2 Years In: How New Data Reduction Can Achieve HDD Economics For All-Flash Market Data Storage

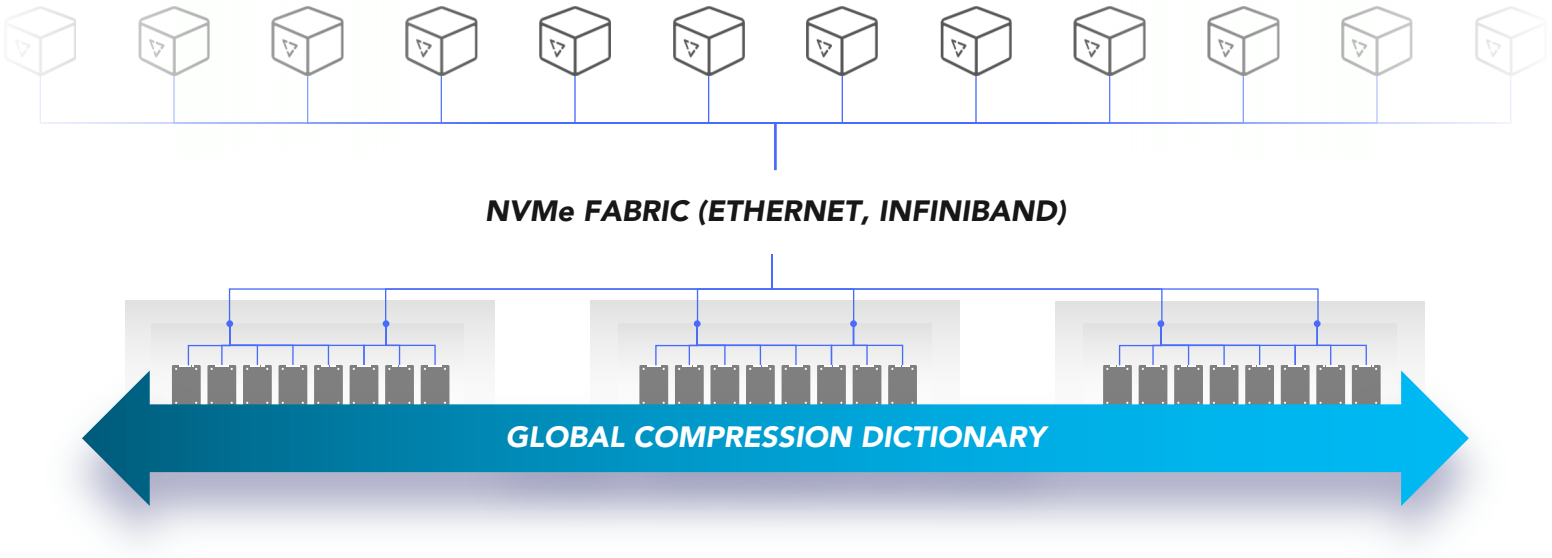
JEFF DENWORTH › CO-FOUNDER + CMO

VAST

WE ARE THE PROVIDER OF ALL-FLASH INFRASTRUCTURE FOR QUANTITATIVE TRADING

VAST

AFFORDABILITY TO MAKE FLASH UNIVERSAL



GLOBAL WEAR LEVELING OF CHEAP FLASH

+ + QLC FLASH IS THE LOWEST COST FLASH

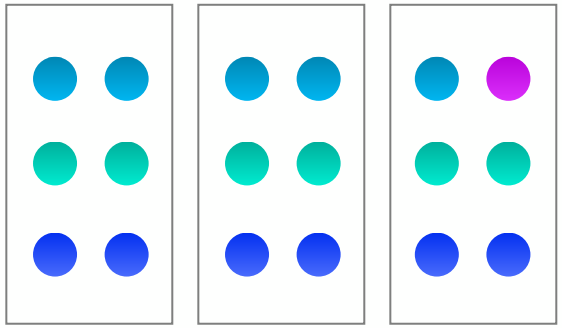
GLOBAL RAID STRIPES – 146+4

+ + 2.7% OVERHEAD, 60M YEARS OF MTTDL

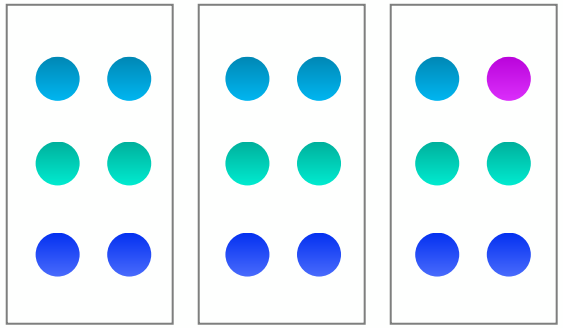
GLOBAL DATA REDUCTION

+ + DRAMATIC COMPOUNDED SAVINGS

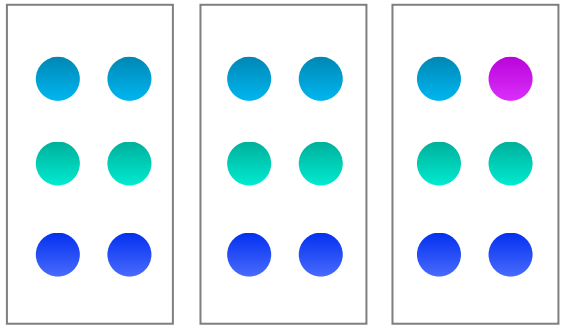
SIMILARITY-BASED DATA REDUCTION



COMPRESSION Fine Grained, But Local



DEDUPLICATION Global, But Coarse



SIMILARITY REDUCTION Global & Fine Grained

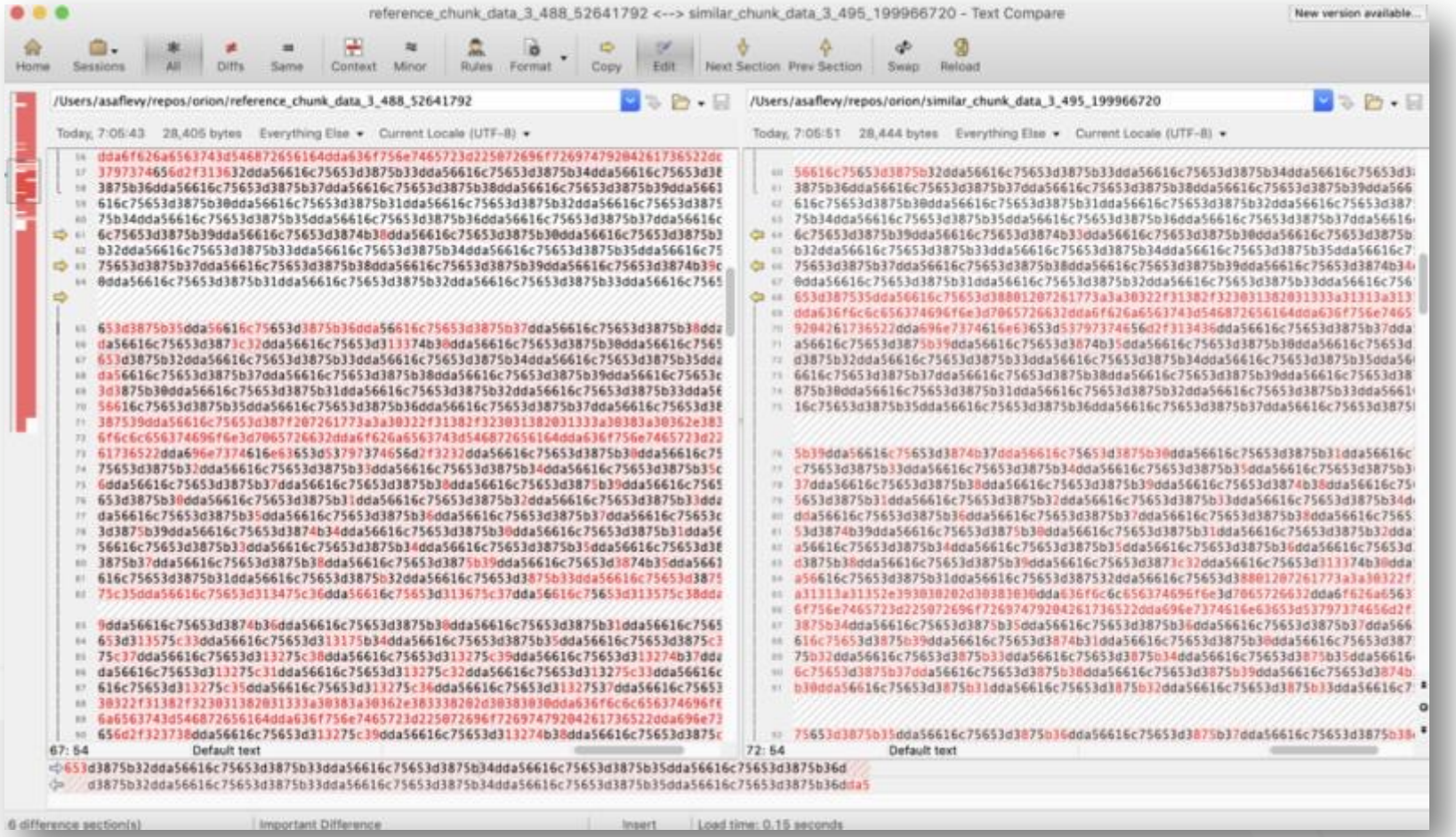
EXAMPLE SAVINGS FROM SIMILARITY

3:1	Pre-Reduced Backups	**3:1**	Pre-Compressed Log Files	**2:1**	Life Science Data	**3:1**	HPC Data	**3:1**	Animation Data	**8:1**	Uncompressed Time-series Data

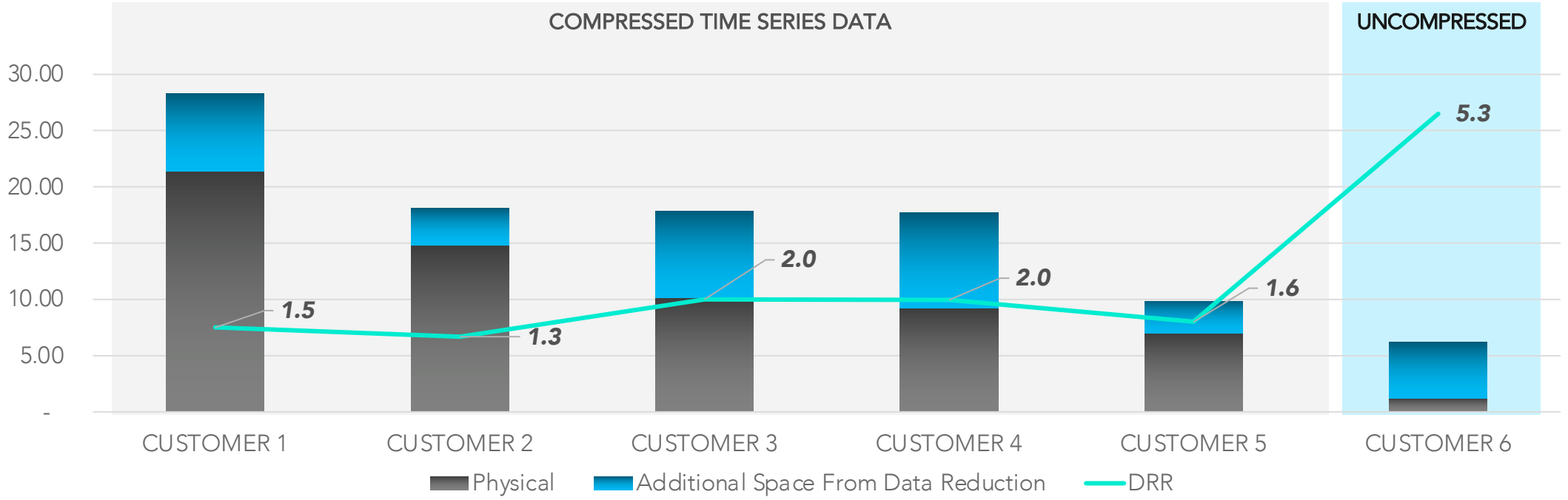
SAVING MONEY, BYTE BY BYTE

Legend

compressible data
delta data



DATA REDUCTION ACROSS A FEW OF VAST'S QUANT TRADING CUSTOMERS

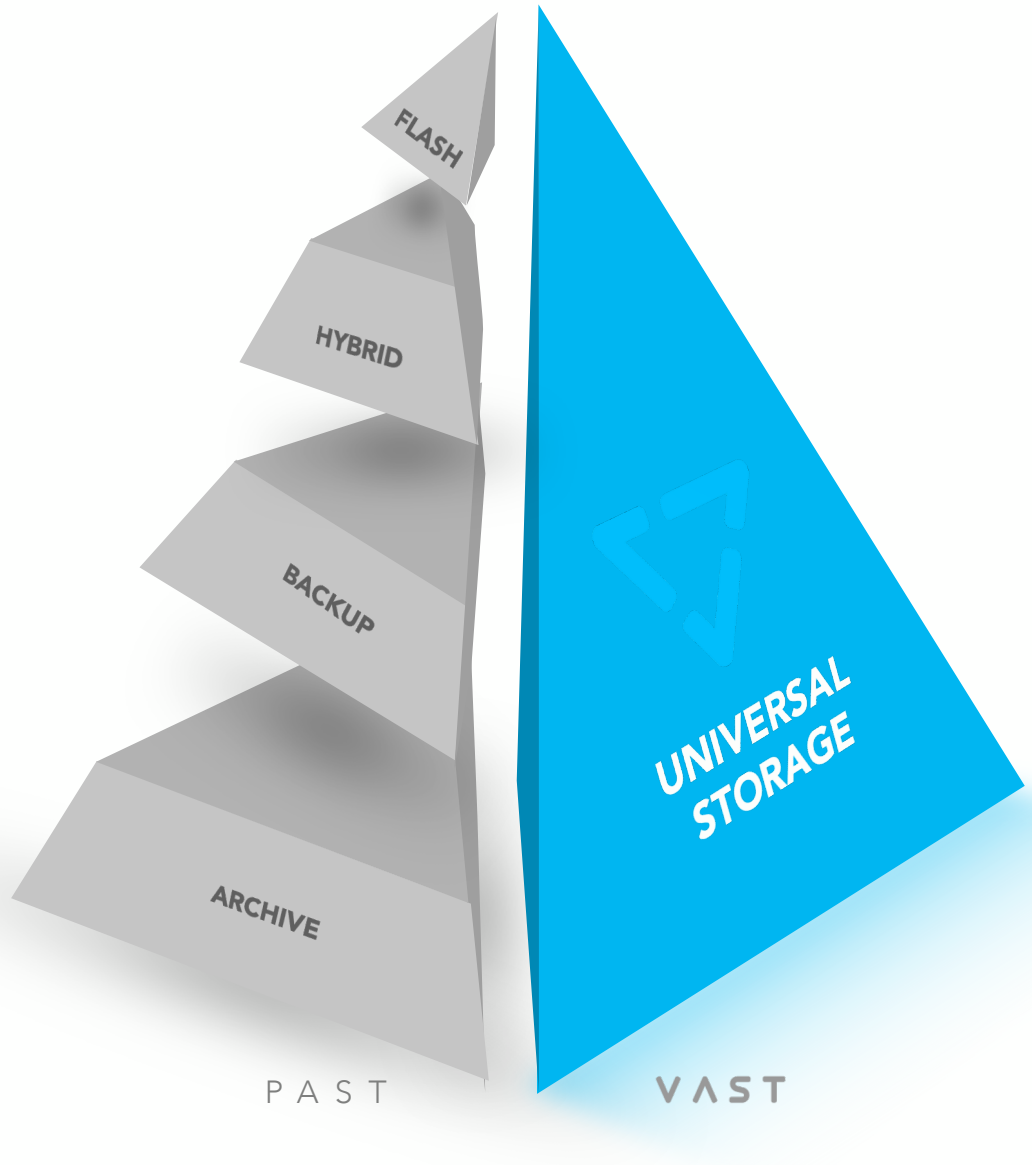


OUR MISSION

NO MORE *TIERS*

BREAKING TRADEOFFS TO MAKE STORAGE SIMPLE

- Extinction-level Event for The Hard Drive
- An End To 30 Years of Complex Storage Tiering
- Unleash Big Data and ML Insights



BUSINESS OVERVIEW

RECORD-BREAKING PRODUCT ADOPTION

- ~$100M Sold In Just 2 Years
- Fastest-Growing In Infrastructure History
- 350% Year-Over-Year Growth In 2020
- Cash Flow Positive Exiting 2020

THANK YOU

VAST