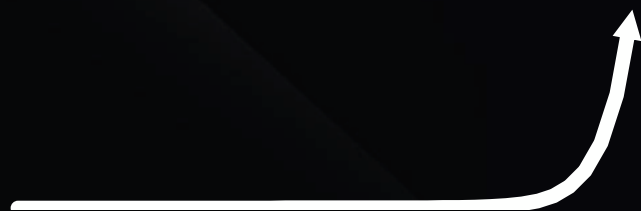# TAMING THE PETABYTE MONSTER

DR. SUBRAMANIAN KARTIK , VP OF SALES ENGINEERING

THE PETABYTE MONSTER IS GROWING

40 Years of Compounding Growth

New Approaches to Research
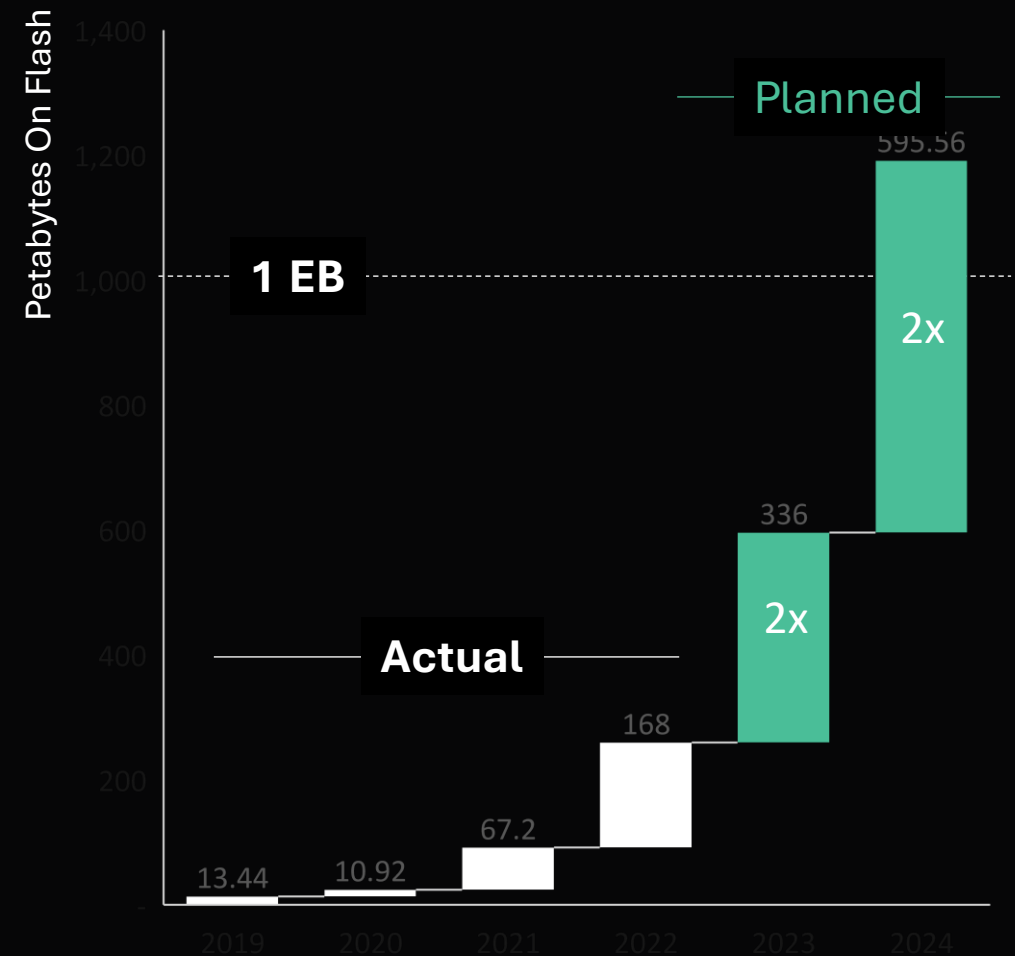
New Trading Instruments

40 YEARS OF COMPOUNDING GROWTH

- Quant Research Now 40 Years Old
- Datasets now growing 2x Y/Y
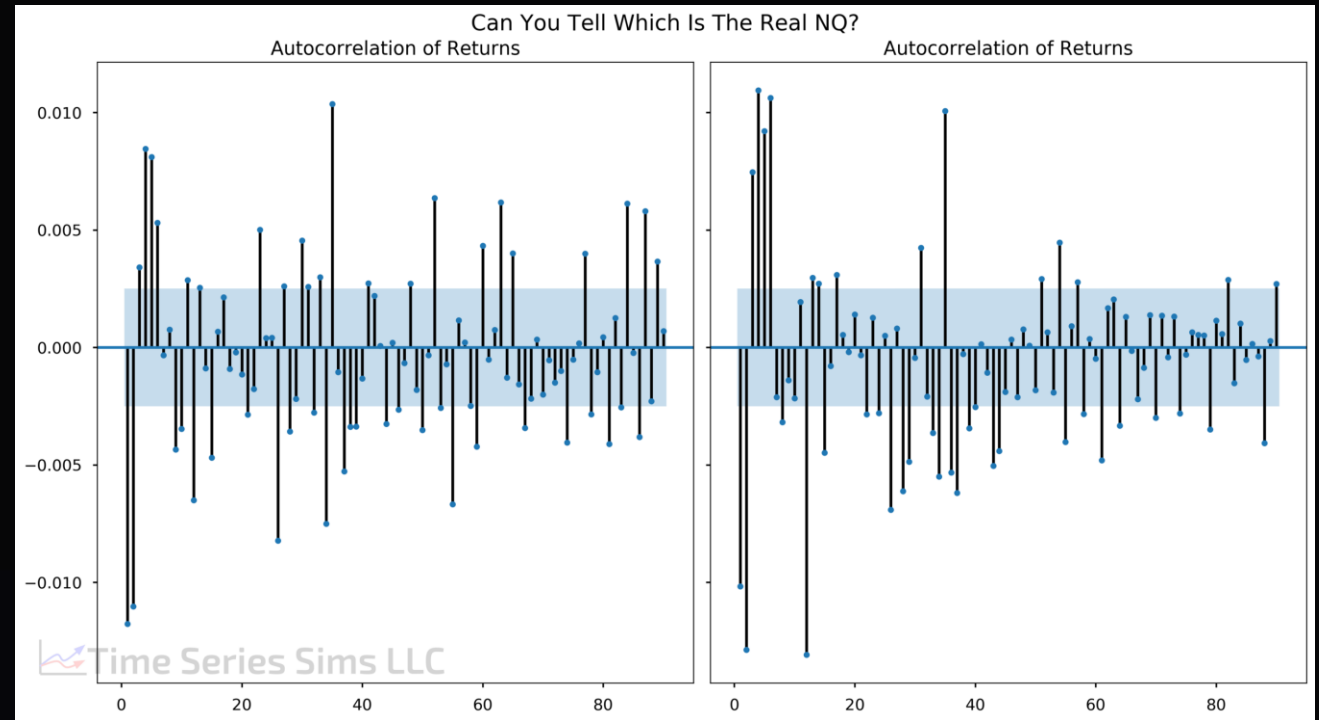- VIX avg is roughly 2x since Covid

Scaling At One of VAST's Largest Quant Trading Customers

THE MACHINES ARE NOW CREATING DATA

- Monte Carlo is being challenged by lack of sophistication and auto-correlation

- More firms are turning to DL, but the "deep" in deep learning = lots of data

- Where to get the training data? Make it!

Can You Tell Which Is The Real NQ?

CRYPTO IS A DATA GROWTH CATALYST

- Full ownership lineage
- 500 exchanges trading coins
- More metadata to analyze

7x Larger Crypto
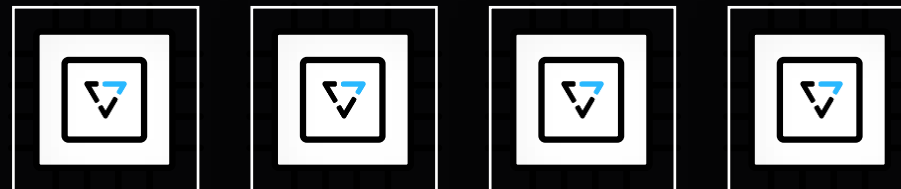Trade Data
Payload

Options
Trade Data
Payload

DATA IS GROWING AT HISTORIC LEVELS

BUSINESSES NEED TO CONTROL THE COST OF REAL-TIME INFRASTRUCTURE
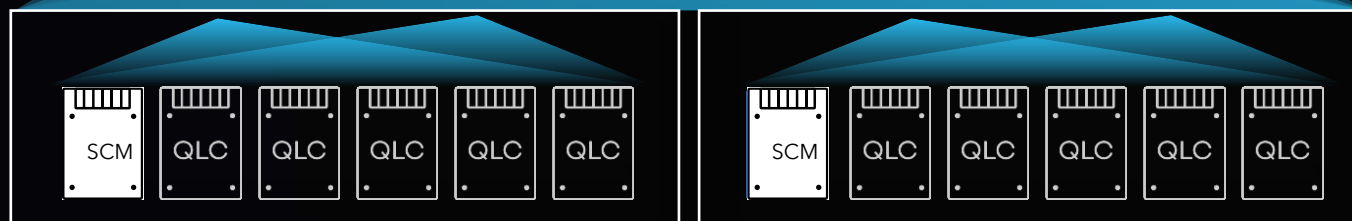
ONE TIER TO RULE THEM ALL

NFS • SMB • S3 • GPUDirect Storage

1,000s of stateless containers
Zero east west traffic, linear scale

NVMe Fabric

Exabytes of low-cost flash
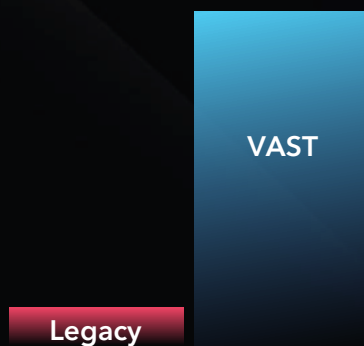All-flash at archive price-points

| SCM | QLC | QLC | QLC | QLC | QLC |

| SCM | QLC | QLC | QLC | QLC | QLC |

DASE: the world's first partition-less scale out architecture

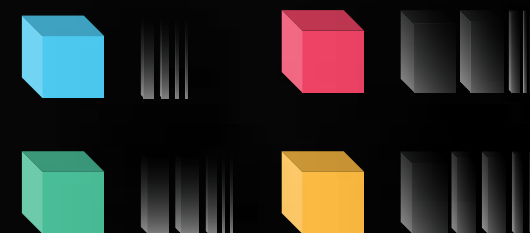# THE PATH TO FLASH AFFORDABILITY

VAST predictive placement saves 85%

Data protection saves up another ~30%

Unprecedented storage efficiency (2:1 on *compressed* data)

SSD Longevity

VAST

Legacy

✕

✕

Enable hyper-scale flash

Locally-decodable erasure codes

Similarity-based data reduction

ALL-FLASH MARKET DATA ARCHIVES
ARE WHAT WE DO

THANK YOU
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