

# Data centers change with the times, becoming greener and leaner

by Lori McGinnis Black

Today's data centers are different from the way they were a few years back. They are smaller and greener.

Data center equipment is becoming consolidated as interest in becoming greener increases, said Kim Whittaker, vice president of sales and service at First National Technology Solutions. Today's data centers want more open spaces.



Whittaker

"Data center design is shifting to 'greener' more efficient energy use from different non-traditional power sources," she said.

Nebraska Colocation Centers works with customers of all types and sizes to lessen the risk of network outages related to power, equipment failure or security breach, said Roger Willey, vice president of sales and marketing.

One of the biggest trends Willey sees in data centers today is that larger companies are getting away from building large, expansive raw land data centers.

"Most other companies have found that it is more cost effective and beneficial to network performance and to have multiple sites scattered throughout the country that are located in carrier dense data center facilities," Willey said.

Several changes have taken place within data centers, including high power



Roger Willey, vice president of sales and marketing for Nebraska Colocation Centers.

density environments, modular designs and container data center systems, said Kenneth Moreano, president of Scott Data Center.

Virtualization has completely changed what enterprise infrastructure looks like, said Jason Black, vice president of data center services at Cosentry.

Flash technology has limited the space and power requirements on data centers. Systems have become more consolidated as technology has evolved over the last five years. It is easier to get more systems in a smaller footprint, Whittaker said.

Companies are no longer investing in large data center footprints as the cloud becomes widely adopted.

"Data centers are turning to closets,

and companies are choosing not to manage the data center anymore by using a co-location provider, or managed services provider," she said.

Being in the middle of the country, Nebraska has become a hot location for data centers, Willey said. Most data center companies see the value in having multiple sites around the country, and Nebraska's location has advantages, he said.

The business justification for a data center is determined by the overall risk and reliance on information technology and not necessarily on the number of employees or business size, Willey said. A small business can be just as affected if it has a network outage or security breach that exposes customer data.

Organizations of all sizes choose data centers as an alternative to using internal resources for their data center needs,

Moreano said, since allocating internal resources typically deviates from the organization's core activity.

One key trend is a better understanding of the value of tier ratings. The industry's



Moreano



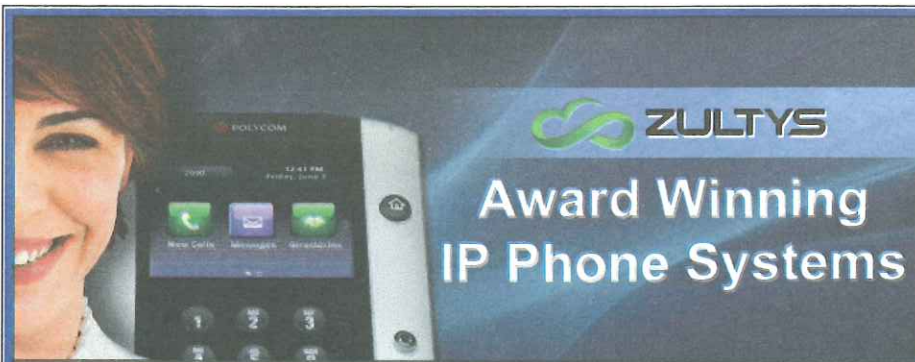
Black

Uptime Institute is a global organization that rates the tiers of data centers.

"Historically the end customer has not been as knowledgeable of data center reliability, but over the past few years, the Uptime certified facilities have been recognized as validated, third-party certified facilities," Moreano said.

It wasn't long ago that server virtualization was 10 percent or 20 percent because each server could only host one application, Black said. Now multiple virtual machines run multiple applications, meaning server utilization approaches 90 percent.

Another growing trend is compliance, he said. More data center providers are required to help businesses and organizations comply with various regulations. TierPoint, which recently announced it was acquiring Cosentry, proactively conducts internal compliance audits and control procedures in each of its data centers, Black said.



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Bob Huerter, regional sales manager at Continuum Security Solutions.

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