Enabling the Next Wave of Growth in the PC Industry

Kevin Conley | SVP and GM, Client Storage Solutions

Forward-Looking Statements

During our meeting today we may make forward-looking statements.

Any statement that refers to expectations, projections or other characterizations of future events or circumstances is a forward-looking statement, including those relating to market growth, industry trends and future technologies. This presentation contains information from third parties which reflect their projections as of the date of issuance.

Actual results may differ materially from those expressed in these forward-looking statements due to factors detailed under the caption "Risk Factors" and elsewhere in the reports and documents we file from time-to-time with the SEC.

Masuoka invents Flash

1980

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Eli Harari

Sanjay Mehrotra

Jack Yuan

SanDisk founded

1980

1988

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SanDisk founded

SanDisk intro's 20MB SSD

1980 1988 1991

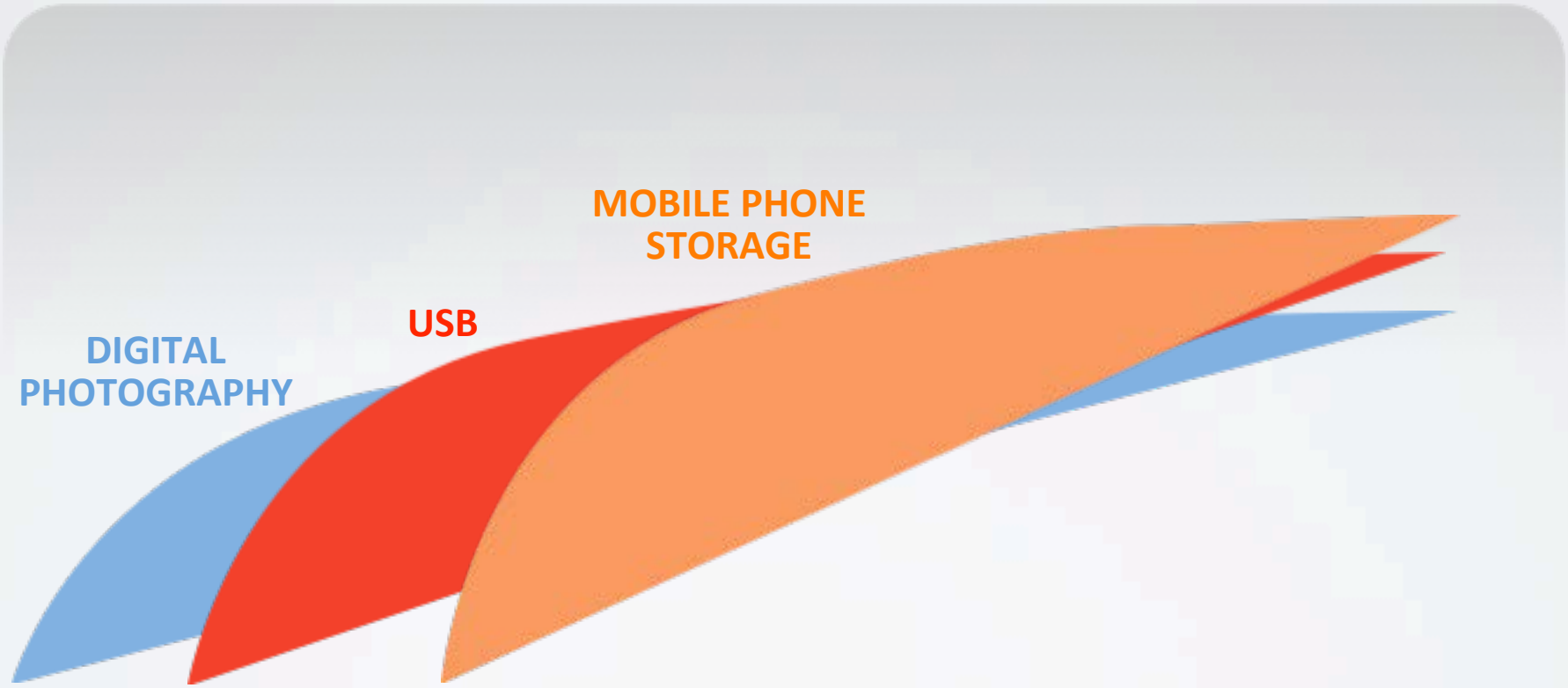
Enabling the Smart Digital Lifestyle

Enabling the Smart Digital Lifestyle

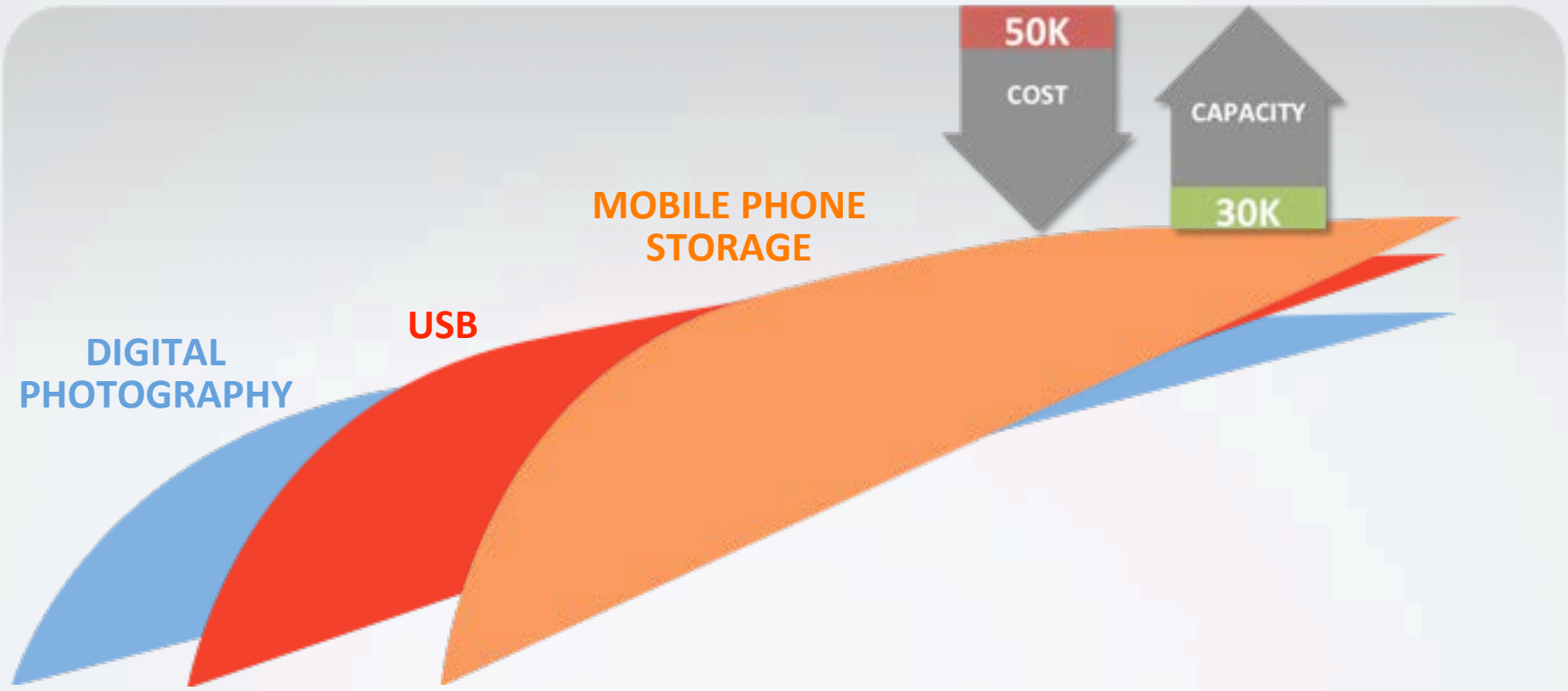
DIGITAL
PHOTOGRAPHY

Enabling the Smart Digital Lifestyle

Enabling the Smart Digital Lifestyle



Enabling the Smart Digital Lifestyle



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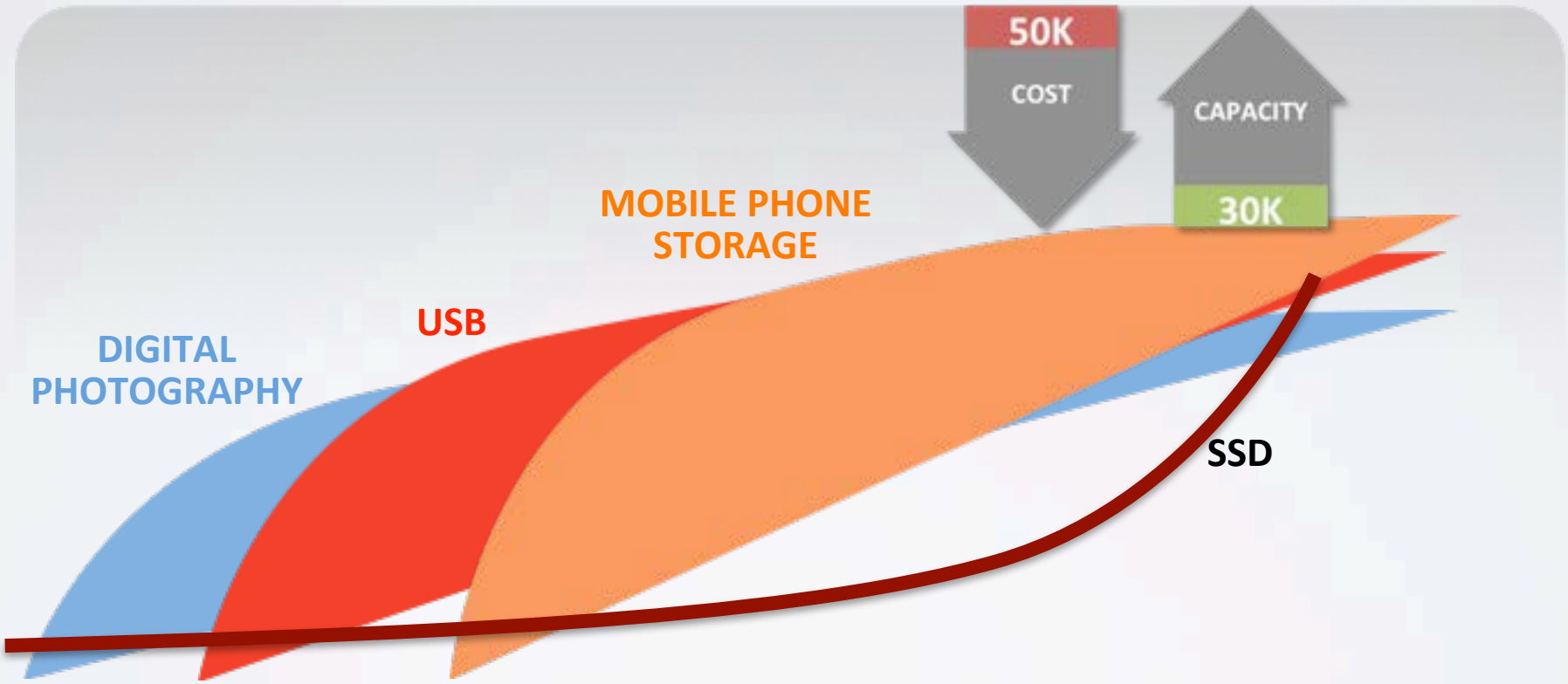

Key Secular Trends

* IDC research data as appeared in New York Times Article “Cloud Computing as a Threat to Older Tech Companies,” December, 2011.
• SanDisk estimates and Gartner forecast: analysis – NAND Flash Update, 2Q’12, June, 2012.

Key Secular Trends

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2.7ZB of Content
In 2012*

Mobility

Connectivity

PC SSD Demand in Consumer Applications

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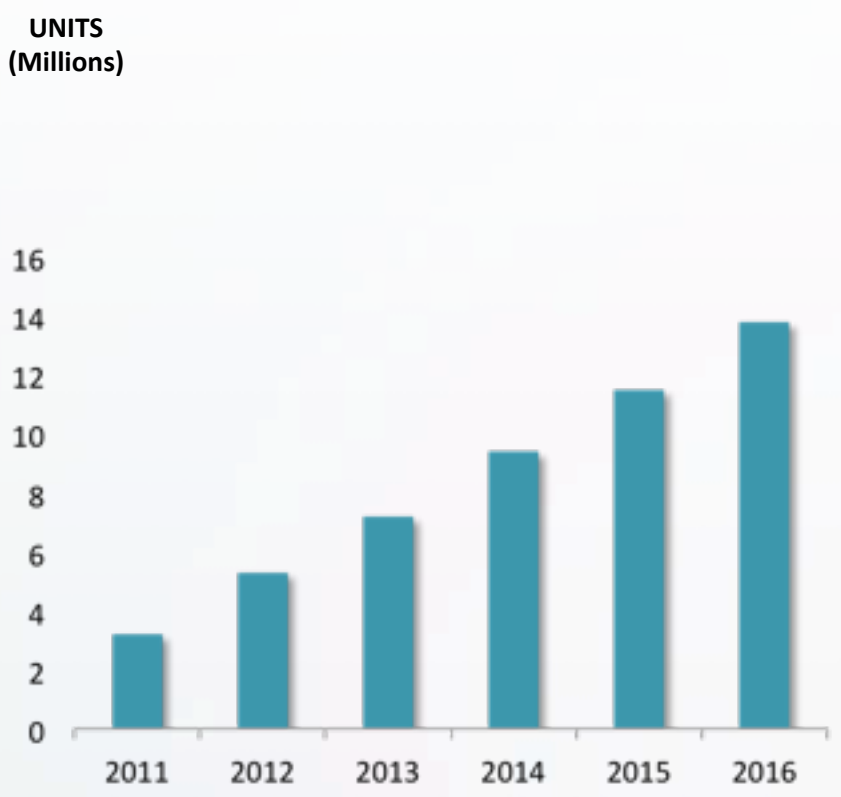
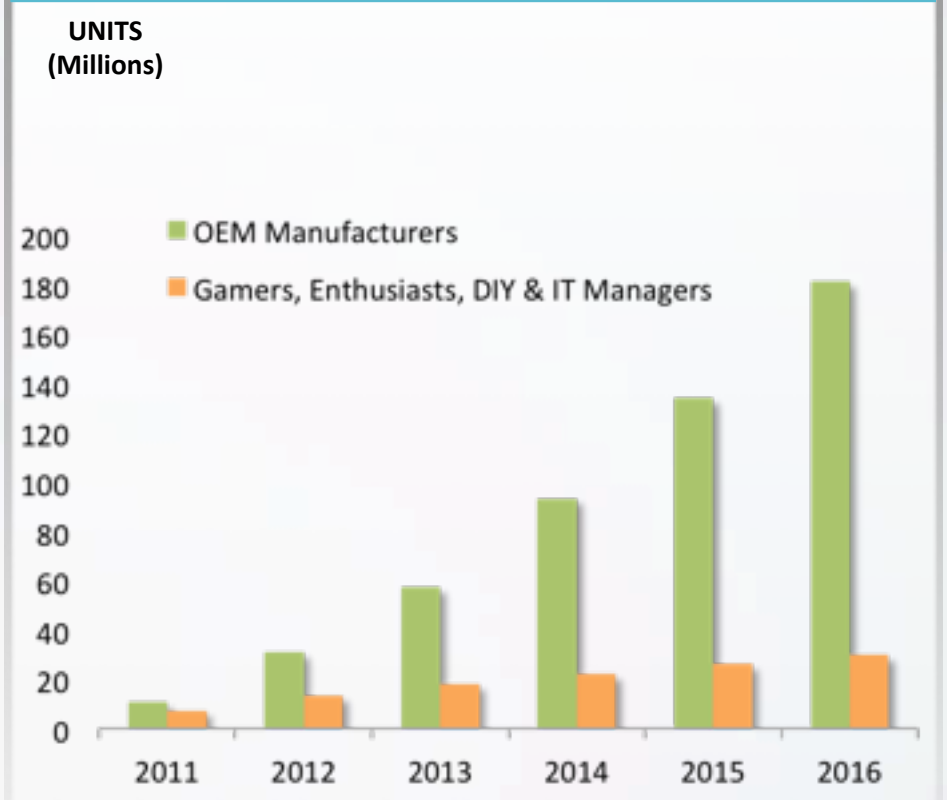
Increased SSD Adoption

ENTERPRISE SSD UNIT SHIPMENTS



1,339GB average capacity by 2016

CLIENT SSD UNIT SHIPMENTS



319GB average capacity by 2016

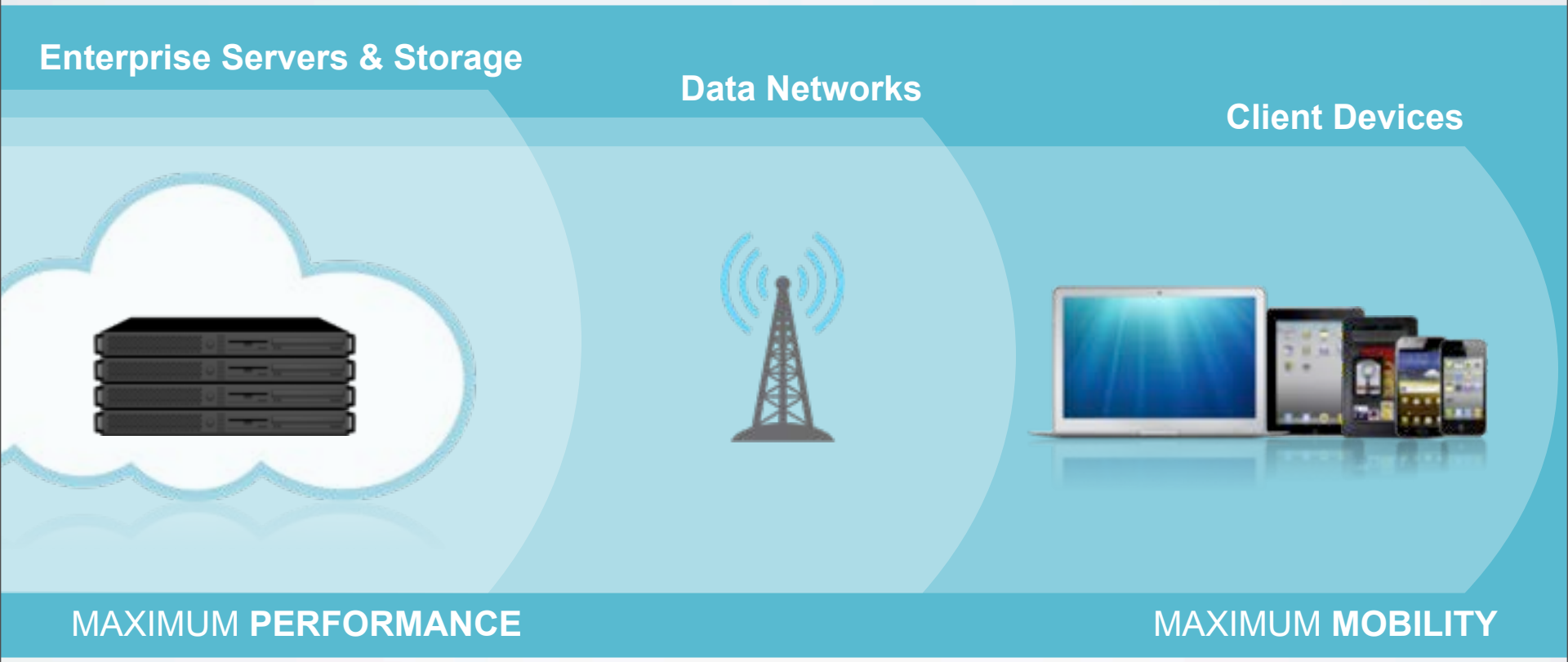
Sources: Forward Insights and Gartner, 2Q12, June 2012.

Today's Mobile Connected World

First Node

Last Node

Today's Mobile Connected World



First Node

Last Node

SSDs Transforming The First Node

MEETING ENTERPRISE

High Performance

High Reliability

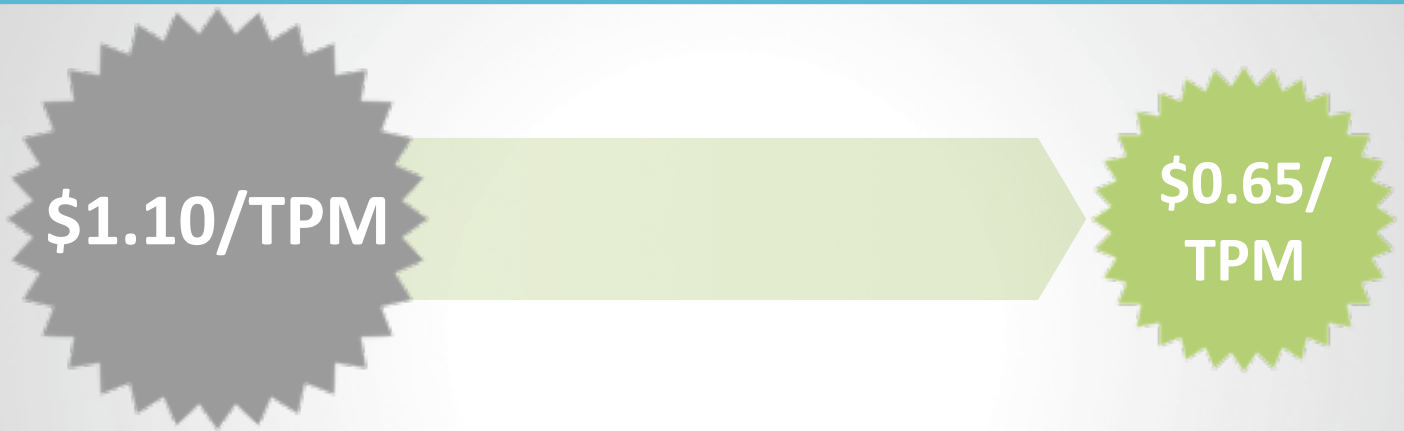
Small Footprint

Low Power

Low Total Cost of Ownership

Flash in Data Centers

HP DL580 G5* – Aug 19th 2008	HP DL380 G7** – May 4th 2011



Metric	Improvement
Storage Capacity (Terabytes)	+74%
Number of Users	+65%
Performance (Transactions Per Minute, TPM)	+61%
Drive Power (Watts)	-79%
Footprint (Enclosures)	-77%
System Cost	-5%

* HP ProLiant DL 580 G5, 2.67 GHz, 16MB L2, TPC Report, Hewlett Packard Company. ** HP ProLiant DL 380 G7, 3.46 GHz, 12MB Cache, TPC Report, Hewlett Packard Company.

Marvell Armada XP SSD Server vs. x86 HDD Server

25K IOs / Rack

2.5M IOs / Rack

VS.

See SanDisk & Marvell Live Demo at Booth # 800

Based on actual measurement using FIO.

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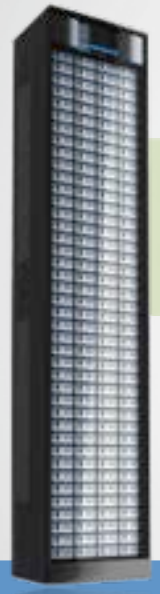


100x Improvement in IOPS
85% Less Power
95% Less Rack Space

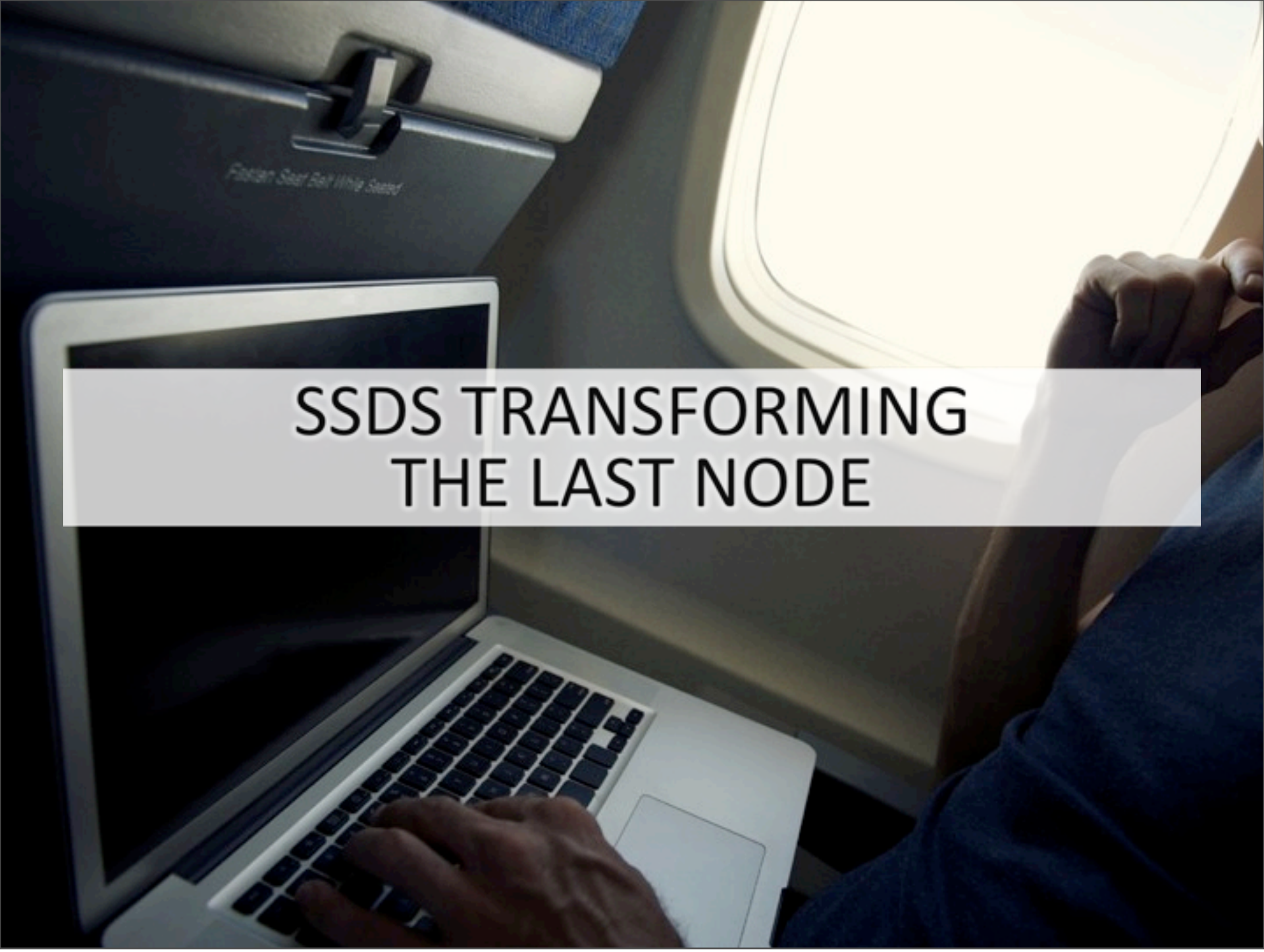
VS.

42U rack | 21 - 2U x86 HDD servers | 8400 watts

Single 2U Chassis| Armada XP SSD Servers | 1200 watt

See SanDisk & Marvell Live Demo at Booth # 800

Based on actual measurement using FIO.



SSDS TRANSFORMING THE LAST NODE

MEETING CLIENT

High Performance

High Reliability

Small/Custom Form Factor

Low Power

Affordable Cost

Key Segment Drivers of Client SSDs

	Speed	Productivity	TCO	Reliability	$/GB	Form Factor	Power	Typical SSD Type
Gamers & Enthusiasts								High performance standalone SSD
Do-it-Yourself (DIY)								Standalone SSD, Caching
IT Managers								Standalone SSD
OEM Manufacturers								SSD or cache SSD w/ caching SW

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SSDs Address OEM Needs

DESIGN GOALS	Sleek thin design	All day computing	Enhanced user exp. AOAC instant on	2012 Pricing <$799
STORAGE CHALLENGES	Form factor flexibility	Power	Performance	$/GB

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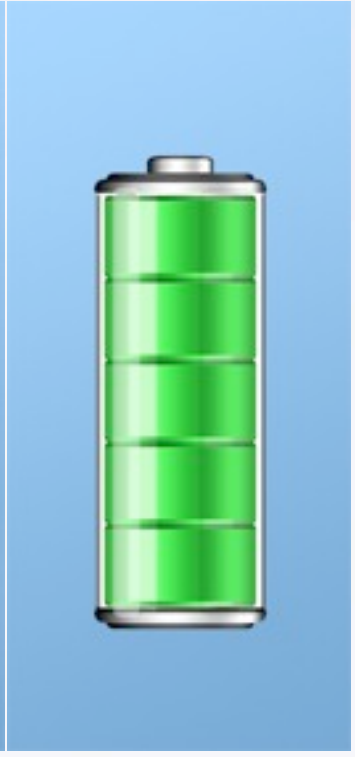

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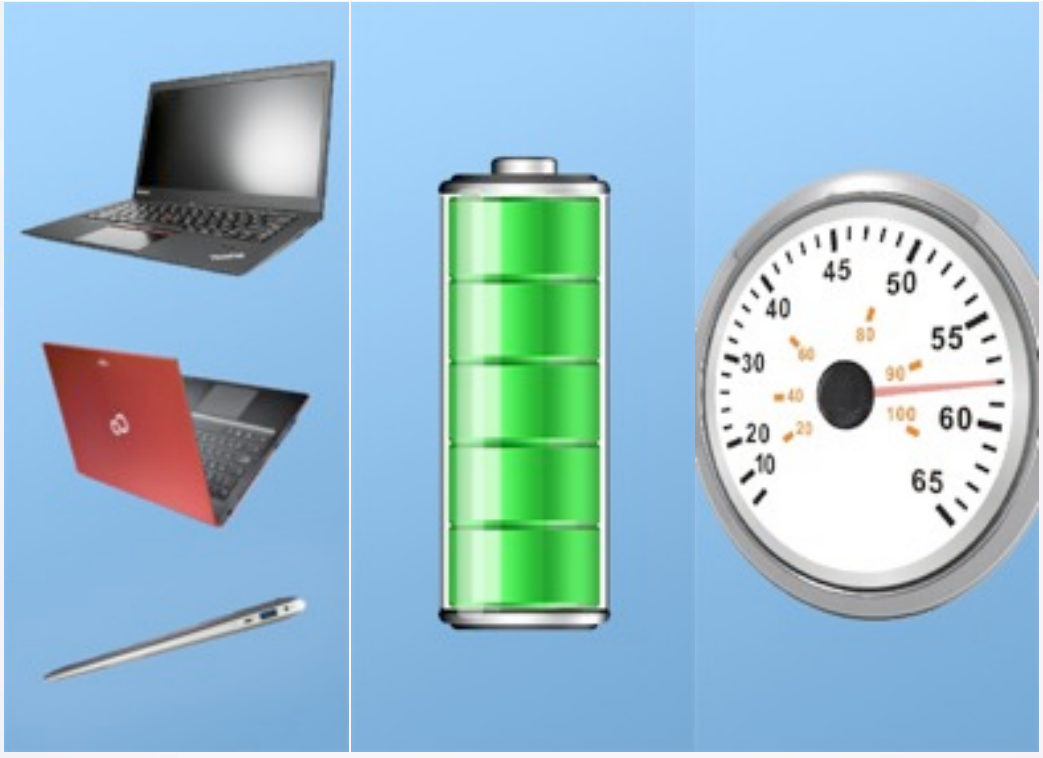

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Client SSD Capacity Dynamics

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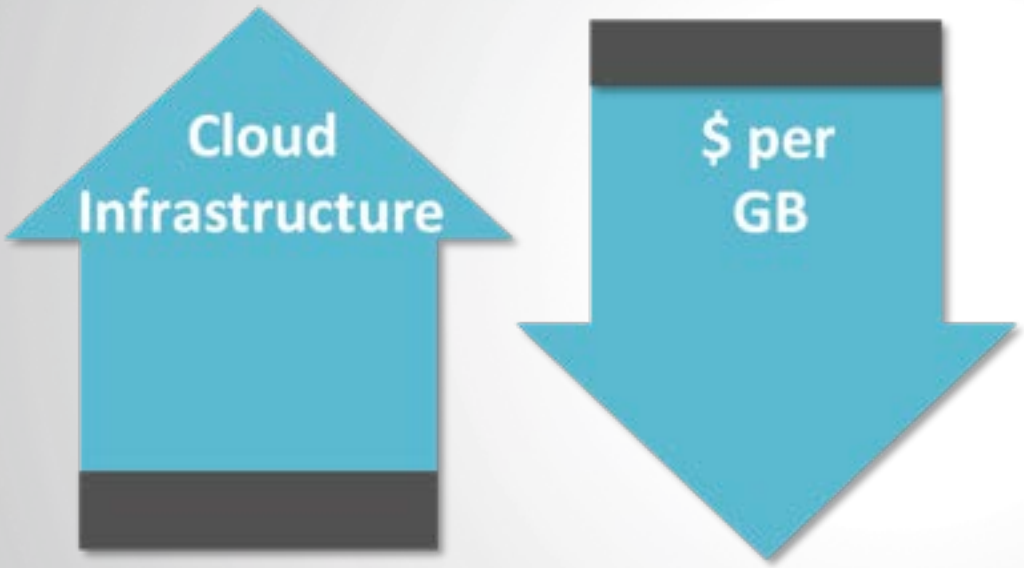

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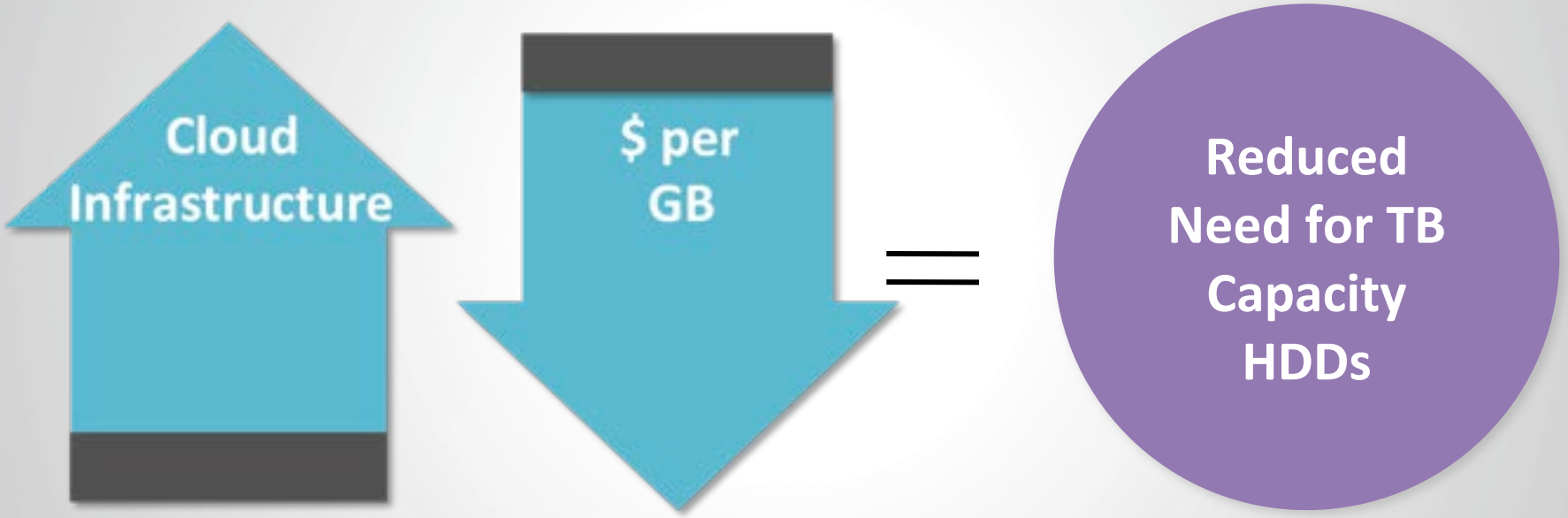

The Innovation Continues: Enabling Future Waves

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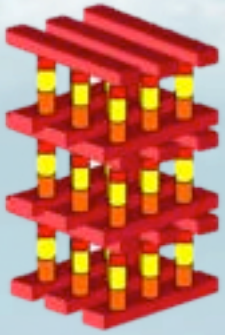
NAND Scaling

BiCS



3D ReRAM

Thank you

Thank you

Celebrating 25 Years of Innovation

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1 gigabyte (GB)=1 billion bytes. Some capacity not available for data storage.