

Important Questions From Gartner's EMEA Data Center Conference 2006: Data Center Trends

Rakesh Kumar

During the data center conference session, "The Data Center in Europe in 2015," many important questions were asked by the audience. This note codifies the answers and makes them available to all clients.

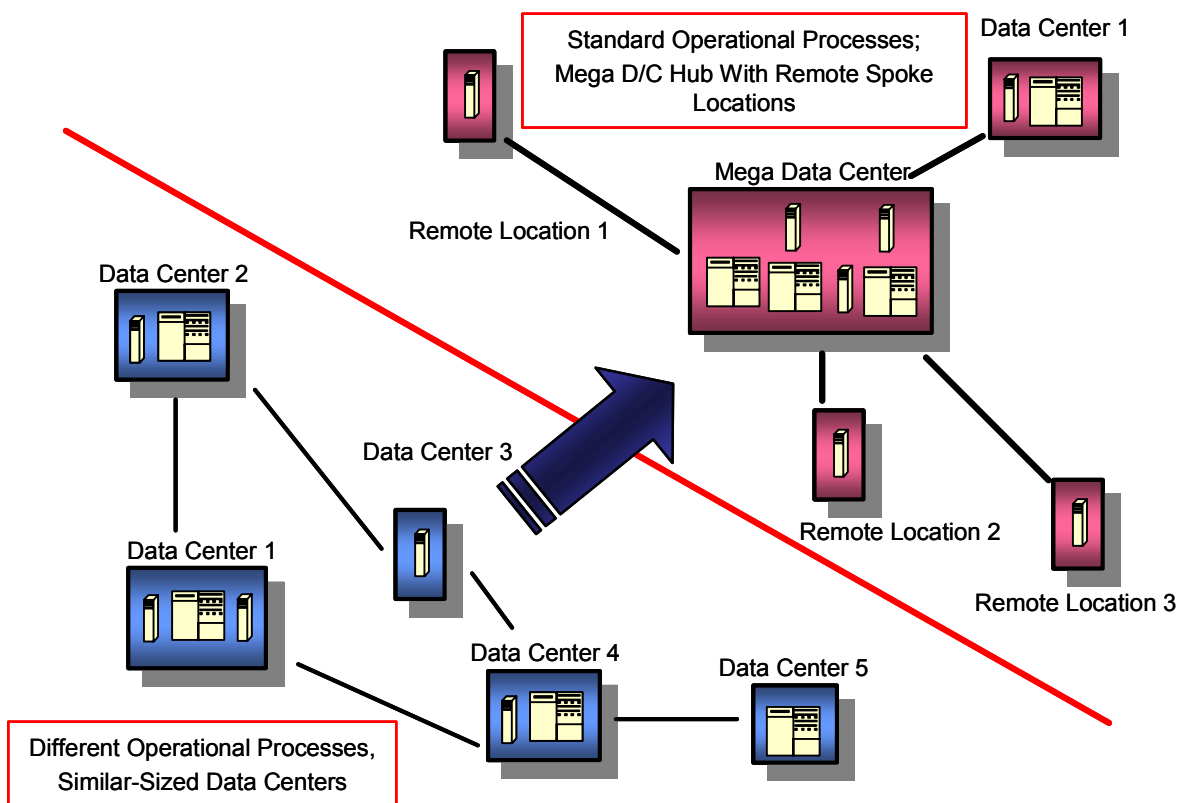
Is it always necessary to move into a consolidated hub-and-spoke data center topology or can I run with multiple data centers of equal size?

Organizations consolidate the number of physical data centers they have for many reasons: cost savings, improvements in service delivery processes, streamlining IT services, improving business continuity and aligning IT service delivery to business growth. In all cases, site consolidation is an expensive exercise involving changes to physical sites, people's working conditions, core infrastructure and software contracts. Therefore, a balanced assessment of the perceived post-consolidation benefits needs to be taken against the complete cost of change.

For many large multinational organizations, a single large (mega) data center for each major geography (Europe, North America or the Asia/Pacific region), with some form of local disaster recovery site, is the most optimum option that balances cost and service delivery. In this case, a large hub and smaller spoke data center model will evolve as the natural topology for the major geographies. However, for many organizations, the cost of moving into such a model may prove to be too expensive. In these cases, organizations should view the hub-and-spoke architecture as a possible "idea scenario" but be more concerned with the smaller, inefficient sites.

Take a steady approach to site consolidation, where the least-efficient data centers are closed down and the services moved into the remaining sites one by one. In this case, the end result may be a number of similar-sized data centers. The emphasis here (just like in the hub-and-spoke model) is to streamline the operational processes (see Figure 1).

Figure 1. Evolving Hub-and-Spoke Architecture



Source: Gartner (December 2006)

How can I overcome organizational politics when consolidating data centers in Europe?

Large organizations in Europe suffer from two effects of organizational politics: individual priorities becoming more important to people than what is best for the company, and the natural language and cultural differences that exist with having multiple countries in a single geographic region. Taken together, this creates a significant level of organizational discontinuity that affects large-scale data center consolidation projects. Many organizations report that although the analysis shows that shutting down data centers in one geography makes financial sense, they have failed to achieve their goals because of a lack of cooperation from the groups involved. The key points to overcome this problem include:

- Ensuring that the business case for cross-border consolidation takes full account of the costs of overcoming organizational politics and the potential loss of goodwill for the business overall. If the price is too high, then it may be wise to focus attention on other aspects of the IT supply chain.
- Allocating extra resources for relationship management, communications and legal costs where organizational politics may slow or hamper the consolidation exercise.
- Winning the support of key groups of individuals and communicating the benefits of the consolidation exercise. This may slow down the timetable but prove to be essential in achieving your objectives.

- Having the support of pan-senior European executives, which is essential because it sends out the message that the organization is serious about the consolidation program

The U.S. branch of my company has consolidated its data centers and it expects me to do the same in Europe. How do I explain the differences between European countries?

Europe is a large continent with more than 20 different languages. Although there has always been trade and commerce between the various countries, they all have a rich history of independent development. The single currency introduced on 1 January 2002 to 12 of the 15 countries of the European Union has made trading easier, and it's generally accepted that English is the language of business. However, national languages and cultures remain strong, and many organizations accept the need for local country and language support. The U.S., in contrast, is monolingual. Moreover, the application of U.S. employment laws are consistent across most U.S. states (although differences exist), whereas in Europe, all the countries have different legal systems, resulting in huge differences in the employment laws.

European IT organizations need to spend time explaining these sorts of issues to their U.S. colleagues. Ideally, it would be beneficial for members of the U.S. IT team to spend time in Europe to experience these issues. Another option is to get the U.S. IT team members to talk to other organizations that have experienced difficulties in consolidation projects in Europe. There is no simple answer except to communicate the issues as clearly and effectively as possible

Why is process optimization more important than technology selection in data center consolidation projects?

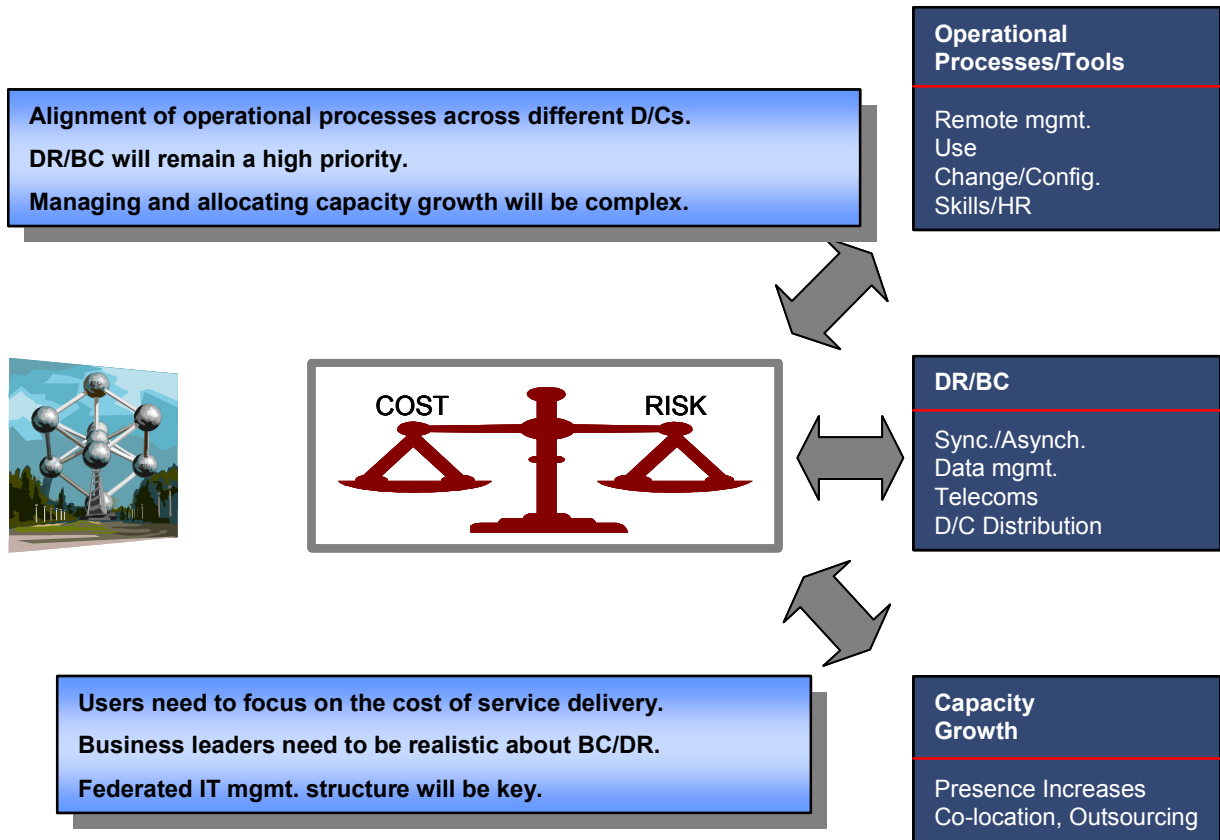
In general terms, consolidation projects are devised to optimize costs and improve service levels. The need to focus on process optimization falls into three areas:

- The hardware cost component of most data centers is less than 15% (for servers, storage and so forth) and is falling — although the volume of new equipment being installed is increasing. This is because of rapid price/performance improvements in hardware. Therefore, any savings in this infrastructure area will be difficult to sustain. Operational processes and tools (including software and people) account for between 20% and 40% of overall data center costs and are rising; therefore, savings in this area will be greater and more critical over time.
- Streamlining core operational processes, such as change, configuration and problem management, makes facilities and infrastructure changes easier. For example, consider an organization is looking to move from 10 data centers to two. If each one runs different processes and tools and has different sets of service delivery metrics, then although moving the hardware is relatively simple, making the technology run efficiently is more complex. Problems will occur in configuration, end-user expectation disaster recovery plans, and core service objectives and metrics.
- New hardware technology going in through a consolidation exercise will only be of true value with a corresponding improvement in operational processes. For example, the use of virtualization on x86 hardware may improve asset use, but requires modifications in processes such as configuration, test and development, and application optimization management to make a significant difference.

Given these three points, organizations should carry out an operational process audit of their key data centers to outline where best practices and significant differences exist (see Figure 2). This

should then be used as a guide for the level of complexity involved in managing site consolidation projects.

Figure 2. Effects of Process Alignment in Consolidation Projects



Source: Gartner (December 2006)

RECOMMENDED READING

"Data Center Consolidation in Western Europe Faces Limitations"

REGIONAL HEADQUARTERS

Corporate Headquarters

56 Top Gallant Road
Stamford, CT 06902-7700
U.S.A.
+1 203 964 0096

European Headquarters

Tamesis
The Glanty
Egham
Surrey, TW20 9AW
UNITED KINGDOM
+44 1784 431611

Asia/Pacific Headquarters

Gartner Australasia Pty. Ltd.
Level 9, 141 Walker Street
North Sydney
New South Wales 2060
AUSTRALIA
+61 2 9459 4600

Japan Headquarters

Gartner Japan Ltd.
Aobadai Hills, 6F
7-7, Aobadai, 4-chome
Meguro-ku, Tokyo 153-0042
JAPAN
+81 3 3481 3670

Latin America Headquarters

Gartner do Brazil
Av. das Nações Unidas, 12551
9º andar—World Trade Center
04578-903—São Paulo SP
BRAZIL
+55 11 3443 1509