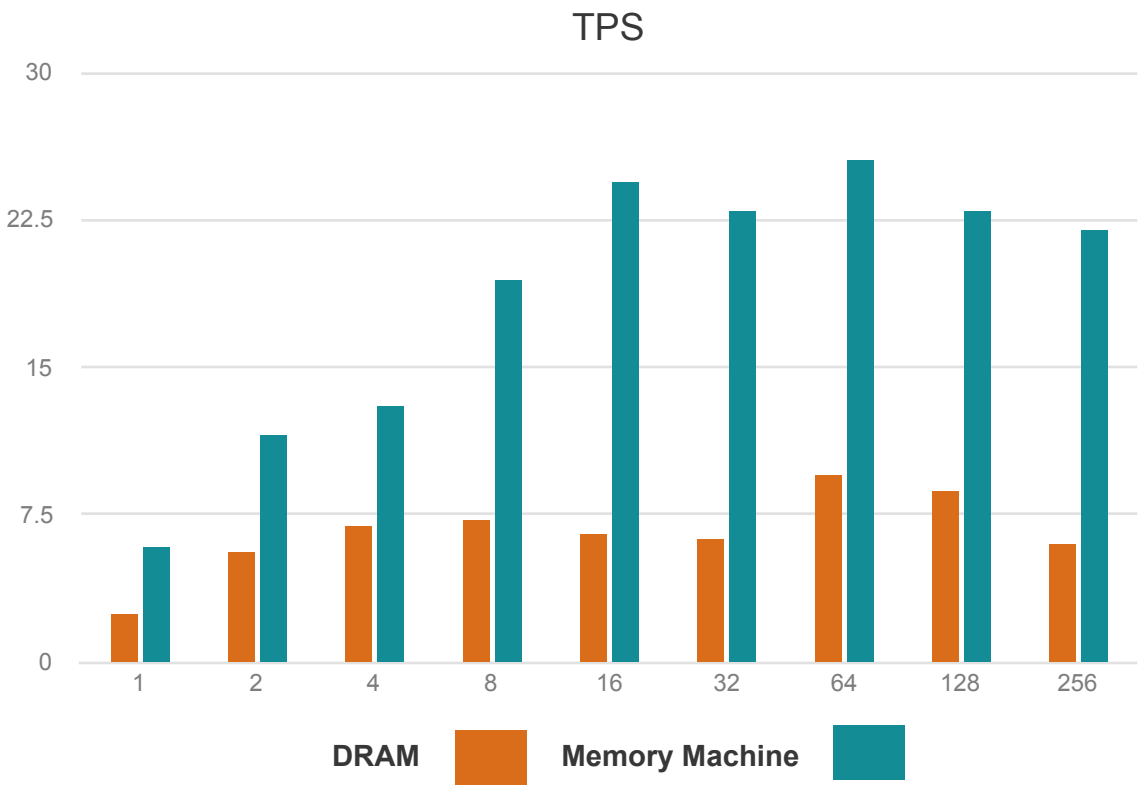
30-40% Lower Memory Cost

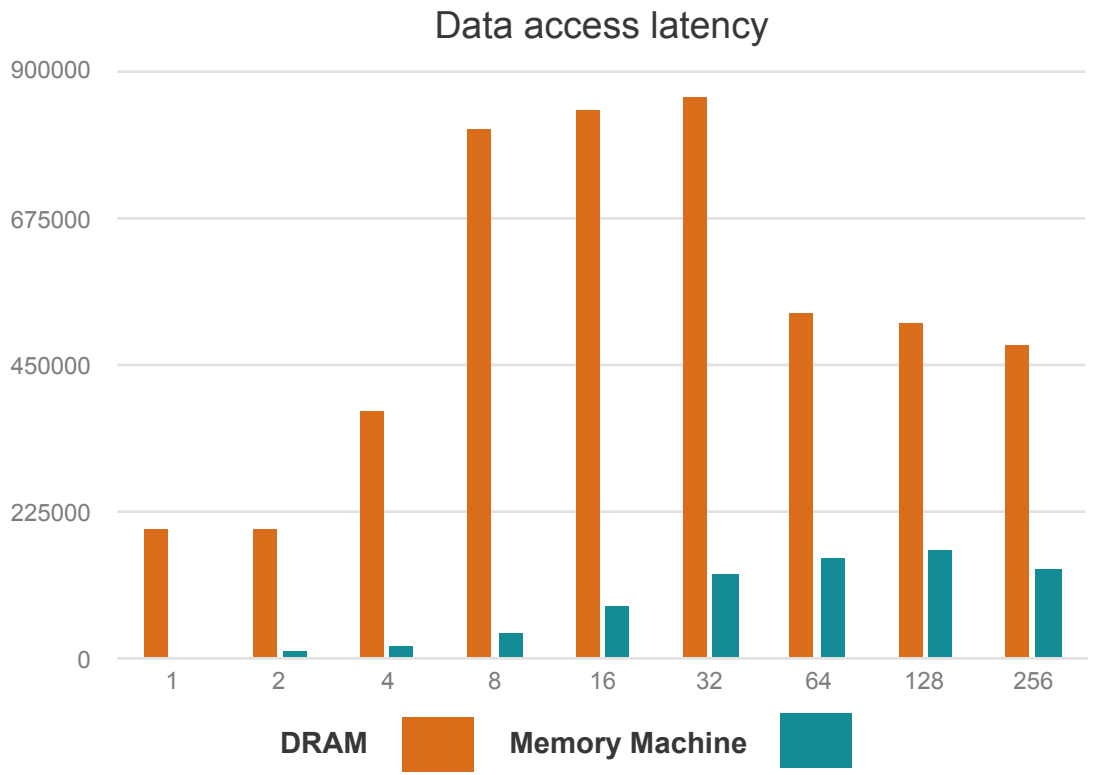
Example: Restore a 315GB Redis Database (300M Keys)



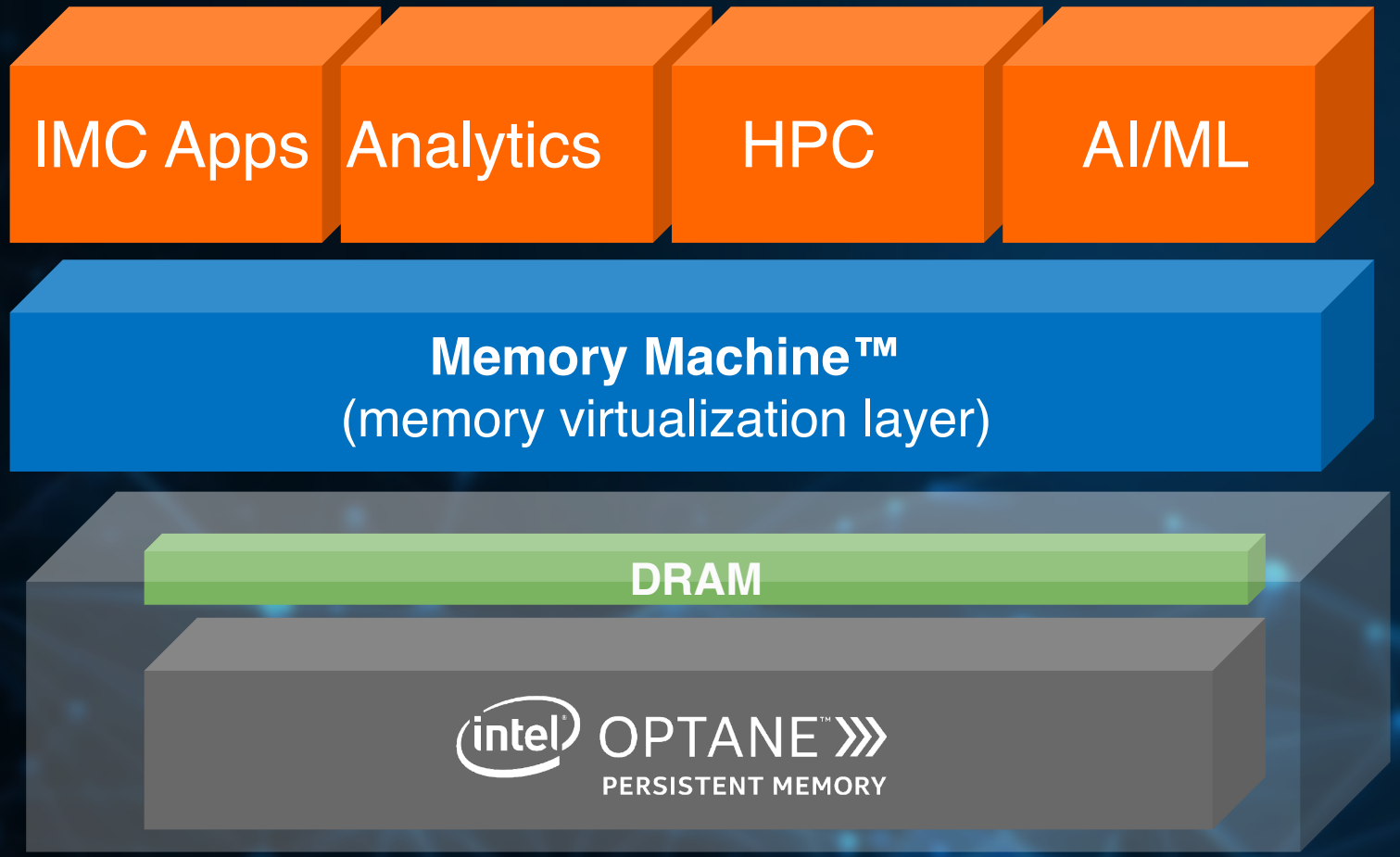
Example: MongoDB AI/ML and Big Data

Test results: 1000 libs (1 million records) case





The Future


IMC Apps
Analytics
HPC
AI/ML
Memory Machine™
(memory virtualization layer)
DRAM
intel
OPTANE™
PERSISTENT MEMORY

Opening the door to Big Memory

A world of abundance, persistence and high availability

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What happens in memory stays in memory…

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