EXECUTIVE SUMMARY

Thanks to relentless global competition and an unforgiving economy, organizations have been under non-stop pressure to deliver products and services. For many the lifeblood of finding new opportunities has been to mine the data assets being gathered from all corners of their enterprise and beyond—transactions, customer data, employee input, and information about market conditions.

However, in the rush to deliver results, many IT and development departments take shortcuts within the testing process, taking live data right out of production environments to run through testing, development and quality assurance (QA) processes. Employing production data is considered the most expedient way to test new and updated applications. But creating copies of this data exposes organizations to new—and avoidable—security risks. In addition, resources are being stretched, in the interest of doing things better faster and cheaper. Add exploding volumes of enterprise data, and this scenario creates gaps in terms of exposure and money to organizations.

In a new survey of 207 IT and data executives, respondents report their organizations are behind the curve when it comes to managing the risks that could come from exposing live data to less secure settings—including development departments and outside contractors. This is an Achilles' heel that is being overlooked in data security efforts.

The survey, which drew responses from the membership of the Independent Oracle Users Group (IOUG), was underwritten by IBM, and conducted by Unisphere Research, a division of Information Today, Inc. A total of 63% of respondents indicate they are directly involved in assembling test data for application development and testing as part of their jobs. Survey respondents hold a variety of job roles and represent a wide range of organization types and sizes and industry verticals. The largest segment (39%) hold the title of database administrator, followed by that of director or manager. Close to one-fourth work for very large organizations with more than 10,000 employees, while 40% work at smaller organizations with fewer than 1,000 employees.

By industry sector, the majority of respondents come from IT service providers, government agencies, and educational facilities. (See Figures 36–38 at the end of this report for more detailed demographic information on job titles, company sizes, and industry groups.)

Key highlights and findings from the survey, which explores testing, development and QA opportunities and issues, include the following:

- The size and sophistication of applications are increasing, but testing windows are tightening. About a third of respondents report they are unable to keep pace with heightened demands, and a majority of respondents are not seeing appreciable growth in staff to help address burgeoning testing, development and QA requirements. To meet these requirements, two-thirds use outside services at least some of the time to augment their testing efforts. However, very little testing has been moved to the cloud as of yet.
- The explosion in data volumes is becoming the rule rather than the exception at many companies, and close to one out of six respondents' companies now have more than a petabyte of data. This means there is more data that must be managed and processed for testing, development and QA purposes. In addition, many applications need to be optimized to access databases more effectively. As a result, there are multiple copies of data—three or more—seen across organizations. Yet few organizations plan adequately to protect data once it leaves the production environment, creating increased and avoidable risk.
- Quality assurance is the main driver for application testing, but a majority of respondents also employ testing to pave the way for upgrades and migrations. However, only financial applications receive rigorous testing by a majority of companies. Testing, development and QA tends to occur across multiple databases across the enterprise, suggesting an additional security risk.

The bottom line is that while testing is more critical than ever, organizations are hard-pressed to quickly get applications out the door, and are faced with the management challenge of assuring quality. In addition, they often are forced to ignore the risks inherent in sending data out of what may be a secure production environment to development teams—both internal and external—who may not adhere to security practices. There may be a great deal of inconsistency between the data governance and security practices of these teams. As one respondent, a DBA with a large transportation organization, put it: "Data in test environments is at a much higher risk because more people access the data and the firewall protection is less compared to production."

On the following pages are more details on the findings of this survey.

Testing the Bounds of Data Governance: 2012 IOUG Test Development & Quality Assurance (QA) Survey *was produced by Unisphere Research and sponsored by IBM. 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/About_Us#Unisphere. Unisphere Media, 630 Central Avenue, Murray Hill, New Providence, NJ 07974; 908-795-3701, Email: Tom@dbta.com, Web: www.dbta.com.*

Data collection and analysis performed with SurveyMethods.