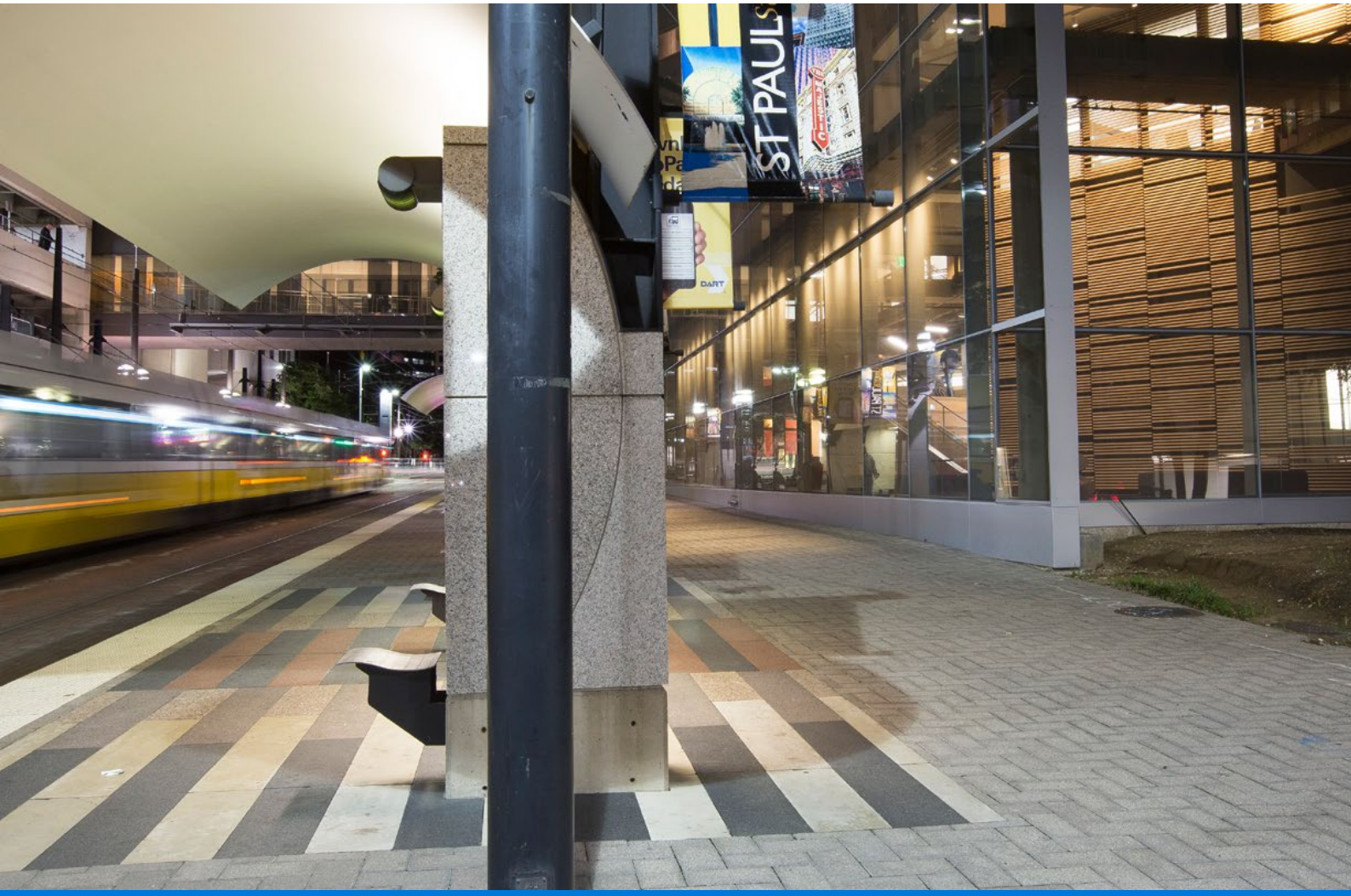

Innovative architecture meets modern IT with StorSimple and Azure

"We're optimistic that in the future we won't have to purchase more SAN disks, which we estimate could save us up to $100,000 annually."

Heather Potter, Vice President of IT Planning and Special Projects, HKS, Inc.

HKS

The handwriting has been on the wall for the architecture, engineering, and construction (AEC) industry for at least a decade. Tasked with providing solutions for aging civic infrastructure, designing more energy-efficient buildings, and improving productivity, AEC firms must evolve and adopt new standards and technologies. To stay competitive, many AEC firms are switching from paper-based processes and 2D software to powerful 3D digital-modeling applications. Meanwhile, globalization has resulted in a proliferation of branch offices, and collaboration across multiple countries and time zones is now commonplace. A mobile global workforce, together with increasingly sophisticated software, has solved some business problems—but it has also created more headaches with each terabyte of data produced.

Microsoft

Outgrowing storage

HKS, Inc., one of the largest architectural firms in the world, has never been shy about innovation. Today, with more than US$12 billion in projects underway, it is taking bold steps to redesign its own IT architecture to alleviate growing pains that included rapidly increasing volumes of data, backup bottlenecks, escalating storage costs, and onerous management processes.

Since Harwood K. Smith founded the company in 1939, HKS has grown to include 25 offices and projects in more than 1,700 cities worldwide. Its landmark projects include the AT&T Stadium in Arlington, Texas; the Aiyuhua Hospital for Women and Children in Beijing, China; the JW Marriot Hotel in Austin, Texas; and renovation of the historic 50 United Nations Plaza in San Francisco, California.

As file sizes grew, along with its noteworthy project portfolio, the company needed a better way of managing data. With the volume of data growing by up to 10 percent each month, information management had become a burden. Backing up project information from each branch office to the central datacenter was an all-night process that frequently carried over into the morning. Then, backup would be interrupted as architects reached the office and resumed work. "It was a rather manual and tedious process, and it involved a lot of administration on our part," says Heather Potter, Vice President of IT Planning and Special Projects at HKS, Inc. "We had one guy that was dedicated to just overseeing backups, and it was a constant struggle."

Archiving and retrieving information were other problems. HKS needed to not only store data, but keep it readily available to meet regulatory compliance as well as business requirements. "For example, an owner we designed a building for in 2009 might want us to do a renovation or addition, so we need to be able to find that base set of files to proceed without starting over again," says Potter. "And sometimes we need files for marketing. For instance, if we did a unique project in aviation, we might want to pull those files to be able to say that we did it once and can do it again."

Ongoing projects could be affected too. Project teams requested earlier versions of files on a weekly basis, and it could take more than a day to find and restore the data. And if a branch office went offline for any reason, projects stalled until the local file share was available again. "The impact of a delay can be huge from a deadline perspective, both in terms of financial and personal cost," says Potter. "Because if you're pushed back a day, that means you're going to be making up the time in the evening or on weekends."

To keep business running smoothly, HKS wanted to replace its cumbersome information management process, which included a help desk and a costly, ever-expanding storage area network (SAN), with a more agile and accessible solution.

> ***"Cloud adoption has been one of our top strategic initiatives for the last several years, and moving storage to the cloud was a natural transition. Why wouldn't we put our time and energy into everything that StorSimple and Azure can provide—including storage, redundancy, and management and datacenter capabilities—when Microsoft can do it cheaper, faster, and better?"***
>
> ***Heather Potter, Vice President of IT Planning and Special Projects, HKS, Inc.***

Customer Name: HKS, Inc.
Industry: Professional services
Country or Region: United States
Customer Website: www.hksinc.com
Employee Size: 1,200
Partner Name: Peer Software
Partner Website: www.peersoftware.com

Customer Profile: Based in Dallas, Texas, HKS, Inc. is one of the largest architectural firms in the world with 1,200 employees, 25 offices, and more than US$12 billion in construction projects currently underway.

Microsoft

Ground to cloud architecture

No stranger to cloud technologies, HKS was an early adopter of Microsoft Office 365. It had kept a watchful eye on the Azure platform and decided to move storage to the cloud with help from Peer Software. A Microsoft partner with deep expertise in cloud technologies and file-sharing solutions, Peer also understood the complexity of specialized software like Autodesk Revit, which produces and continuously updates large 3D files in a unique format. To solve data backup and management challenges, Peer and HKS implemented a hybrid-cloud architecture based on Microsoft Azure StorSimple. The solution includes StorSimple 8600 hybrid storage arrays running in a central datacenter connected to Azure and the company's 26 branch offices. The solution also takes advantage of real-time replication capabilities in Peer Software's PeerSync Backup Edition for Servers to efficiently move branch office data to the datacenter. To ease administrative tasks, HKS deployed the Peer Management Center, a central interface for managing and monitoring the solution. HKS gained 345 terabytes (TB) of on-premises backup space with just five storage arrays, and virtually unlimited storage on Azure.

Microsoft

Better peace of mind

Incremental changes are saved immediately to the StorSimple hybrid storage arrays, and scheduled backups are performed on all file servers too. The company can also create point-in-time copies or snapshots that can be stored in the cloud for backup and easy recovery. Data replicates online for archival, where it is continuously available in a read-only format.

HKS already has approximately 345 TB stored on Azure, and the volume continues to grow by about 10 percent each month. But regardless of how much data is stored, files are available in milliseconds from virtually any location, whether inside or outside the office, and the IT team can restore files to any branch office in less than an hour.

The solution has already saved the day twice. "We've lost power in the Phoenix office twice in the last month because of seasonal monsoons," says Potter. "The first time it happened, the building lost power for three or four days, and in the past, it would've been a huge problem if architects couldn't access the local file server. But because the files were available through StorSimple on Azure, our architects were able to work from home on their laptops. Then all we had to do was restore the files from Azure to their server when the power came back up."

Now, the HKS IT team enjoys peace of mind as hundreds of HKS architects continue working without interruption. The firm is also avoiding future investment in expensive storage products. "We're optimistic that in the future we won't have to purchase more SAN disks, which we estimate could save us up to $100,000 annually."

Building modern IT

HKS is meeting current and future industry challenges with modern IT architecture that can handle whatever the company builds next. "Cloud adoption has been one of our top strategic initiatives for the last several years, and moving storage to the cloud was a natural transition," says Potter. "Why wouldn't we put our time and energy into everything that StorSimple and Azure can provide—including storage, redundancy, and management and datacenter capabilities—when Microsoft can do it cheaper, faster, and better?"

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Software

- Microsoft Azure
- Microsoft Azure StorSimple
- PeerSync Backup Edition for Servers

Microsoft