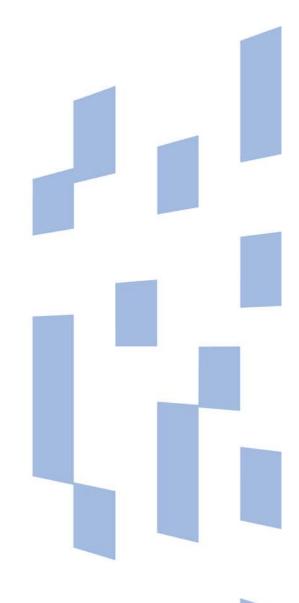


# What is Driving the US Market? 2011

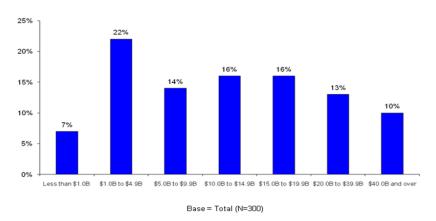


560 MISSION STREET, SUITE 2500 SAN FRANCISCO, CA 94105 TEL 415-738-6500 FAX 415-738-6501 WWW.DIGITALREALTYTRUST.COM 2323 BRYAN STREET, SUITE 1800
DALLAS, TX 75201
877 DRT DATA (378-3282)
TEL 214-231-1356
FAX 241-231-1345
WWW.DIGITALREALTYTRUST.COM



Survey participants
were dispersed
across an annual
revenue range from
\$1B to over \$40B

The United States' data center market continues to grow at a steady pace. In order to understand what trends and driving factors are impacting the market, Digital Realty Trust conducts an annual survey of senior executives from enterprise sized companies (\$1B or more in revenues and/or 5,000 total employees) to capture their perspectives on the industry. In the recently completed 2011 survey, 300 of these corporate leaders we surveyed on a variety of issues ranging from the use of PUE to their expansion plans for the coming months. This paper provides an overivew of the study's major findings.



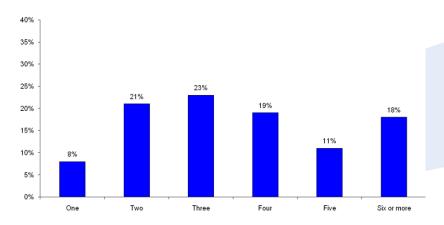
# **Characterizing the Current Market**

Today's corporate computing requirements have made the data center an integral part of corporate operations

#### Average Data Center Size

Excluding small data center closets, the average enterprise company has four data centers in operation. The number of these facilities provides evidence of the increasing corporate computing requirements in today's business environment.

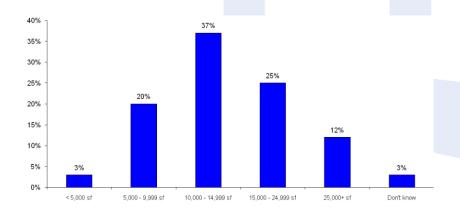




The average enterprise level data center is 15,400 square feet

# Average Data Center Size

The space devoted to data center operations for enterprise level firms is substantial. With an average size of over 15,000 square feet, the average enterprise has a combined data center operating capacity in excess of 60,000 square feet.



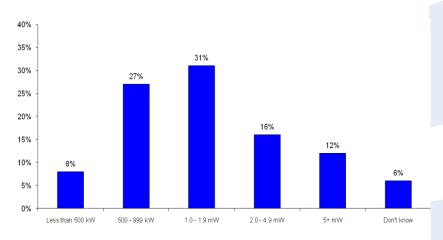
The average IT Load for an enterprise facility is 2.2MW

#### **Data Center Power**

Mega data centers of 5MW or more are the exception and not the rule in terms of the average facility. The studys reported an average of 2.2MW is the same as the reported requirement in Digital Realty Trust's 2009 survey.



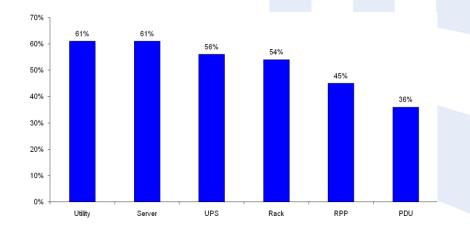
#### **Data Center Power**



Although 76% of respondents meter power use in their data center, no logical pairing of measuring points is evidenced by the data

## **Power Metering**

The percentage of companies that are metering their power remained steady in 2010 at 76%. Although 61% stated that they measure power at the server, a higher level of UPS level monitoring than the reported 56% would seem to have been expected as it is the constant output source in all data centers and can easily be compared with utility input to determine a site's PUE.

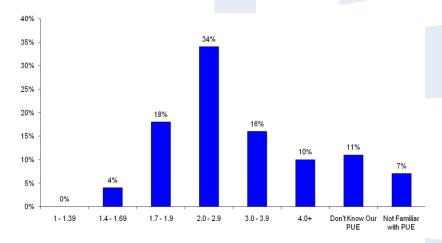




Only 11% of respondents did not know their data center PUE

#### PUE

Perhaps no metric has been as quickly adopted as PUE. Although adoption shouldn't necessarily be confused with understanding since many issues, such as frequency of measurement, still surround the de facto efficiency standard, only 11% of respondents did not know their data center PUE. At a time when announced PUE ratings of 1.2 or below are increasingly reported, the studies average of 2.8 would seem to indicate a prediposition toward conservatism when it comes to performing the efficiency calculation.



# **Growth and its Driving Factors**

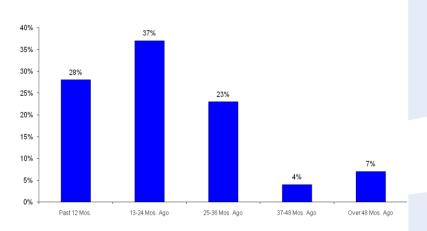
#### Recent Expansion

The continuing need for enterprise sized firms to expand their data center operations to accommodate their burgeoning computing requirements is evidenced in many ways, not the least of which being the timeframes for their most recent data center expansions. Almost 2/3s of respondents have added data center capacity in the past 12-24 months.

The constant need to support new computing capacity has driven corporate expansion of data center capacity over the past 24 months



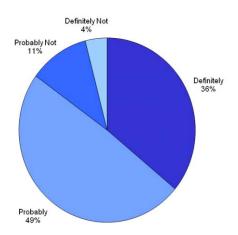
## Timing of Most Recent Expansion



85% of enterprise level organizations will definitely/probably add data center capacity in 2011

#### Plans for Expansion-2011

The need for data center space continues to grow unabatedly. 85% of reporting companies indicated that they definitely/probably would expand their data center capacity in 2011. Almost 40% of these companies said that their computing needs definitely would necessitate the addition of space during the calendar year.

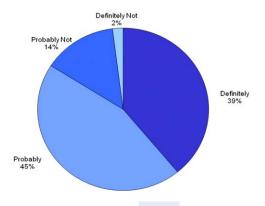




Demand for capacity in 2012 parallels 2011

#### Expansion in 2012

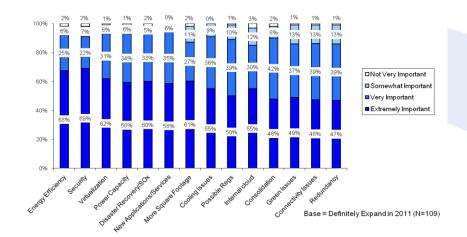
The need to expand data center capicity will continue into 2012 with 84% of firms definitely/probably expanding their operations in 2012. Based on the previously reported information on the timing of companies' most recent expansion (65%), the projections for expansion in both 2011 and 2012 reflect a consistent trend.



Power related concerns are increasingly driving corporate data center requirements

## Reasons for Expansion

The influx of new applications is forcing today's corporate data center planners to place more emphasis on power related issues than ever before. This trend is evidenced by the inclusion of energy efficiency (1) and power capability (4) within the top four reasons cited by respondents for their need to expand.

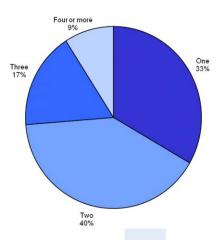




Two-Thirds of expanding enterprise-sized firms will add two or more locations

## Number of Locations for Expansion

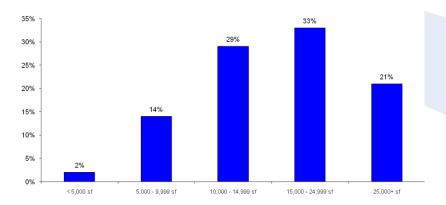
Expansion of data center space is not a function of adding a single new facility. Two-thirds of respondents indicated that their new data center space requirements will necessitate more than two new facilities.



54% of respondents require new data centers in excess of 15,000 square feet

#### **Expansion Space Requirements**

The addition of new data centers is obviously not a small endeavor for many of today's companies as illustrated by the number of organizations requiring multiple new facilities. The average size of these new locations is projected at 18,000 square feet indicating that the majority of companies adding data center space will add between 36,000 and 72,000 square feet.

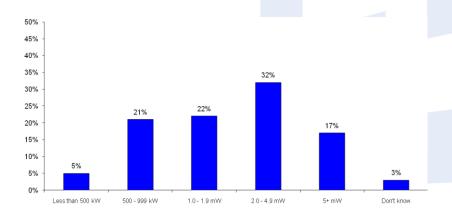




Power requirements for expanded facilities will be marginally higher than existing locations (2.8MW v 2.2MW)

#### IT Load of Expansion

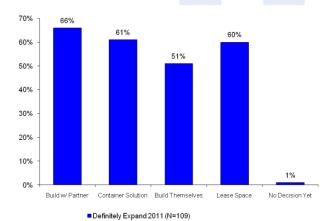
49% of these new projected facilities will have power requirements greater than 2.0MW. The average load for these sites will be slightly larger than existing facilities (2.8MW versus 2.2MW).



The number of companies planning to build their own data centers continues to decline. 7% lower than 2009

#### Using a Parner

The Do it Yourself (DIY) mode of data center construction continues to decline. Slightly more than half (51%) of respondents indicated that they planned on using this approach to expand their operations. This figure is down 7% from the study conducted last year by Digital Realty Trust.

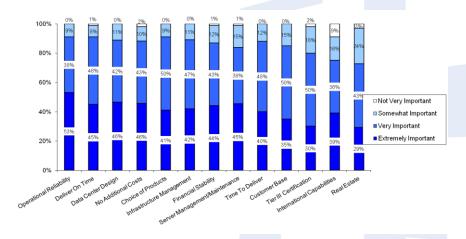




Enterprise companies are looking for providers to deliver reliable facilities on time and on budget

#### Partner Qualifications

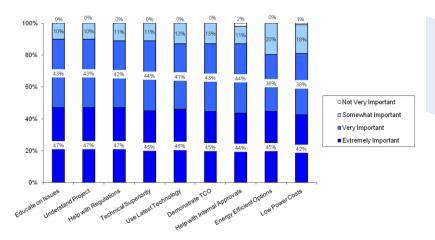
As more firms look to partners to design and build their facilities, or to provide them with leased space, they are becoming more demanding of their ability to execute. Operational reliability continues to be the most important qualification but the entry of delivery on time and no additional costs illustrate that firms are seeking to hold their providers more accountable than ever before.



Businesses are looking to their data center partners to supplement their data center planning and operations considerations through their knowledge of industry and governmental issues

#### Partner Considerations

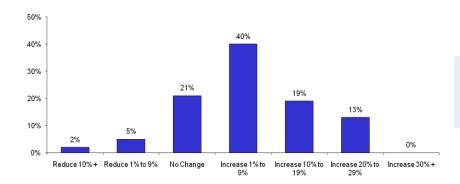
The issues surrounding the construction and operation of a data center are becoming increasingly complex. Since the construction and operation of these facilities are not their central mission, respondents are relying more heavily on their data center partners for the expertise and knowledge of related issues ranging from local issues like zoning and permitting to larger economically impactful considerations such as the cost of impending regulation.



Data center spending continues to grow with a projected average budget increase in 2011 of 7.7%

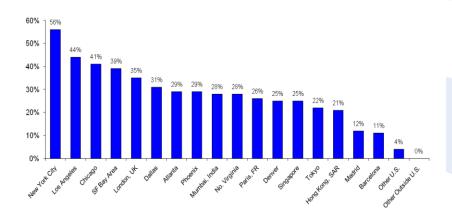
#### Changes in Data Center Budgets

Unlike many corporate initiatives, data center spending has successfully weathered the economic problems of the past few years. In 2011, average data center budgets are expected to increase by 7.7%.



#### Locations

The New York metro area continues to be the most desired area of for expansion in 2011.

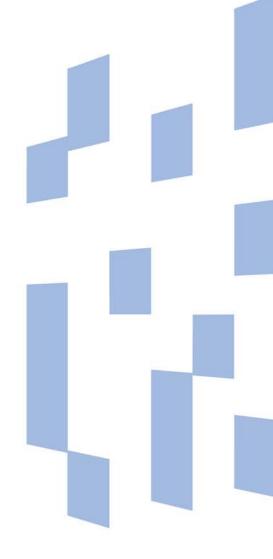




# **Summary**

The enterprise data center market continues to grow. The need to accommodate new and larger computing applications necessitate that these firms add multiple facilities with larger spacial and power requirements. Demand forecasts for the next 12 to 24 months do not portend the likelihood of any decline in the capacity requirements for organizations in this marketplace for the foreseeable future.





# About Digital Realty Trust, Inc.

Digital Realty Trust, Inc. enables customers to deliver critical business applications by providing secure, reliable and cost effective datacenter facilities. Digital Realty Trust's customers include domestic and international companies across multiple industry verticals ranging from information technology and Internet enterprises, to manufacturing and financial services. Digital Realty Trust's 96 properties, excluding two properties held as investments in unconsolidated joint ventures, comprise approximately 16.8 million square feet as of March 1, 2011, including 2.2 million square feet of space held for redevelopment. Digital Realty Trust's portfolio is located in 28 markets throughout Europe, North America and Singapore.