

# Balancing Data Center Costs and Risks with the World Series

What do you do when you've scheduled an event for 60+ at a South of Market art gallery for a thought leadership discussion that ends up conflicting with Game 2 of the World Series? Easy: you serve cocktails and delicious appetizers, host the panel discussion, take Q&A, and then broadcast the game on the big screen while serving more cocktails and appetizers!

The second event in Digital Realty's popular Executive Roundtable Series, held on October 22, featured Dean Nelson, Vice President of Global Foundation Services at eBay, and [Jonathan Koomey, Ph.D.](#), a Research Fellow at the [Steyer-Taylor Center for Energy Policy and Finance](#) at Stanford University, in a lively discussion of the many tradeoffs involved in balancing data center costs and risks.

The discussion focused on an analysis that eBay commissioned that looked at the reliability of different ways to build data centers, which the University of Illinois published as a [case study](#).

Using fault tree analysis, Dean compared the performance of three of eBay's newest data centers.

1. The first was a Tier IV facility that ranked high in both cost and reliability.
2. The second was a Tier II facility that was significantly less expensive, and carried a higher risk of failure.
3. The third facility featured the innovative use of fuel cell technology and other techniques, which together reduced the company's cost per megawatt by 50 percent, quadrupled the infrastructure capacity, and reduced the carbon footprint of the data center – all without sacrificing reliability.

A tier standard does not yet exist for the type of infrastructure implemented at the third facility, but it delivers higher reliability at lower cost.

Admittedly, these results sound too good to be true, but Dean went through, step by step and convincingly, how these figures and reliability levels were objectively and carefully measured, reported, and tracked over the 14 months of operation of this innovative data center.

# Data Center Executive Roundtable Series

DEAN NELSON  
VP, Global Foundation Services, eBay

JONATHAN KOOMEY, Ph.D.  
Research Fellow, Stanford University



*(left to right: Dean Nelson and Jonathan Koomey)*

Another gem from the event was when Jonathan Koomey observed, “Data centers are not a cost center. They are a cost-reducing profit center.” Jonathan is building on this insight in an innovative online, self-paced five-week course entitled “[Data Center Essentials for Executives](#),” which begins November 10, 2014. The course will be given again in Spring 2015.

The event reinforced our own conviction that when your data center is highly efficient and delivers the results you need, it becomes the engine of your business.

I encourage you to attend Digital Realty’s next Executive Roundtable Series. The series will continue in locations across the U.S. The next event will most likely be held in Texas, in February 2015. If you’d like to be added to the list to receive an invitation for the next event in the series, send an email to [sdebacker@digitalrealty.com](mailto:sdebacker@digitalrealty.com).

