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# A New World of Big Data Flash

Open Disaggregation

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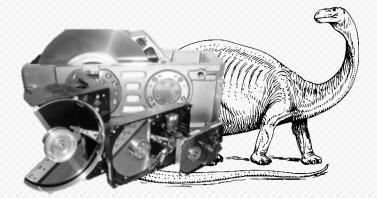




### Challenges & Considerations

#### **Traditional Approaches Fail**

- Over design SW for HDD failure
- Forced massive redundancy
- Poor performance
- New steps not addressing



#### **Performance with Capacity**

- Forced trade-offs and high complexity
- Billions of users, objects & immediate gratification required
- Your cold data is my hot data



### **Costs & Complexity at Scale**

- Look to DISAGGREGATION of compute and storage
- Simplification is paramount
- At massive scale costs and complexity increase exponentially

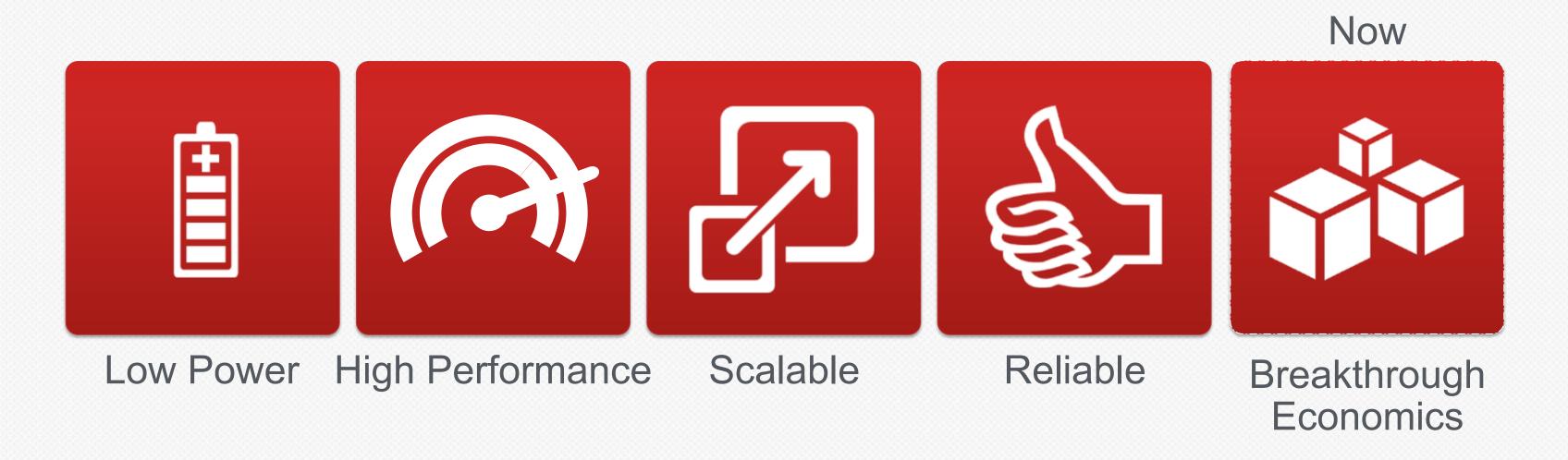


#### **Big Data NDO Scale-out**

- File systems break at massive scale
- Object Storage optimal efficiency
  - Multi-protocol access to a common storage substrate: Block, Object and File interfaces



## Flash excels in 4 areas to transform the data center





### Huge Opportunity with Flash for Big Data







Key Workloads that Require Both Performance & Capacity



### SanDisk InfiniFlash™

Removing Barriers to Innovation @Scale

### **Architected for Massive Scale and QoS**

- Scale-out, High Density, All-Flash appliance
- Designed for maximum efficiency
- New Flash form factor not SSD based
- Compelling TCO with space and energy savings

### **Leaving Traditional Approaches Behind**

- 512 TBs of Flash in 3U
- Up to 1M IOPS, <1ms Latency, 7GB/s Throughput</li>
- 5x the density, 50x the performance, 5x lower power

### **Breaking Price Barriers**

- \$1/GB for InfiniFlash hardware with API's
- \$2/GB for InfiniFlash with Scale-out or Scale up SW



- Innovative Big Data Flash Platform
- Breakthrough Economics @ Scale

# Sandisk Barrer

Systems and Software Solutions for Infinite Possibilities

For questions http://www.sandisk.com/bigdataflash