Welcome to the Second

Creative Storage Conference

Tom Coughlin

www.tomcoughlin.com

2008 Creative Storage℠ Conference

April 15, 2008 Las Vegas Convention Center

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CONTENT DELIVERY & STORAGE ASSOCIATION

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MEDIATECH association

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Executive Strategies for the Advancement of Content Delivery & Storage

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SCSI Trade Association

Storage Visions™ 2009 Conference

January 7 & 8, 2008 Flamingo Hotel, Las Vegas

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The Cosmic Wheel of Storage Karma

Content Creation
Content Editing
Content Archiving
Content Distribution
Content Reception

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Entertainment Storage Alliance™

- On-going activities to provide resources and a forum for the integration of storage and entertainment
- Quarterly Updates on Storage and Entertainment (newsletter)
- Blog site on digital storage and content value chain (now operating)
- Discounts on partner reports related to storage, entertainment and consumer electronics
- Discounts on SV08 and other ESA programs.
- More to Come

www.entertainmentstorage.org

Trends for Entertainment Storage

EXCERPTS FROM

2007 Entertainment Creation and Distribution Digital Storage Report

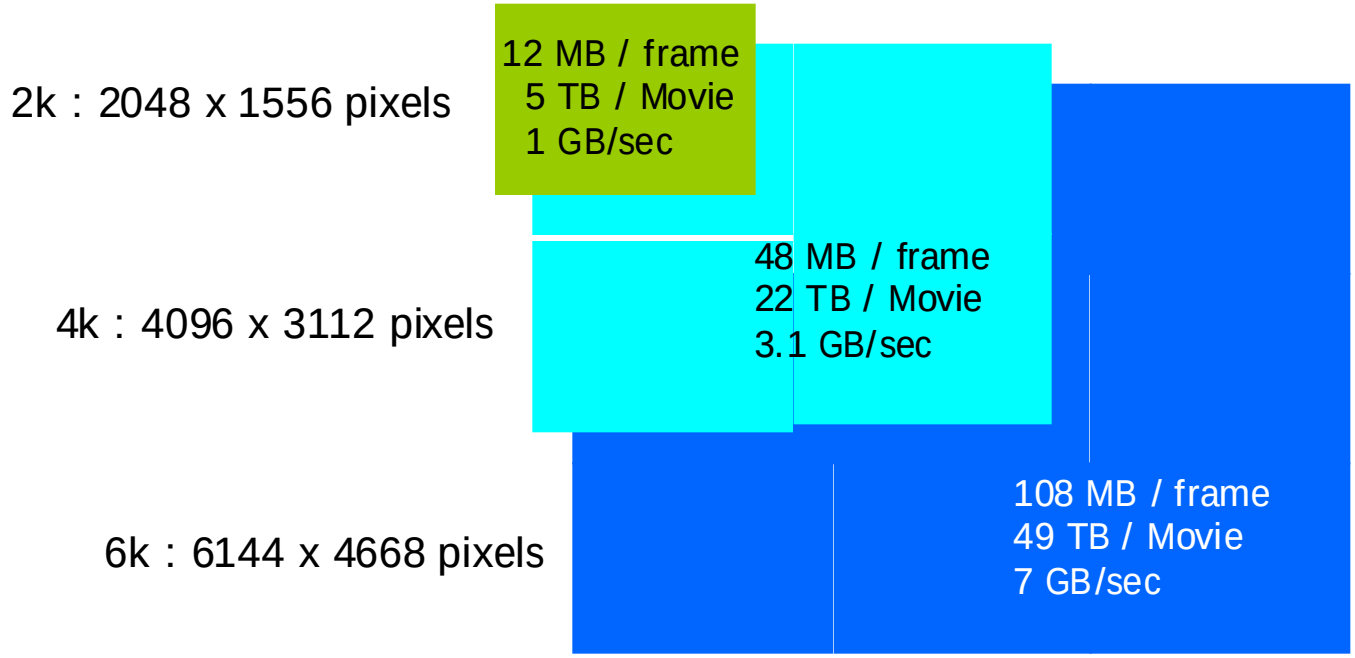
and **Digital Storage in Consumer Electronics 2008**

Coughlin Associates
www.tomcoughlin.com

Physical Content Distribution is in a Race with Bandwidth

Video Resolution	Stream Rate (Mbps)	Storage Capacity/Hour (GB)
SDTV	~8.0	~2.00
HDTV	~19.3	~8.89
Ultra HDTV	~295	~133

- Uncompressed Professional Video Requirements



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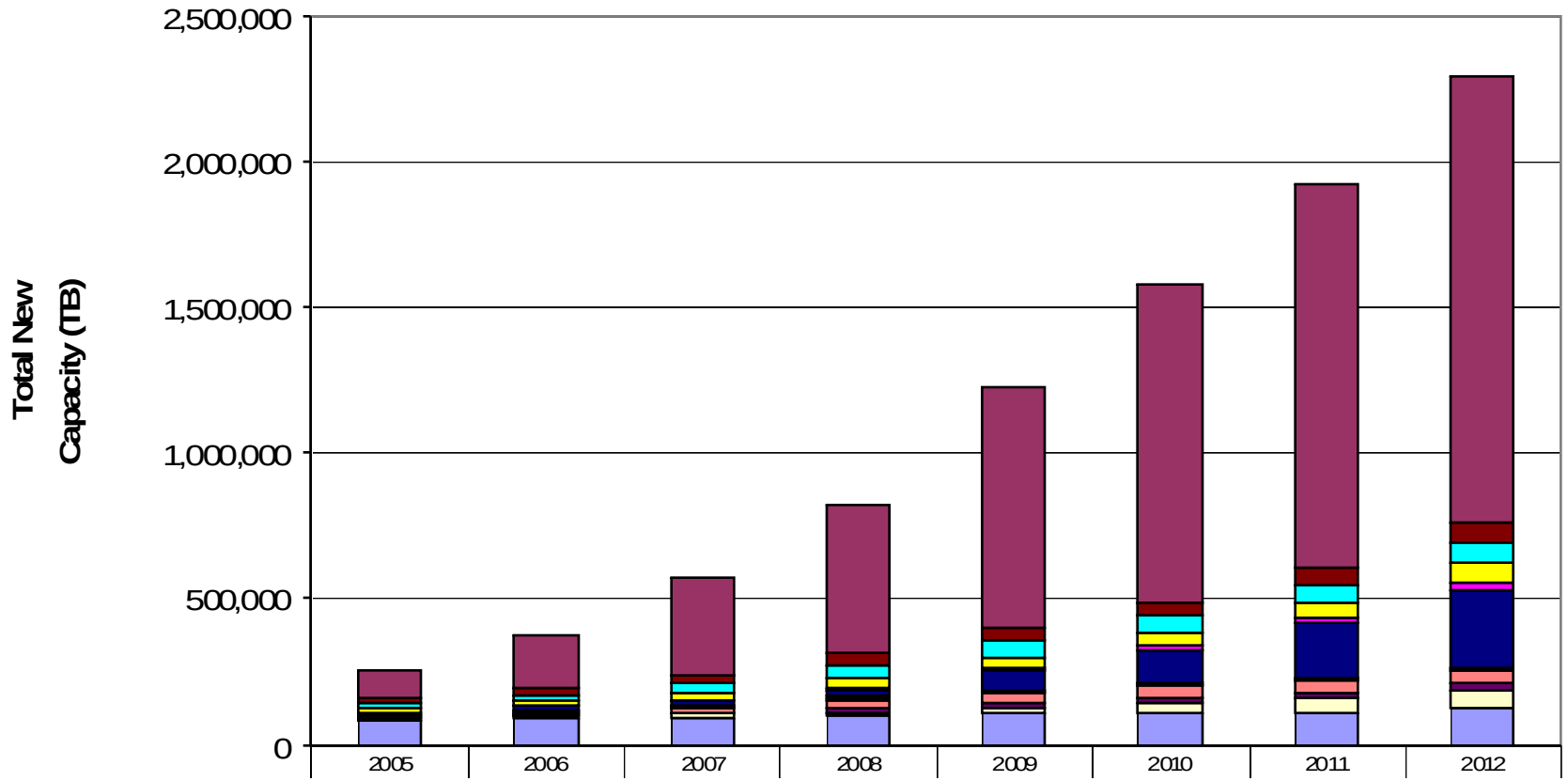
Storage and Content Creation/Distribution

(Over 2 Exabytes of New Storage by 2012)



Source: 2007 Entertainment Content Creation and Digital Storage Report

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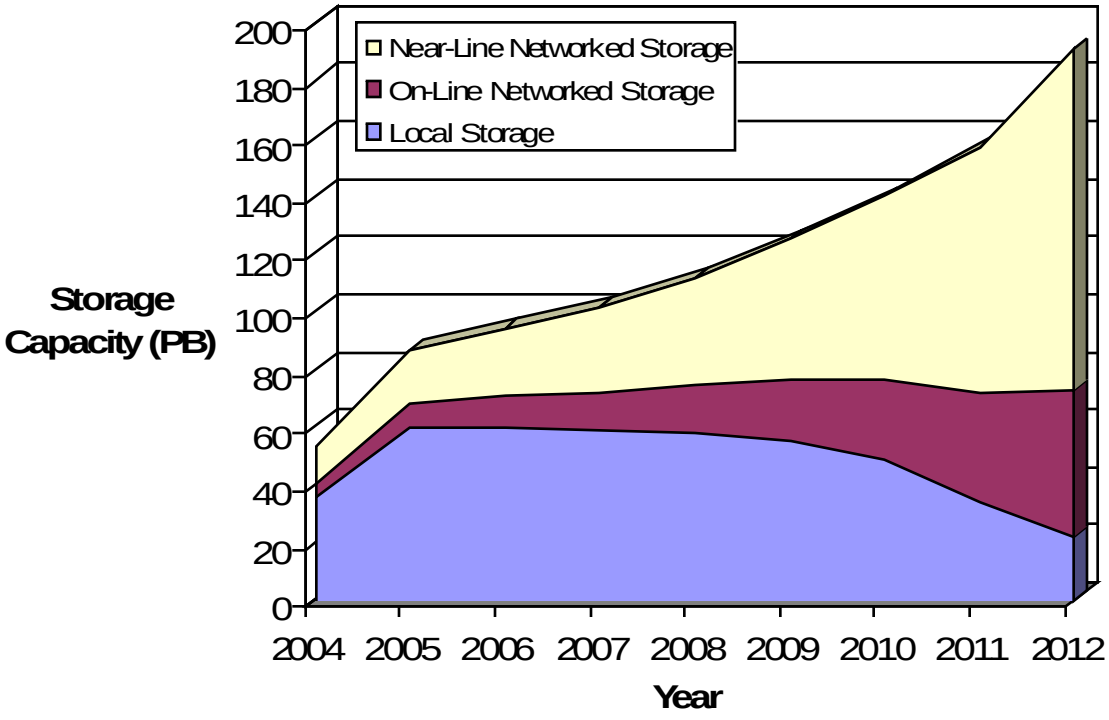
Postproduction digital storage projections

- Post production is the single biggest driver of on-line (or high performance) networked storage demand in the entertainment industry.
- Likewise along with archiving it will be the biggest driver of near-line (lower performance but higher capacity and lower cost) networked storage
- Direct attached storage capacity will decline with the availability of high performance network storage



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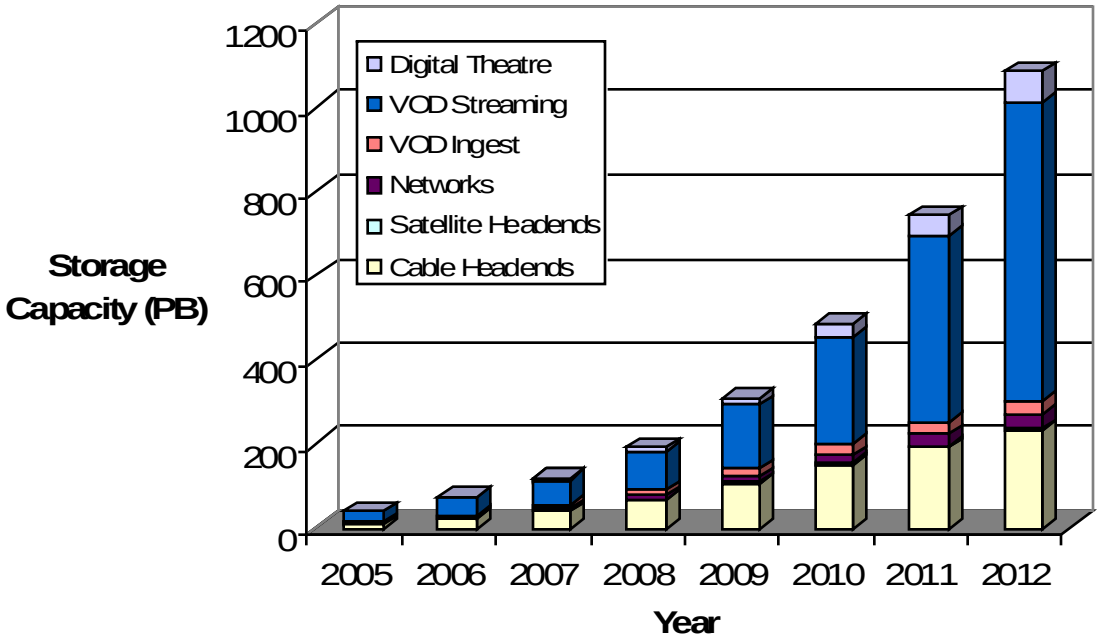
Capacity growth for content distribution

- Broadcast, Video on Demand, Digital Cinema and other forms of digital content distribution use compressed formats in order to make the best use of limited bandwidth resources and to match the content to the display device.
- Distribution methods will require larger amounts of storage as the digital content resolution increases.



Internet based distribution is becoming more significant and will be included in the 2008 report

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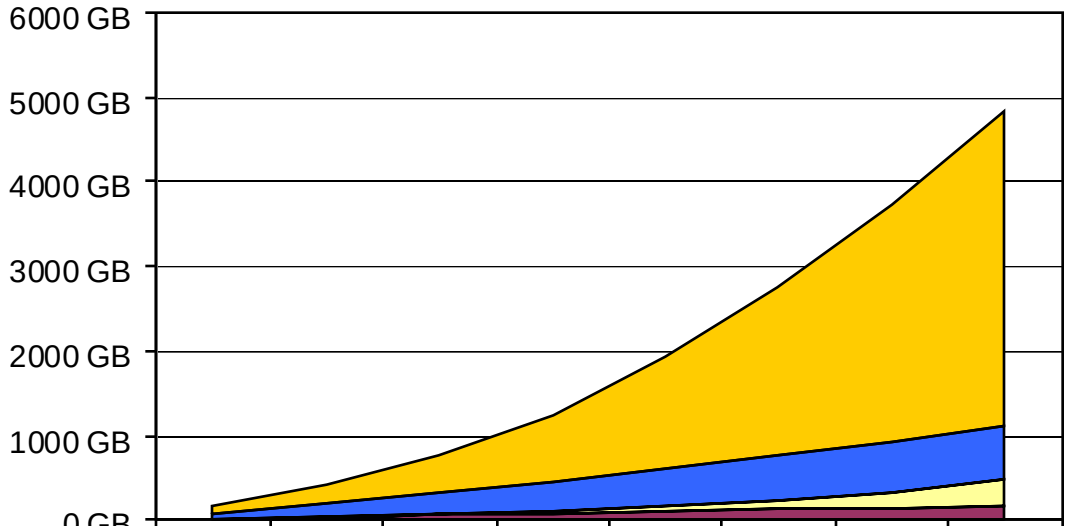
Home Entertainment Accumulated Digital Content per Average Household



	2006	2007	2008	2009	2010	2011	2012	2013
HD Television	106.36	234.00	433.75	779.00	1,336.	2,008.	2,806.	3,728.
SD Television	78.07	164.66	257.80	353.80	447.65	524.29	582.30	621.69
HD Video Download	-	2.28	8.80	22.89	49.08	96.15	186.22	330.32
SD Video Download	6.71	32.74	58.37	83.19	106.62	127.60	143.34	152.49
Music	0.58	0.88	1.19	1.50	1.82	2.13	2.45	2.76

- Even an average household will have Terabytes of commercial data in the next decade
- As content resolution increases the required storage capacity must increase as well

•**Consumer Survey on Digital Storage in Consumer Electronics** (Coughlin Associates, January 2008)

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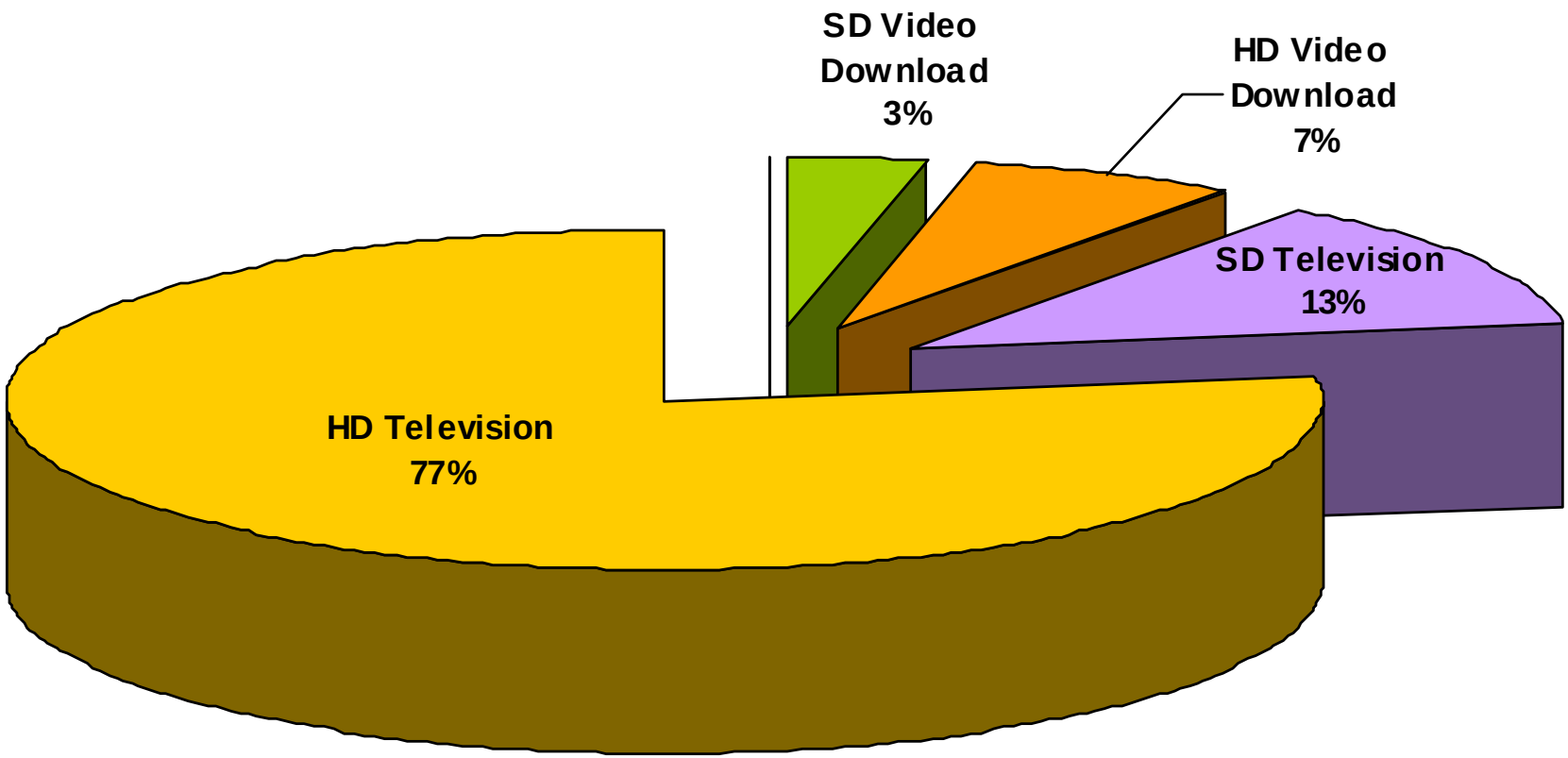
Accumulated Digital Content in 2013
Per Average Household



•**Consumer Survey on Digital Storage in Consumer Electronics** (Coughlin Associates, release January 2008)

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Source

- **2007 Entertainment Creation and Distribution Digital Storage Report**, Coughlin Associates (134 pages)
- **Digital Storage in Consumer Electronics 2008**, Coughlin Associates (released mid-2008)

For more information go to the tech papers section of www.tomcoughlin.com

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Welcome to our Future…
Thank You!