



*For the Complete Technology & Database Professional*

# TOWARD A SMARTER INFORMATION FOUNDATION:

## 2010 IOUG Enterprise Platform Decisions Survey

---

By Joseph McKendrick, Analyst  
Produced by Unisphere Research, a division of Information Today, Inc.  
January 2010

Sponsored by **vmware**<sup>®</sup>

Produced by **UNISPHERE**<sup>®</sup>  
RESEARCH

## EXECUTIVE SUMMARY

*Growing volumes of data ... expanding numbers of database instances ... increasing licensing fees ... shortages of critical data management skills ... tight IT budgets ...*

As organizations rely more and more on the quality and availability of data to better compete on analytics in the global economy, they are encountering difficult challenges in managing and maintaining their information infrastructure. That is, they are faced with a fast-growing infrastructure, while running out of resources to better manage and leverage its components.

What steps are companies taking to grow their data environments while still reining in costs and complexity? A new survey of members of the Independent Oracle Users Group (IOUG), the leading association of Oracle technology professionals, confirms that not only are data volumes and database instances on the rise, but these environments are siloed across multiple vendors, running on multiple platforms. The survey also finds interest in virtualization strategies to better manage these diverse environments. Most already have server virtualization in place, and half are looking at database virtualization to increase the value of their data environments. Since data resources from many parts of the organization need to be engaged, the main challenge to these efforts are organizational and political, versus technical. The survey finds that organizations with advanced virtualization efforts underway report that they are able to more effectively grow their data capabilities while reigning in staff time and costs.

In November of 2009, Unisphere Research conducted the study for the IOUG, in partnership with VMware to explore issues and solutions for this challenge. The survey was announced via an email notification to the IOUG membership list, which directed participants to a web-based survey instrument. A total of 381 responses were collected by the survey deadline.

Survey respondents oversee complex and multiple database sites, many with large volumes of data. Forty-three percent of those surveyed manage greater than 100 databases, and 22 percent manage in excess of 500 databases.

Of the 381 survey respondents, 50 percent indicate they are database administrators, nine percent identify themselves as directors or managers, eight percent as programmers and developers. The remaining 23 percent say they hold a variety of titles, including that of consultant, architect, and project manager.

Respondents come from a fairly even split among company sizes. Twenty-nine percent come from large organizations with more than 10,000 employees, and about two-fifths, 39 percent, represent employers with 1,000 to 10,000 employees. In addition, 29 percent are with smaller to medium-size firms with 1,000 or fewer people. By industry, 15 percent come from the utility and

transportation sector, and 14 percent represent IT services organizations. Another 12 percent are with educational organizations. (For more information on the demographics of this survey, see Figures 34 through 36 at the end of this report.)

Tight budgets and skills constraints are putting the squeeze on IT and data environments. Three out of four respondents say tight budgets are their greatest issue their IT operation currently faces. Even when the economy improves and budgets do get more flush, there will still be challenges facing IT and data managers. Even at a time when hiring is slow, more than four out of 10 say they can't find the right skills to address their current requirements. (See Figure 1.)

### Additional key findings include the following:

- More than eight out of 10 respondents report that the number of database instances within or across their companies have increased over the past year. A majority of respondents have mixed database environments, and there is a limited amount of sharing of data that takes place between these environments. But, in most cases, this is not deep integration.
- Respondents run a wide mix of processor platforms to support their database operations. UNIX is still a strong choice of architecture, but many also are moving to “commodity” platforms. Half of Oracle shops in the survey either run Oracle database instances on x86 architecture, or plan to do so shortly.
- About half of respondents with virtualization underway apply the approach to their data environments. While cost reduction is the primary driver to virtualization, efforts to move to virtualization are most likely to be hampered by up-front budget constraints and organizational issues.
- While virtualization is still relatively new in database production environments, a majority of respondents report that such virtualization is on the rise. Those that are embracing high levels of virtualization are more likely to be expanding their production database environments.
- Virtualization is more prevalent in data development environments than production settings. One out of two respondents was able to increase development database deployments with virtualization.
- Virtualization is also being extended to development environments. One out of two respondents was able to increase development database deployments with virtualization.

Respondents were asked to provide their additional comments about virtualization, and many pointed to the advantages and challenges to the approach. As one respondent observes, “Virtualization has become a significant asset for IT, reducing

---

**Toward a Smarter Information Foundation: 2010 IOUG Enterprise Platform Decisions Study** was produced by Unisphere Research and sponsored by VMware. Unisphere Research is the market research unit of Unisphere Media, a Division of Information Today, Inc., publishers of Database Trends and Applications magazine and the 5 Minute Briefing newsletters. To review abstracts of our past reports, visit [www.dbta.com/research](http://www.dbta.com/research). Unisphere Media, 229 Main Street, Chatham, NJ 07928. Tel: 973-665-1120, Fax: 973-665-1124, Email: [Tom@dbta.com](mailto:Tom@dbta.com), Web: [www.dbta.com](http://www.dbta.com).

Join the IOUG—If you're not already an IOUG member and would like to continue receiving key information like this, visit the IOUG at [w3.ioug.org/join/today](http://w3.ioug.org/join/today) for information on how to join this dynamic user community for Oracle applications and database professionals.

Data collection and analysis performed with SurveyMethods.

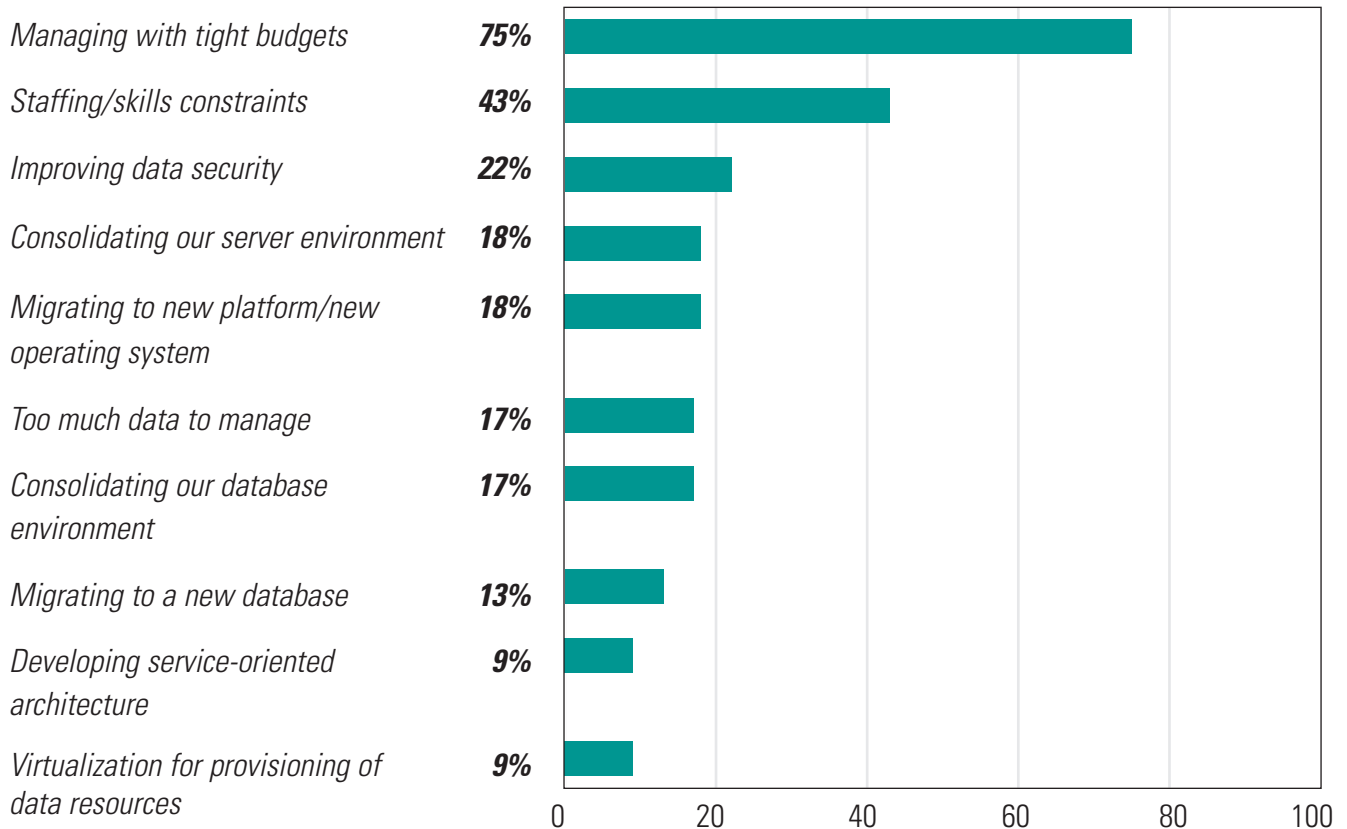
time and cost of deploying new servers. However, the greatest challenge has been resistance from software vendors to support their applications on virtualized servers.”

Organizational challenges also arise as participants embrace new virtualization strategies. “I certainly believe that IT virtualization makes it easy to manage databases more efficiently and effectively,” says one respondent. “However, we need to

convince our top management—the decision-making point—with return on investment; the cost savings in hardware and less administration costs.”

Respondents also discussed and provided feedback on a range of opportunities and issues, ranging from cost savings to organizational adaptation. On the following pages are the results of this important survey.

## Figure 1: Top 10 IT Operational Challenges



*(Multiple responses permitted. Respondents were asked to check only the top three choices that apply. Thirty-eight percent also reported other challenges.)*

**Toward a Smarter Information Foundation: 2010 IOUG Enterprise Platform Decisions Study** was produced by Unisphere Research and sponsored by VMware. Unisphere Research is the market research unit of Unisphere Media, a Division of Information Today, Inc., publishers of Database Trends and Applications magazine and the 5 Minute Briefing newsletters. To review abstracts of our past reports, visit [www.dbta.com/research](http://www.dbta.com/research). Unisphere Media, 229 Main Street, Chatham, NJ 07928. Tel: 973-665-1120, Fax: 973-665-1124, Email: [Tom@dbta.com](mailto:Tom@dbta.com), Web: [www.dbta.com](http://www.dbta.com).

Join the IOUG—If you’re not already an IOUG member and would like to continue receiving key information like this, visit the IOUG at [w3.ioug.org/join/today](http://w3.ioug.org/join/today) for information on how to join this dynamic user community for Oracle applications and database professionals.

Data collection and analysis performed with SurveyMethods.

## CHANGING DATA ENVIRONMENTS

**More than eight out of 10 respondents report that the number of database instances within or across their companies has increased over the past year. A majority have mixed database environments, and there is a limited amount of sharing of data that takes place between these environments. But, in most cases, this is not deep integration.**

As noted in the Executive Summary, a significant portion of respondents' companies are wrestling with tight budgets. The survey also finds that 28 percent say they have cut staffing and/or support, and 19 percent have cut back on database growth, software, or tool purchases. Overall, an overlapping total of 38 percent of respondents report that they have downsized at least part of their operations over the past year, either in people or in systems. About nine percent say they had to cut back in both categories. (See Figure 2.)

By contrast, a total of 32 percent of respondents (overlapping) have seen growth in either people or systems. Nineteen percent say that they had accelerated database growth, software and/or tool purchases over the past year, and 17 percent report expanding their staffing and/or support. Only five percent say they grew in both areas.

Respondents' companies have numerous database instances across their enterprises. At the high end, 22 percent of respondents report running more than 500 instances within their companies. (See Figure 3.)

With volumes of data increasing on all levels, there's no shortage of requirements for new database instances. More than eight out of 10 respondents report that the number of database instances within or across their companies have increased over

the past year. Close to three out of 10 report they have increased their number of databases substantially, increasing by more than 10 percent over the past year. (See Figure 4.)

However, adding new database instances isn't necessarily a seamless process. For example, six out of 10 respondents say they face additional hardware and networking costs as they grow their number of databases. A majority also find issues with licensing costs as the number of copies grows. Half also cite the additional administration costs and complexity as they expand their data environments. (See Figure 5.)

Respondents also pointed out the pressures they face with fast-growing data environments. As one manager lamented: "Our database growth and support continues astronomically while staffing remains the same, and our budget has been cut." Another echoes this sentiment, noting that "staffing remained the same, but we've expanded database and software purchases and support."

An overwhelming majority of these sites are also mixed environments. More than 90 percent say they run databases other than Oracle, and in most cases, these are Microsoft SQL Server. Another 44 percent of this group also say they have instances of MySQL onsite. (See Figure 6.) There is some sharing of data that takes place between these environments, but as respondents report, this is not deep integration. Close to half, 47 percent, report that their Oracle and non-Oracle databases are "somewhat integrated," with non-Oracle database applications accessing data for point solutions. Another 38 percent report no integration at all between Oracle and non-Oracle environments. Only 10 percent report deep integration, in which significant volumes of data shared between Oracle and other databases. (See Figure 7.)

---

*Toward a Smarter Information Foundation: 2010 IOUG Enterprise Platform Decisions Study* was produced by Unisphere Research and sponsored by VMware. Unisphere Research is the market research unit of Unisphere Media, a Division of Information Today, Inc., publishers of Database Trends and Applications magazine and the 5 Minute Briefing newsletters. To review abstracts of our past reports, visit [www.dbta.com/research](http://www.dbta.com/research). Unisphere Media, 229 Main Street, Chatham, NJ 07928. Tel: 973-665-1120, Fax: 973-665-1124, Email: [Tom@dbta.com](mailto:Tom@dbta.com), Web: [www.dbta.com](http://www.dbta.com).

Join the IOUG—If you're not already an IOUG member and would like to continue receiving key information like this, visit the IOUG at [w3.ioug.org/join/today](http://w3.ioug.org/join/today) for information on how to join this dynamic user community for Oracle applications and database professionals.

Data collection and analysis performed with SurveyMethods.