

2013 Storage Trends

How can businesses best prepare for the data deluge that's to come in 2013? Tim Wright, Senior Manager, Technical Support, Toshiba Electronics Europe, makes the following predictions.

Explosive Growth

As the digital universe continues to grow, in 2013 companies will need to step up and address the disconnect between storage requirements and storage capabilities. Whilst businesses are aware they need to invest in high capacity storage hardware solutions, they also need to look at those that won't compromise on performance. It's essential they not only cope with the wide range of data types but also ensure instant access to business critical data whenever needed.

By implementing a tiered storage approach, organisations can benefit with an increased level of sophistication when it comes to data storage and retrieval.

Tiered storage means the automated management of data, to the most effective form of storage depending on cost, performance, availability, security and recovery requirements. The tiered structure controls access demands to different types of data, graduating from high demand data in tier zero, decreasing to the lowest as you move through the tiered system. With this flexible structure, businesses can far easier deal with big data.



The Great Debate

The torrent of data has left businesses facing a huge challenge for choosing the most appropriate storage. Hard Disk Drives (HDDs) and Solid State Drives (SSDs) remain the most dominant media in storage and we expect to see the two continue to coexist in the data storage market over the next twelve months. SSDs should not



be viewed as the "HDD killer" it has been touted to be. Although they offer compelling advantages, such as less energy consumption and fast random access capability, HDDs continue to offer lower price per Gigabyte and performance characteristics that make them the favoured choice.

Businesses will need to carefully asses their storage needs and choose the one that's best for them. Is a high capacity or faster data access the top priority? With a tiered storage model, however, you can get the best of both worlds – fast data access speeds, high capacity storage as well as cutting back on costs. We also expect hybrid drives to grow in influence in the storage market next year as it takes on the best qualities of both the SSDs and HDDs. Hybrid drives perform quite like an SSD so you don't have to compromise on capacity over performance.

Every Cloud has a Silver Lining

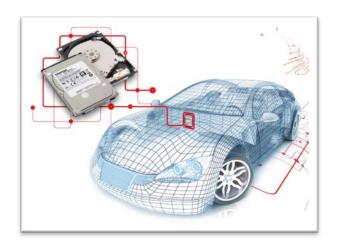
Cloud computing now forms an integral part of the work place. But in order to comply with regulations across the globe and provide businesses with the most effective data storage strategy, a combined approach to data storage is essential. By mixing both cloud and on-premise storage capabilities, businesses can make sure all bases are covered when it comes to storing sensitive company data.

Cloud storage provides an ideal solution for large amounts of data. But it can also provide businesses with a number of challenges when it comes to data privacy compliance. Privacy and security will continue to be key issues in cloud, SaaS and laaS. Where data is stored, is now an important consideration for businesses and they should be aware that both private systems and cloud have their advantages. However, security and privacy considerations for the cloud can be complex, therefore, need to be evaluated and addressed to ensure it complies with the businesses objectives. Not only this, but organisations need to access large amounts of business critical data at the touch of a button. This should be stored on premise to ensure there are no latency issues.

When thinking of corporate storage security and architecture, a combination of cloud storage and local storage systems is the most secure and reliable way for businesses to store and access their data and deliver the highest performance.

Getting Connected

The automotive experience is rapidly evolving and the car is now becoming an extension of the connected home. Drivers now want to plug in their smartphones and tablets to directly interact with vehicle infotainment systems, providing everything from sat nav applications to music. Car manufacturers themselves are starting



TOSHIBA

Leading Innovation >>>

to produce their own apps for a more immersive in-car experience. These more sophisticated features with high-definition displays require much higher storage capacities. Furthermore, drivers expect their vehicles to last for an average of 13 years and/or 145,000 miles. Car manufacturers need to ensure their vehicles are future proofed to meet these expectations.

As such we are seeing an increasing trend towards large capacity storage solutions of up to 200GB. Currently HDDs are still dominating the market as they offer a cheaper price per Gigabyte equivalent. However, over the next few years we expect to see this gap narrow even further as SSDs start taking their place alongside HDDs as they do in consumer devices.

About Toshiba Electronics Europe

Toshiba Electronics Europe (TEE) is the European electronic components business of Toshiba Corporation, which is ranked among the world's largest semiconductor vendors. TEE offers one of the industry's broadest IC and discrete product lines including high-end memory, microcontrollers, ASICs and ASSPs for automotive, multimedia, industrial, telecoms and networking applications. The company also has a wide range of power semiconductor solutions as well as storage products like HDDs, SSDs, SD Cards and USB sticks.

TEE was formed in 1973 in Neuss, Germany, providing design, manufacturing, marketing and sales and now has headquarters in Düsseldorf, Germany, with branch offices in France, Italy, Spain, Sweden and the United Kingdom. TEE employs approximately 300 people in Europe. Company president is Mr. Takashi Nagasawa.

For more company information visit TEE's web site at www.toshiba-components.com

About Toshiba

Toshiba Corporation is a world-leading diversified manufacturer, solutions provider and marketer of advanced electronic and electrical products and systems. Toshiba Group brings innovation and imagination to a wide range of businesses: digital products, including LCD TVs, notebook PCs, retail solutions and MFPs; electronic devices, including semiconductors, storage products and materials; industrial and social infrastructure systems, including power generation systems, smart community solutions, medical systems and escalators & elevators; and home appliances. Toshiba was founded in 1875, and today operates a global network of more than 550 consolidated companies, with 202,000 employees worldwide and annual sales surpassing US\$74 billion.

Visit Toshiba's web site at www.toshiba.co.jp/index.htm

Contact details:

Toshiba Electronics Europe, Hansaallee 181, D-40549 Düsseldorf, Germany

Tel: +49 (0) 211 5296 0 Fax: +49 (0) 211 5296 792197

Web: www.storage.toshiba.eu
E-mail: spdinfo@tee.toshiba.de