

Gearing Up for Growth

Financial Analytic Capabilities for Changing Times

A report prepared by CFO Research Services in collaboration with Teradata

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About this report

In March of 2011, CFO Research Services conducted an invitation-only electronic survey of senior finance executives at midsize and large companies on corporate finance’s use of financial and operating information. Respondents are primarily from U.S.-based companies. We received a total of 231 qualified responses, as follows:

Survey respondents hold positions with the following titles:

Chief financial officer	23%
Director of finance	23%
VP of finance	20%
Controller	15%
EVP or SVP of finance	9%
Treasurer	3%
President, CEO, or managing director	2%
Other	6%

Respondents come from companies of different sizes, in terms of revenue:

\$200M-\$500M	15%
\$500M-\$1B	20%
\$1B-\$5B	34%
\$5B-\$10B	10%
\$10B+	21%

Respondents represent a broad cross-section of industries:

Aerospace/Defense	1%
Auto/Industrial/Manufacturing	15%
Business/Professional services	4%
Chemicals/Energy/Utilities	7%
Construction	3%
Financial services/Real estate/Insurance	20%
Food/Beverages/Consumer packaged goods	8%
Hardware/Software/Networking	4%
Health care	9%
Media/Entertainment/Travel/Leisure	4%
Pharmaceuticals/Biotechnology/Life sciences	3%
Public sector/Nonprofit	3%
Telecommunications	5%
Transportation/Warehousing	2%
Wholesale/Retail trade	6%
Other	6%

Note: Percentages may not total 100%, due to rounding.

Executive summary

In March of 2011, CFO Research Services conducted a survey among more than 200 senior finance executives primarily in the United States to explore how well companies’ information systems are supporting finance executives’ ongoing efforts to transform the finance function into a value-added partner to the business. Especially in the aftermath of a worldwide recession, do CFOs and their staffs have the information they need to deliver real business value throughout the organization? How well equipped are they to provide the kinds of critical and useful business analytics that can drive the company forward?

Our research provided the following main findings:

Finance executives will need analytics that can support their companies in pursuing renewed growth strategies.

- Although 85% of respondents anticipate revenue growth in the coming year, only 10% characterize this growth as “substantial.”
- Only about half of respondents expect improving economic conditions to make their decisions less challenging, while the rest either see no change in the difficulty of decision making or believe decision making will be *more* challenging.
- Finance executives indicate that they will be facing new challenges in the use of information to support their pursuit of growth opportunities. As one respondent states, “Most important is the quality of data collected.”

Finance executives reveal gaps between their uses of financial and non-financial data for analytics.

- More than half of all respondents say that their companies are “very effective” at incorporating financial information gathered for compliance purposes into strategic and operating decision making (54%), and in using financial performance information for decision making (51%).
- Fewer respondents say that their companies are very effective at using operating information—as opposed to recent financial data—either for internal business activities (31%) or from external sources (24%). The fewest number of respondents say their companies are very effective at using other types of external data (19% for market information and 18% for competitive intelligence).
- A director of finance in the energy industry writes, “Better customer-demand data and tighter linkage

between demand and production planning would have provided a quicker response to the downturn (as well as the subsequent improvement in demand).”

Our research reveals room for improvement in the use of more-sophisticated analytical capabilities to complement management experience in decision making.

- The largest number of respondents (36%) identify management intuition and experience as the primary decision criteria when making strategic and operating decisions, in combination with recent financial performance data (31%).
- Few respondents (17%) say that statistical analysis and modeling are primary decision criteria, and the largest number of respondents (36%) report their companies make “little or no use” of these more sophisticated techniques.
- Only 20% of respondents say that management intuition should play an even greater role in decision making over the next year. However, nearly twice as many (39%) are looking to make better use of basic operating or non-financial data, and more than half of all respondents (53%) say that robust modeling and analytics should play a greater role.

The complexity of IT systems is one barrier to the increased use of analytics in management decision making.

- Respondents most often say that their companies’ ability to adapt to new reporting and analytic requirements “needs improvement” (39% of all respondents). Nearly as many respondents (35%) say that their companies’ ability to capture and use performance data in a timely way needs improvement.
- Approximately 40% of respondents say that each of the following issues relating to IT complexity is a barrier to effective decision making: problems with interoperability between disparate IT systems, lack of sophisticated models/metrics/methodologies to support decision making, and overlapping and conflicting data stores of information. Nearly 40% of respondents also say that disagreements among managers about data validity and accuracy often interfere with business decision making.
- Nearly half of respondents (48%) say that IT complexity makes reporting or analyzing the business in new ways more difficult, obstructs their ability to ensure the consistency of data across the organization (46%), or makes it harder to provide users with the right data at the right time (42%).

Finance executives anticipate that their companies will invest in technology that improves financial analytics, but they seek to align investments with the needs of the business.

- One executive writes that finance needs to “let the managers of the business units tell you what they believe the most meaningful information is,” while another advises his colleagues to “start by defining exactly what management needs to run the business.”
- Finance executives appear willing to make the kind of investment needed to improve their ability to access and analyze business performance information. More than three-quarters of respondents (76%) anticipate that their companies will make at least a moderate investment in linking operational data to financial results, followed by improving adaptability (73%) and timeliness (69%).
- As several respondents note, the key is to identify, understand, and capture the operating metrics that will impact profitability—or, as one executive writes, “concentrate on those key performance indicators that truly can move the dial.”

Nearly half of respondents say that IT complexity makes reporting or analyzing the business in new ways more difficult.

Translating operational actions into financial results

Over the years, CFO Research Services has documented the efforts that finance departments have consistently and consciously been making to transform themselves from traditional “scorekeeper” roles into more active partners in the business. The business value that an expanded finance role delivers has been well documented in the business media.

At a minimum, operating management needs the finance department to supply reliable data and insightful analyses so they can make decisions that are grounded in fact. As one respondent writes in response to an open-ended question in our survey, CFOs and senior finance executives provide value when they can work with business lines to help them better understand “how operational actions will translate into financial results and [how to use] the relevant financial data to make strategic decisions.”

In March of 2011, we surveyed senior finance executives (primarily in the United States) to gauge their perceptions on how well their companies’ information systems are

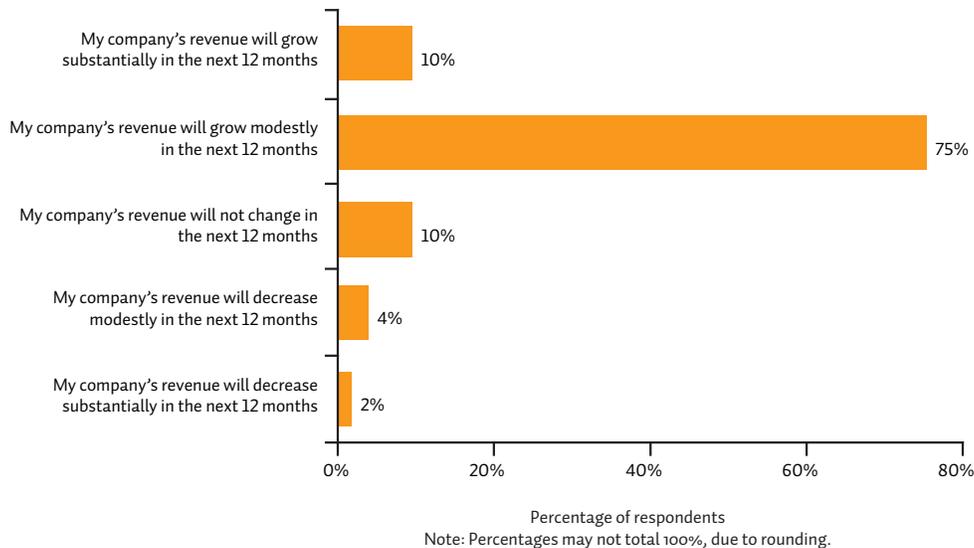
supporting these efforts. We were especially interested in learning if, following a global recession, CFOs believe they and their staffs have the information they need to deliver real business value throughout the organization. Are they able to deliver the kinds of critical and useful business analytics that can drive the company forward?

To start, our research confirmed that finance executives believe the economic climate is warming, albeit gradually. The survey shows that most finance executives have a modest degree of confidence in growth prospects over the next year, with 85% anticipating revenue growth for their businesses. However, only 10% of respondents anticipate that this growth will be “substantial,” whereas three-quarters of respondents say that their companies’ revenue will grow “modestly.” (See Figure 1.)

Finance is once again turning its attention to laying the groundwork for pursuing growth.

Figure 1. Respondents are clearly anticipating modest—but not strong—growth.

What are your expectations for your company’s top-line growth over the next 12 months?



Finance executives provide value when they can work with business lines to help them better understand “how operational actions will translate into business results,” writes a survey respondent.

This tempered outlook likely reflects finance executives’ recognition that markets in developed economies are growing at an anemic pace. It also may signal their simmering concerns about rising cost pressures in areas ranging from input prices to labor costs. Still, in what remains a challenging economic environment, the fact that more than three-quarters of respondents anticipate growth is indisputably a positive sign.

In other recent reports, we have characterized this outlook as one of guarded optimism on the part of finance executives. Participants in recent research projects have told us that, in the throes of recession, they were likely to have narrowed their focus to survivalist mode, in which cost control and cash management were paramount. For example, in the current survey, one respondent writes that a “tighter grip on our operating cash flow (cash position) proved very helpful during the downturn.”

Now, finance is once again turning its attention to laying the groundwork for pursuing growth. Many companies also built up a stockpile of cash during the recession in an attempt to strengthen their balance sheets and provide a buffer against depressed sales. Finance executives are in the position of having to decide on the most productive use of that cash going forward.

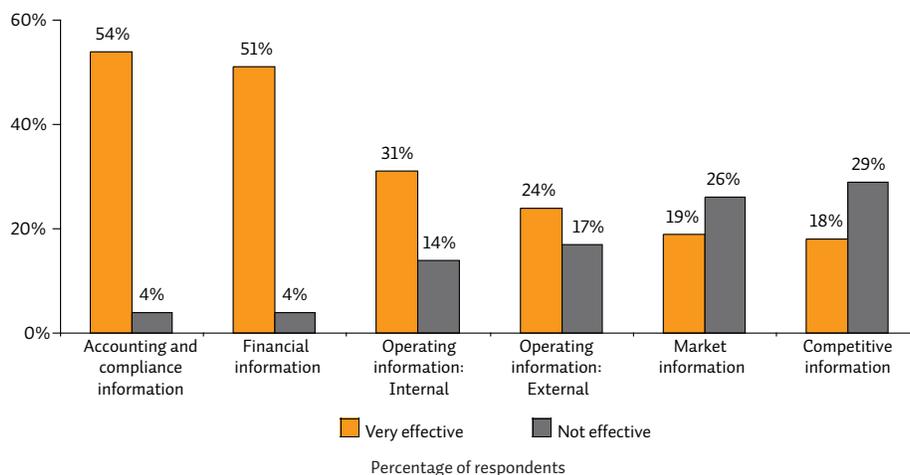
Even so, only about half of respondents expect improving economic conditions to make their decisions less challenging. The finance executives who anticipate that decision making will become more challenging are more prominent within the group of respondents who describe their companies’ basis for competition as product/service differentiation, as compared to those who say they compete primarily on cost or who rely on customer relationship management. For these finance executives, ramping production and sales back up may mean that the universe of high-stakes resource-allocation decisions is expanding. For example, their companies must make decisions on how, and how fast, to bring production back in markets where the demand outlook remains decidedly murky. The challenge for finance executives, then, is to sort out the most meaningful information that will allow them to chart a course for profitable growth.

These shifts present new challenges for the use of information in making the kinds of financial and operating decisions that will allow companies to pursue growth opportunities. A controller from the manufacturing sector, when asked what types of operating information and analysis proved to be most useful during the downturn, replied, “Margin models by product and machine, leveraged with sales projections to match limited production and sales resources with [our] best-performing products.” He goes on to describe the kinds of complexities finance executives are now facing in their decision making: “Continued use of the above [types of information], with the additional variable of balancing new business with existing business, when machines are at maximum production volume. Having new business diversifies our risk, but not supplying our existing customers can create friction with them, possibly leading to loss of their business when demand is lower.”

Finance executives overall believe they are most effective in gathering and analyzing internal financial performance data, but fewer respondents say their companies are very effective at using operating information or external data.

Figure 2. Finance executives are less satisfied with their companies' ability to collect, manage, and analyze non-financial data—both internal and external.

How effective is your finance function in acquiring and analyzing the following types of information for use in strategic and operating decision making?



Gaps between the uses of financial and non-financial data for analytics

Few would dispute that high-quality information and robust, flexible analytical capabilities can help companies cope with increasingly complex and persistently uncertain business conditions. But the usefulness of these analytical capabilities starts with the data. As one respondent states simply, “Most important is the quality of data collected.”

Survey results indicate that companies are better at gathering and analyzing some forms of data than others. The survey shows that finance executives overall believe they are most effective in gathering and analyzing internal financial performance data for use in decision making. However, they also reveal some areas in which gaps may exist in their ability to fully advise non-financial managers and executives.

For example, more than half of all respondents (54%) say that their companies are “very effective” at incorporating financial information gathered for compliance purposes into strategic and operating decision making. (See Figure 2.) Nearly as many (51%) say their companies are very effective at using financial performance information (for example, information on liquidity and working capital positions) for decision

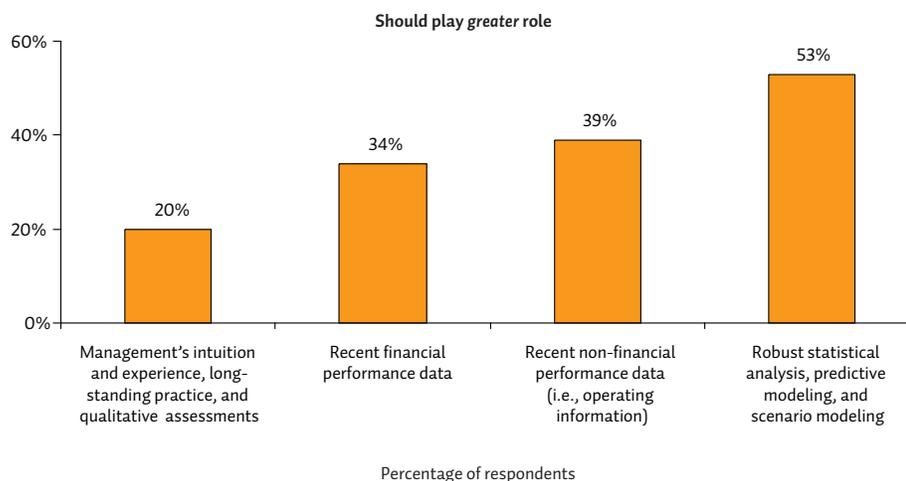
making. Virtually no respondents report that their companies are not effective in these basic areas of financial reporting.

The survey shows a distinct decline in respondents' satisfaction with their finance functions' effectiveness in acquiring and analyzing operational data linked to financial data. Fewer respondents say that their companies are very effective at using operating information for internal business activities (such as production rates, backlogs, labor utilization, or product/service quality [31%]) or operating information from external sources (such as information on inputs, suppliers, and supply-chain performance [24%]). The fewest number of respondents say their companies are very effective at using other types of external data (19% for market information and 18% for competitive intelligence). This type of detailed, but more-difficult-to-obtain, data can be useful as leading indicators for management, allowing a company to adapt quickly to changing conditions—provided the organization itself has the flexibility needed to respond.

Across all categories, between 40% and 60% of respondents say they are “somewhat” effective, suggesting that a large number of finance executives still see room for improvement. As a director of finance in the energy industry writes, “Better customer-demand data and tighter linkage between demand and production planning would have provided a quicker response to the downturn (as well as the subsequent improvement in demand).”

Figure 3. Finance executives are looking to employ more-sophisticated analytical techniques to support decision making, while continuing to draw on management expertise.

In your opinion, what role should the following types of information and analyses play in strategic and operating decision making at your company over the next year?



Supporting management experience through analytics

Not surprisingly, survey results confirm that most finance executives rely primarily on management intuition and experience in strategic and operating decision making, in combination with recent financial performance data. Respondents suggest that their companies are less well equipped to use non-financial performance data in decision making. They also indicate that sophisticated modeling and analytics play less of a role in strategic and operating decisions.

The largest number of respondents (36%) identify management intuition and experience as primary decision criteria when making strategic and operating decisions, followed closely by recent financial performance data (31%). Two-thirds of all respondents (67%) say they see no need for the role of management intuition in decision making to change over the next year (and another 20% of respondents say that management intuition should play an even greater role). In the end, people, not information systems, run a company.

Sound management judgment relies on the quality of the information on which it is based, and survey results suggest that finance executives see a need to better unite the best attributes of rigorous analysis and informed experience.

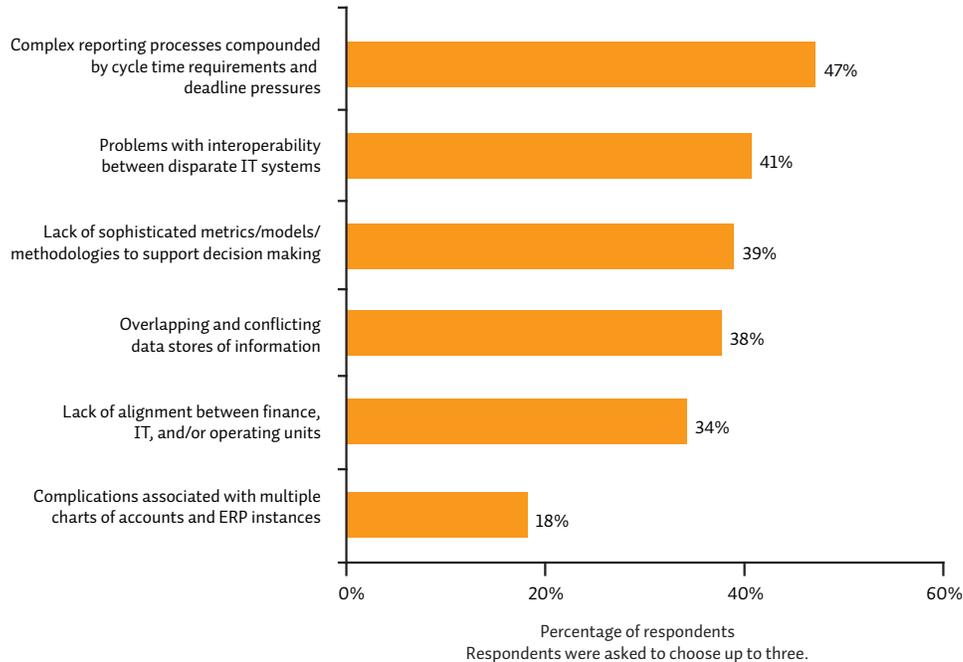
Respondents appear comfortable applying historical financial performance data to support management judgments. In addition, while their comfort level is lower with historical non-financial performance data, all but 2% are applying it to some extent in support of management decisions. Conversely, noticeably fewer finance executives report that they are able to employ more sophisticated and complex analytical tools in their strategic and operating decision making. A comparatively large number of respondents (36%) report their companies make “little or no use” of statistical analysis and modeling, while few (17%) say these are primary decision criteria.

But respondents want analytics to become a bigger component in future decision making. (See Figure 3.) More than half of all respondents (53%) say that robust modeling and analytics should play a greater role in strategic and operating decision making at their companies over the next year. Sizeable numbers of respondents also are looking to make better use of basic financial data (34%) and operating information (39%).

Respondents want analytics to become a bigger component in future decision making.

Figure 4. Finance executives know what obstacles need to be overcome to improve data quality for decision making.

Which of the following items present the most formidable barriers to improving the quality of information for use in making strategic and operating decisions?



One barrier to increased use of analytics: IT complexity

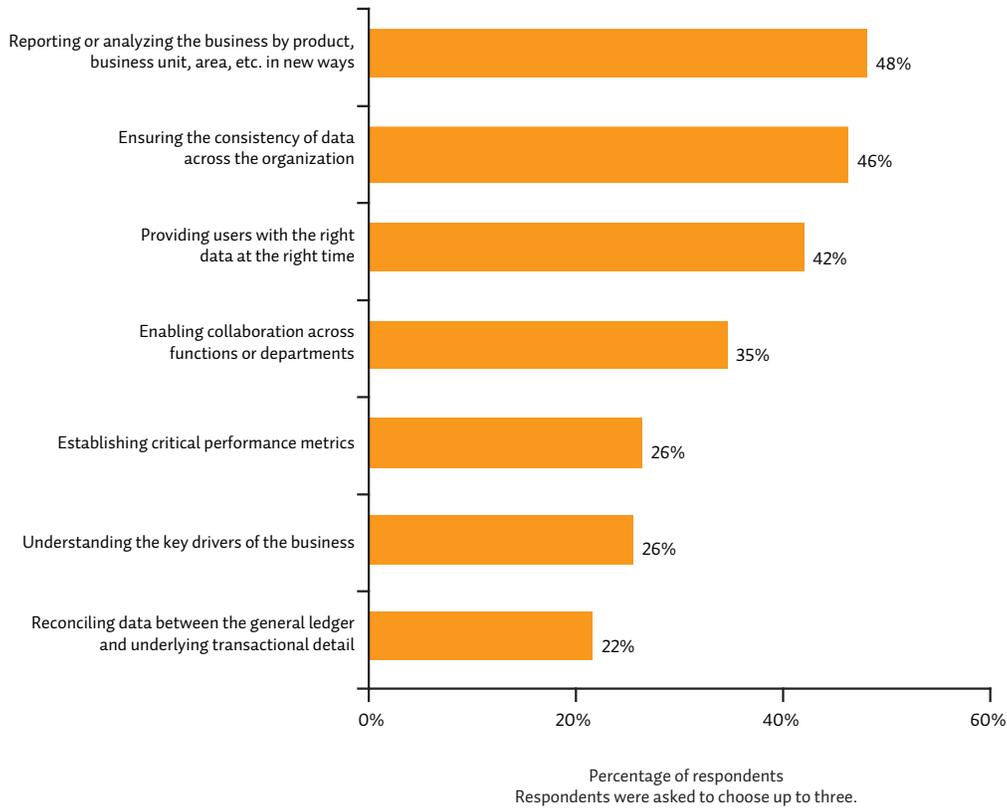
While survey respondents clearly see a need to make analytics a bigger component in decision making, many indicate that addressing underlying data-management capabilities is a prerequisite. Queried on a range of key competencies, respondents most often say that their companies' ability to adapt to new reporting and analytic requirements "needs improvement" (39% of all respondents). A substantial number of respondents (35%) say that their companies' ability to capture and use performance data in a timely way needs improvement. When asked to identify the barriers to effective decision making, approximately 40% of respondents select each of these issues relating to IT complexity: problems with interoperability between disparate IT systems, lack of sophisticated models/metrics/methodologies to support

decision making, and overlapping and conflicting data stores of information. (See Figure 4.) Clearly, finance executives are acutely aware of the obstacles that prevent them from giving management maximum decision-making support.

Respondents say that their companies need to overcome information management challenges related to complexity.

Figure 5. IT complexity, respondents say, prevents data from being useful in several aspects of decision making.

In your view, which of the following items are made most difficult by the complexity of your company's IT systems and infrastructure?



Implications of IT complexity

Complex IT systems hinder finance's efforts to improve its analytical capabilities. When asked about the consequences of complexity in their companies' IT systems, respondents say that they struggle to provide a reliable fact base for all parts of the business—nearly 40% say that disagreements among managers about data validity and accuracy often interfere with business decision making. As a respondent writes in our survey, "If alignment is not clear, finance will constantly be chasing iterations of data that are misaligned to the operating structure." Nearly half of respondents say that IT complexity makes reporting or analyzing the business in new ways more difficult (48%), obstructs their ability to ensure the consistency of data across the organization (46%), or makes it harder to

provide users with the right data at the right time (42%). (See Figure 5.) These shortcomings can only make it more difficult to sift through the masses of operating and financial data to find the nuggets that will truly drive growth.

Finance executives report that they are struggling to provide a reliable fact base for all parts of the business.

Concluding thoughts

In the end, as one respondent writes, “the first step is to make sure that operations understands that they are ultimately responsible for financial results....Once they buy in to owning results, it’s much easier to drive analytical-based decisions.” Finance executives in the survey stress the importance of matching data analysis with the needs of the business as they plan for renewed growth. Another executive writes that finance needs to “let the managers of the business units tell you what they believe the most meaningful information is,” while a third advises his colleagues to “start by defining exactly what management needs to run the business.”

Finance executives appear willing to make the kind of investment needed to improve their ability to access and analyze business performance information. A majority of respondents say their companies will invest at least modestly in all of the performance-information improvement categories we queried on. More than three-quarters of respondents (76%) anticipate that their companies will make at least a moderate investment in linking operational data to financial results, followed by improving adaptability (73%) and timeliness (69%).

In this way, finance executives can lead the charge to marry management judgment, operations expertise, and information capabilities. As several respondents note, the key is to identify, understand, and capture the operating metrics that will impact profitability—or, as one executive writes, “concentrate on those key performance indicators that truly can move the dial.” Given the magnitude and complexity of the global economy, building out institutional knowledge and improving fact-based decision making skills will become increasingly powerful contributors to the mission of delivering business value. When the finance function is better equipped to supply an enhanced level of decision support, companies will discover that clarity and precision in decision making can give them a decisive competitive advantage.

Finance executives stress the importance of matching data analysis with the needs of the business as they plan for renewed growth.

Sponsor's perspective

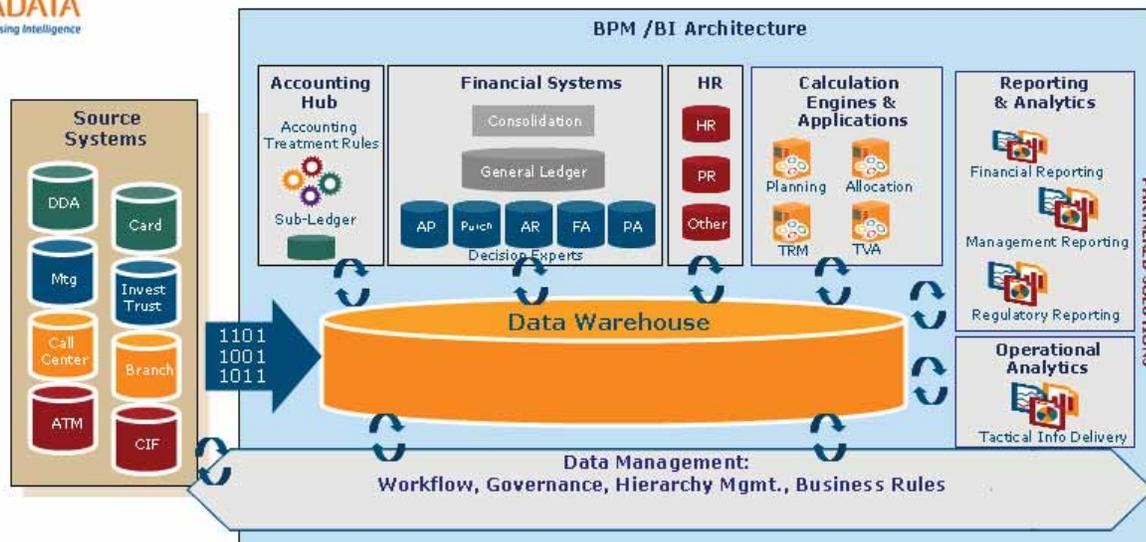
Recognized in 2010 as an *Information Week* Top 10 Most Strategic Vendor, Teradata is the world's largest company solely focused on creating enterprise agility through database software, enterprise data warehousing, data warehouse appliances, and analytics. Teradata serves a diversified client base of over 1,000 customers worldwide and employs 7,000 associates in more than 60 countries.

In this report, CFO Research Services documents the need that companies have for coherent data and robust analytics to help them target new growth opportunities. However, finance executives also say that IT complexity presents a serious challenge to their efforts to improve information quality. Teradata's Finance and Performance Management (FPM) offerings help companies improve their financial reporting and performance management by simplifying their finance

architectures. The Teradata warehouse integrates financial data with customer, operational, and industry data facilitating key cross-functional analyses throughout the enterprise. Because it links financial results to their key operational drivers and ensures consistently-defined performance metrics, Teradata serves as a crucial foundation for Business Intelligence (BI) and Business Performance Management (BPM) initiatives.

Teradata has helped dozens of finance departments at leading global corporations by advocating and implementing a next-generation finance architecture with a data warehouse acting as the platform for integrated information management and analytics. Teradata's finance reference architecture (depicted in the figure below) guides our clients as they leverage existing technology investments with Teradata technology, tools, professional services, and partnerships.

Next-Generation Finance Architecture



In this report, CFO Research Services documents the need that companies have for coherent data and robust analytics to help them target new growth opportunities.

Shared data is at the heart of Teradata's approach. Taking a data-centric approach to financial analytics has several advantages over stove-piped approaches to building analytical applications, scoreboards/dashboards, and performance management tools:

1. **Lower cost**—reduce data overlap (and the associated movement and storage costs) by leveraging the same data source for BPM tools that help create forecasts and monitor actuals, as well as for BI tools that help drill into production anomalies and assess shifting customer purchase patterns.
2. **Innovation**—by working from one shared, vetted source of data, companies can reduce the cost of building new applications by 80% and speed their time-to-value.
3. **Business alignment**—the ability to connect BI insights with BPM helps align frontline and operational groups' understanding of performance drivers and leading indicators with that of key corporate departments including finance.
4. **Accelerated insight and action**—enhance proactive capabilities by loading new data more rapidly and increasing frequency of new insights, so that performance threats and opportunities can be noted and addressed in near real-time.

This report confirms the widely held belief that finance executives are broadening their focus away from strict cost control and towards managing profitable growth in what remains an uncertain economic landscape. Many finance departments at leading global companies have already used Teradata's FPM capabilities to add millions to the bottom line:

- Hundreds of millions in additional profit by identifying unprofitable customers for improvement or termination.
- Tens of millions of dollars in project NPV by reducing the vendor base (as much as 75%) based on vendor performance measures, empowering negotiating positions for contract pricing and other terms.
- Significantly increased cash flow forecast accuracy by leveraging insight into operational and transactional drivers of key balances like Accounts Receivable, Accounts Payable, and Inventory.

For more insight on how Teradata's FPM offerings can help you enhance financial analytics for improved decision making, visit www.teradata.com.



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