

Storage Innovation Executive Summit

Data Explosion on a Smarter Planet

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The Decade of Big Data

161 exabytes of data were created in 2006 – 3 million times the amount of information contained in all the books ever written.

In **2010** the number
reached hit **988 exabytes**.

By **2020** will total
35 zettabytes.

What's a Zettabyte?

1 kilobyte	1,000
1 megabyte	1,000,000
1 gigabyte	1,000,000,000
1 terabyte	1,000,000,000,000
1 petabyte	1,000,000,000,000,000
1 exabyte	1,000,000,000,000,000,000
1 zettabyte	1,000,000,000,000,000,000,000

Organizations Need Deeper Insights from Their Big Data

1 in 3

Business leaders frequently
make decisions based
on information they don't trust,
or don't have

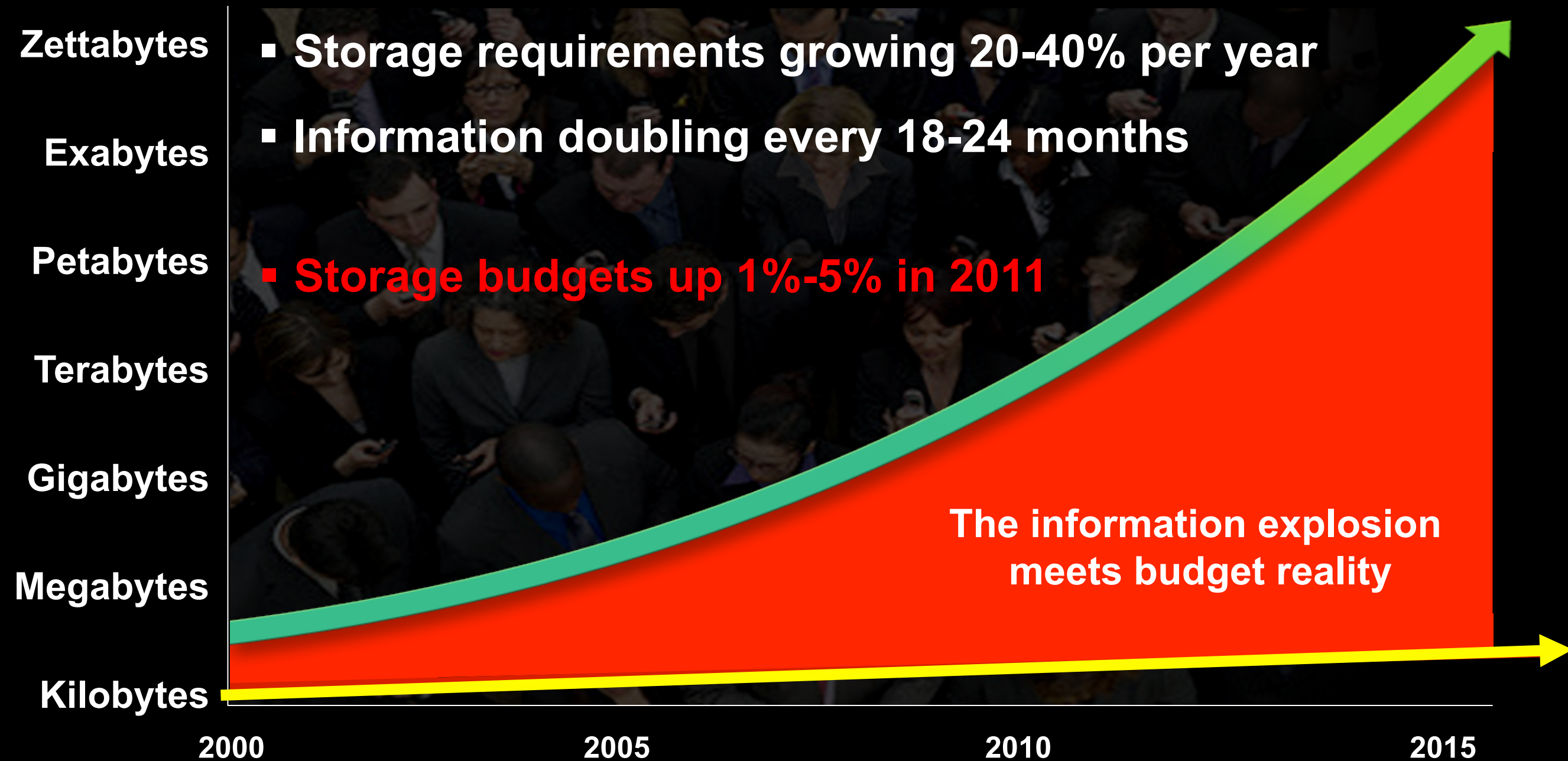
71%

CMOs report being
underprepared for the data
explosion

83%

of CIOs cited "Business intelligence
and analytics" as part of their
visionary plans to enhance
competitiveness

The information explosion is creating a storage efficiency challenge

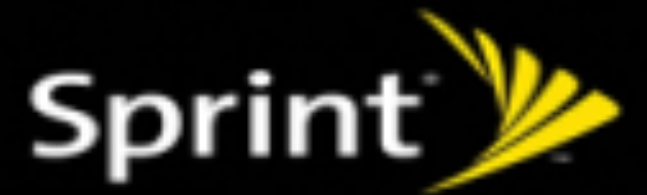


Real Storage Dilemma



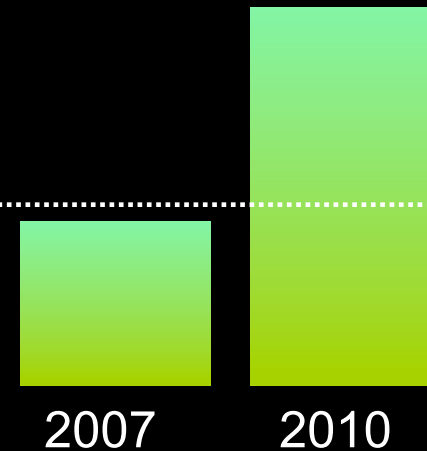
- Storage Utilization: **35%**
- Storage Tiering: **70% Tier I, 30% Tier II/III**
- Storage Migration: **Costly**
- Variation: **6 storage vendors**
- Storage Management skills: **Fragmented, due to variation**
- Maintenance budget: **Increasing**
- Legal holds: **Lengthen data retention**
- Aging Infrastructure: **60% storage end-of-life < 3 years**

Storage Efficiency Drives Real Benefits

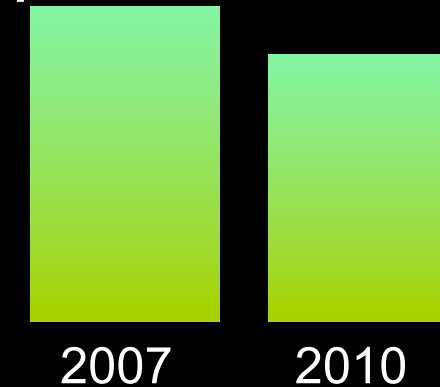


Utilization up by over 100%
from 35% to 78%

Average, per Gartner



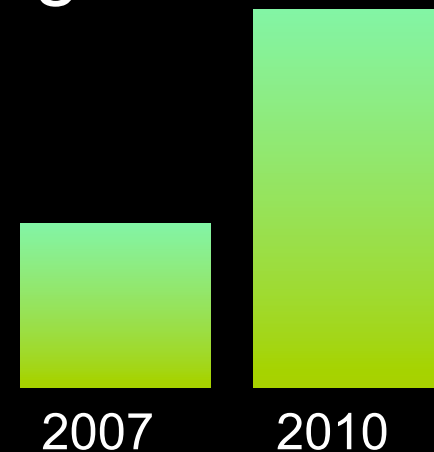
Raw capacity down 15%
from 10 petabytes to 8.4



Operating
expenses
down

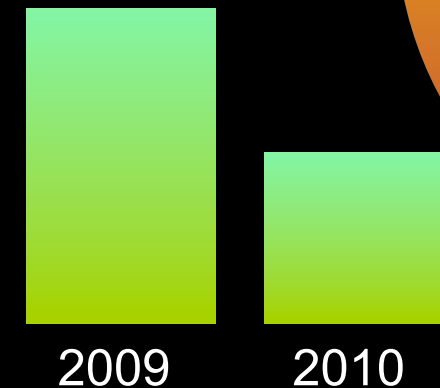
- Storage maintenance costs - 60%
- Annual kW hours - 3.6 million
- Data center raised floor space - 1700 sq. ft.
- Annual CO2 emissions - 2500 tons

Tier efficiency up by over 100%
from 30%, Tier 2 or 3 storage to
70%



Storage arrays down from
166 arrays to 96

**Storage vendors
down
from 6 to 3**



Storage Solutions for a Smarter Planet

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- The background of the slide is a high-angle, slightly blurred photograph of a business meeting. Several people in professional attire are seated around a large conference table, looking at documents and laptops. The image is semi-transparent, allowing the text to be clearly visible over it.
- **Welcome to the era of Big Data**
 - **Data and storage requirements growing at an unprecedented rate**
 - **Business demands driving an insatiable appetite for collecting, analyzing, storing information, extracting insights**
 - **Demands on storage are rising, storage budgets are not**
 - **Innovative technology, expertise, insight provide the path forward**

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Thank You
IBM

