



Wisconsin Technology Network

ADVERTISEMENT

MICHAEL BEST
& FRIEDRICH LLP
michaelbest.com

WORKING WITH THE BEST

IN HIGH GROWTH COMPANIES

The region's leading source for news, commentary and analysis for technology and life science.

Go

[Home](#) | [Events](#) | [News Archives](#) | [About Us](#) | [Contact Us](#) | [Employment](#) | [Syndicate](#) | [Advertise](#) | [Subscribe](#)

News by Topic

- [Biotech](#)
- [Careers](#)
- [Commentary](#)
- [Education](#)
- [Entrepreneurs](#)
- [Health Technology](#)
- [Internet](#)
- [IT](#)
- [Manufacturing](#)
- [Venture Capital](#)
- [Visions](#)

Featured Events

Doing Business in China
May 21, 2007

[More events](#)

[Submit an event](#)

Columnists

Guest Column
[Supreme Court limits foreign reach of U.S. patents](#)

MedTech Futures
[Barriers will not stop convergence of medical technologies](#)

Aligning IT
[Are you doomed to repeat the great software mistake?](#)

Next Generation Workplace
[Media-savvy workers: New front in the War for Talent](#)

Carlini's Comments
[New Urbanism: Community planning Feng Shui](#)

News by Date

2007
[Jan](#) [Feb](#) [Mar](#) [Apr](#) [May](#)

2006
[Jan](#) [Feb](#) [Mar](#) [Apr](#) [May](#) [Jun](#)
[Jul](#) [Aug](#) [Sep](#) [Oct](#) [Nov](#) [Dec](#)

2005
[Jan](#) [Feb](#) [Mar](#) [Apr](#) [May](#) [Jun](#)
[Jul](#) [Aug](#) [Sep](#) [Oct](#) [Nov](#) [Dec](#)

2004
[Jan](#) [Feb](#) [Mar](#) [Apr](#) [May](#) [Jun](#)
[Jul](#) [Aug](#) [Sep](#) [Oct](#) [Nov](#) [Dec](#)

2003
[Jan](#) [Feb](#) [Mar](#) [Apr](#) [May](#) [Jun](#)
[Jul](#) [Aug](#) [Sep](#) [Oct](#) [Nov](#) [Dec](#)

2002
[Dec](#)

Lack of connectivity is real estate's hidden time bomb

James Carlini • Published 03/28/07

[Print this article](#) • [E-mail this article](#) • [Add your opinion](#) • [Order reprints](#)



When it comes to real estate acquisitions, many smart investors have turned to taking their money from the stock market and have invested it into REITs (Real Estate Investment Trusts). Some of these groups have provided 20 to 50 percent returns to their investors. These are great returns on investment, but are there any hidden time bombs lurking behind the marble facades and talking elevators?

What many of these acquisition groups fail to look at are the technology issues associated with buildings. The due diligence and appraisal process are on the traditional side of real estate:

- Location, location, location.
- Occupancy rates.
- Financial models.
- Other generally accepted rules-of-thumb that have not really changed in the last 20 years.

Attending last week's [Building Automation Conference](#) in Baltimore was not an eye-opener, it was a reaffirmation of technology infrastructure concepts learned throughout the last 20 years. These concepts were learned while working on the basic concepts of intelligent buildings as well as mission critical projects and large-scale lawsuits.

With real estate being touted to investors as the fourth asset class after equities, bonds, and cash, there needs to be some real due diligence performed on power and connectivity issues when evaluating real estate properties. If we put up a different yardstick that measures the capabilities of both power and connectivity, would we still have the same results of appraisals on buildings?

Antiquated power grids

There were some interesting points about power that should be mentioned. Almost all buildings are fed from a single power grid, which creates a single-point-of-failure issue. In terms of business disruption and continuity, the power grid is more of an issue than terrorism.

ADVERTISEMENTS



FREE newsletter

Get the scoop on midwest tech.

Digital Healthcare Conference 2007

About DHC

Speakers and advisory board

Agenda and Presentations

WTN MEDIA

FUSiON2007

CEO-CIO Symposium

How Fusion connects leaders

Read CIO Leadership Series interviews

2007 symposium presentations

Top Stories

Stem cell and regenerative medicine center to aid education and commerce

Business plan finalists capture technology

DHC 2007: Controlling health IT costs the key to capturing value

Cardinal Health likes growth potential of Viasys NeuroCare Group

Supreme Court limits foreign reach of U.S. patents

Barriers will not stop convergence of medical technologies

Three finalists named for UW-Madison CIO

**Commercial Property
Mgmt**

Effectively Manage
Every Aspect Of Your
Real Estate Business.
Read How
www.sagetimberlineoffice.com

Ads by Google

One of the presenters, Dr. Shalom Frank of Pareto [Energy, Ltd.](#), said the power grid in the United States is antiquated and that 94 percent of the power failures can be attributed to distribution. In one case in California, he said that a raccoon and a possum were the cause of power being cut to oil refineries that in turn disrupted refinery production that caused gasoline prices to jump seven cents a gallon.

The new approach for buildings as well as business campuses should be one which incorporates two or three power sources instead of one grid. This might cost more upfront but would create a much more valuable property as well as differentiate it from properties that have used the traditional approach, which is obsolete.

Pareto cited several issues that necessitate the need to innovate the power grid:

- No improvement delivered efficiency in 40 years.
- Little use of digital technology.
- Grid has no early warning system for disruption and cannot "self-heal."
- Unacceptable environment and global climate impact.
- American high-tech companies have lost faith in grid power for digital-age commerce.

He went on to cite a 2006 study by the [SteelEye Technology Business Continuity Index](#) that said almost half of the American IT companies say power outages are likely to have a maximum impact on their businesses. By comparison, only one percent cited terrorism as a concern for IT downtime.

So a common local outage or power disruption is 50 times more critical to plan for, than that lone EMP bomb that some are trying to ensure they are insulated from.

Power, as well as connectivity, has become more of an upfront issue for master-planning instead of an afterthought once the tenant has moved in. Any new construction should have serious upfront consideration of power requirements and connectivity. These attributes should be addressed as part of the pre-built infrastructure.

As for commercial and industrial real estate that is already built, the need to review and assess these attributes is essential in appraisal processes because if they are overlooked, they can become huge detriments for the property owner and manager. New rules-of-thumb have to be created as well as adopted by all real estate professionals: property managers, leasing agents, site selection teams and everyone else.

What is the value of having feeds from two different power grids as a

Are you doomed to repeat the great software mistake?

State to offer \$850K in high-tech training grants

DHC 2007: Barriers to electronic data exchange include the law

building amenity versus the liability of having a single power grid creating a single point-of-failure within a property? How do you adjust the leasing when amenities like this are lacking? How do you adjust the total value of the property?

Building cable and icebergs

Just like an iceberg, building cabling problems are 95 percent underneath the surface. You may see something wrong, but as they say, "it's only the tip of the iceberg." Just like with the power utility, the horse-and-buggy approach to network connectivity was one connection to the phone company's one central office. Most developments still use this out-of-date rule, but it should be discarded.

In mission critical applications like the Chicago 911 Center or the [Chicago Mercantile Exchange](#), connectivity to more than one central office is a given. But with all organizations so dependent on connectivity today, the new rule-of-thumb should be connectivity to at least two central offices, as well as multiple long-distance carriers.

It's not overkill today as much as it is being compliant with mission critical objectives and business continuity. Again, have appraisals for buildings and campuses even reviewed this as a value attribute that determines the worth of the property?

At the conference, the focus of my presentation was that economic development equals broadband connectivity, and broadband connectivity equals jobs. With that being said, the design requirements of both connectivity as well as power must be pushed into the upfront planning process instead of being reviewed later when tenants are moving in.

Connectivity for stand-alone buildings as well as intelligent industrial parks and business campuses is skyrocketing to gigabit per second speeds. Organizations are looking for more and more speed as their business must compete globally and 10Gbps speeds are now starting to be upgraded to 40Gbps as a connectivity standard.

Real estate owners beware

If your property has DSL or T1 as the basic speed for connectivity, you probably are still driving a stagecoach. And if you aren't now, that's about all you'll be able to afford to drive as tenants move to buildings offering higher speeds. Maybe you will decide to switch to a public storage facility as the market will pass you by.

There were studies made 20 years ago that buildings that did not keep up would become technologically obsolete. Some real estate people have not heeded that warning and are now scrambling for intelligent amenities that they do not have.

CARLINI-ISM: "Location, location, location" has given way to "location, location, connectivity."

Copyright 2007 - James Carlini

Recent articles by James Carlini

- [James Carlini: State video franchises vs. universal service: Grasping the total picture](#)
- [James Carlini: Getting beyond the vortex of corporate mediocrity](#)
- [Call centers and customer service: The good, the bad, and the clueless](#)
- [James Carlini: Data centers: Buyers beware of over-hyped facilities](#)
- [James Carlini: Energy conservation might take us farther than renewable fuels](#)

James Carlini is an adjunct professor at Northwestern University, and is president of Carlini & Associates. He can be reached at james.carlini@sbcglobal.net or 773-370-1888. Check out his blog at <http://www.carliniscomments.com>.

This article previously appeared in [MidwestBusiness.com](#), and was reprinted with its permission.

The opinions expressed herein or statements made in the above column are solely those of the author, and do not necessarily reflect the views of Wisconsin Technology Network, LLC.

WTN accepts no legal liability or responsibility for any claims made or opinions expressed herein.

Add your comment:

Wisconsin Technology Network is an independent news source and **does not represent** other companies or organizations discussed in our articles.

Comments are screened to prevent spam, advertisements, and profane messages. Commenters' views are their own, and do not represent the views of WTN Media or other authors or contributors.

Name (Required)

E-Mail (Optional)

[Home](#) | [Events](#) | [About Us](#) | [Contact Us](#) | [Archives](#)
[Syndicate](#) | [Subscribe](#) | [Employment](#) | [Terms & Conditions](#) | [Privacy Policy](#)

© 2002-2007 Wisconsin Technology Network LLC. All Rights Reserved

Web hosting and services provided by [SupraNet](#)