

# Finance analytics: Seven hows and millions of whys

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## Executive introduction

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Data meeting a financial mind does lucrative things. So it's no surprise that financial analytics is taking off. Whether used to streamline revenue forecasting or improve payment collection, senior finance leaders are increasingly realizing that those collective bits of data on which their companies sit can amount to far-reaching hills of gold. But don't just take our word for it. Nucleus Research reported that an investment in analytics pays back \$13.01 for every dollar spent, and returns are only increasing.<sup>1</sup> That's huge. Capitalizing on analytics is now critical to business success. What are top finance leaders doing to maximize this ROI? IBM asked nearly 1,000 CFOs to find out. Whether you're an experienced player in the analytics game or just getting started, the findings summarized in this paper reveal valuable wisdom that can help you now. If you're a finance leader, we're talking to you.

## Because acting on instinct is a thing of the past...

If you were to choose a word for the intersection of data and finance, one could do worse than “profitable.” You’d be hard pressed to find a top finance leader unwilling to advance the notion that data analytics have emerged as a high-yield investment and a requisite ingredient for advantageous decision making.

Maximizing the strategic use of data is now essential, and neglecting to do so can pose a major threat to your business. Analytics simply make decisions better. Think of them as a precise tool compared to the blunt instrument of “gut instinct.” Properly analyzed and applied, analytics offer a highly effective means of finding specific areas of profitability.

IBM recently surveyed a total of nearly 1,000 CFOs and senior finance leaders in two important studies to gain insight into the ways that analytics relate to the world of finance.

First, the IBM Center for Applied Insights surveyed 337 senior finance leaders on analytics adoption. The study, [Capitalizing on analytics in finance: Creating trusted insights for the enterprise](#), is headlined by the key finding that adoption of analytics across all key areas of finance is set to double in the next two years.<sup>2</sup> Why? As one finance executive admitted, “Advanced analytics give me answers to questions I didn’t even know I had.”

In analyzing the survey responses, researchers identified a small group (28 percent) of the most effective finance leaders. On average, these leaders were more effective than their peers across ten finance-focused activities:

1. Cash forecasting
2. Expense management
3. Finance process optimization
4. Financial planning
5. Management reporting
6. Mergers and acquisitions
7. Order-to-cash
8. Procurement
9. Profitability and margin analysis
10. Revenue forecasting

The second survey, conducted by the IBM Institute for Business Value, surveyed 643 senior finance leaders on the subject of “tempestuous times” for business leadership. “Disruption” is the operative word here. Analyzing the responses led to the overwhelming conclusion that today’s environment is not kind to the straggler. Without an analytics strategy, it’s easy for organizations to get left behind. The role of the CFO is evolving rapidly and convergence has become the norm, as “barriers between previously distinct industries are collapsing... producing new hybrids and erasing traditional industry classifications in the process.” As the CFO of a consumer products company in China said, “The most unpredictable external force impacting our business right now is disruptive innovation: it totally changes the rules of the game.”

But some are finding success in these tempestuous times. The study, [Redefining Performance: The CFO Point of View](#), identifies a small group (19 percent) of leading CFOs we call Value Integrators.<sup>3</sup> This group excels in the capabilities of finance efficiency and business insight. To reduce the complexity of their financial operations, these leaders have implemented commonality in their processes and data. They also possess strong analytics capabilities, talent and technology.

These studies are much more than an affirmation of the role that data and analytics play in value creation and growth. The insights gained from this pool of some of the world's top finance leaders can act as your roadmap for how to find similar success. Lessons learned from each study are important to digest as you look to take your own organization's financial analytics capabilities to the next level.

### Adoption

Most finance organizations are deeply interested in deploying analytics. In fact, 9 in 10 finance organizations have implemented analytics solutions to support their financial processes in the last five years and even more are expecting to implement analytics in the next five years.

That may make it sound like analytics are a widespread phenomenon. But adoption is happening in pockets and is far from pervasive across finance activities. (See Figure 1.) For example, only 40 percent have implemented analytics for management reporting, and even less for profitability analysis, financial planning and cash forecasting. And finance organizations are still primarily using analytics to look backward rather than to anticipate the future and prescribe actions (50 percent use descriptive compared to 30 percent predictive and only 20 percent prescriptive).

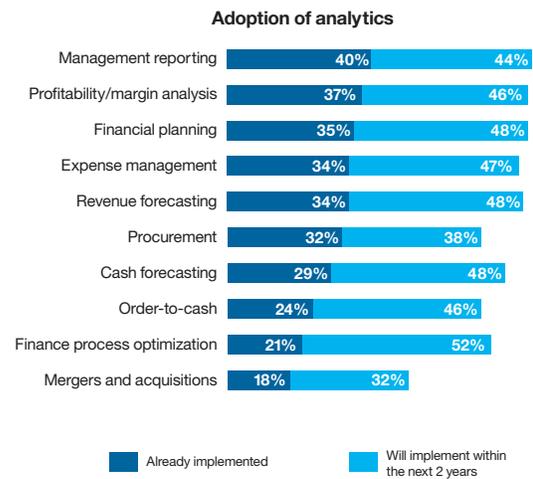


Figure 1: Participants were asked to indicate whether they have adopted or will adopt analytics for the following finance-related activities.

Source: IBM Center for Applied Insights, October 2015.

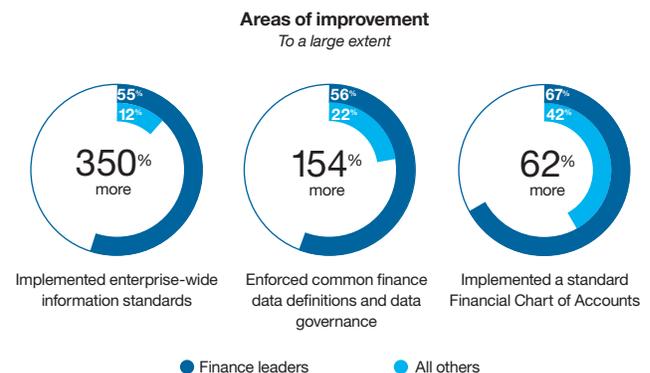
Adoption of analytics across all key areas of finance is set to double in the next two years. Finance teams will use analytics to optimize internal processes for cost reduction, accuracy and speed by analyzing transaction processing outcomes. In fact, use of analytics for finance process optimization is expected to grow from 21 percent to 73 percent. Finance will use analytics to optimize planning, budgeting, and forecasting processes to make this more silent running and lights out. Use of analytics for financial planning will grow from 35 percent to 83 percent. Finance will expand the horizon of what analytics is applied for to include integration of macro-economic data, industry trends and competitor data. Use of analytics for revenue forecasting is projected to jump from 34 percent to 82 percent.

### The seven “hows” of finance analytics success

Why pay attention to the finance leaders from these studies? Quite simply, because they deliver better financial performance than their peers—in both revenue growth and profitability.

Here’s what the top finance leaders are doing differently with respect to analytics:

**1. They focus on common data definitions.** Analytics depend on a foundation of uniformly understood data, and top finance leaders have done more in this area. (See Figure 2.) They are 154 percent more likely than their peers to use common finance data definitions, and 62 percent more likely to use a standard chart of accounts. They have also gone one step further by adopting enterprise-wide information standards.



*Figure 2:* Participants were asked which of the following improvements their organization has undertaken.

**Source:** IBM Institute for Business Value, February 2016.

**2. They integrate information.** Analytics relies on the integration of various data types (e.g., financial, operational, external). Doing this well and quickly is the key, and top finance leaders have done more to integrate information across their enterprise. (See Figure 3.) In fact, they are 3.5 times more likely to be very effective at doing so, and 57 percent of top finance leaders integrate their financial planning with strategic and operational planning to a large extent. This allows for a better understanding of how different aspects of the business are performing in conjunction with one another.

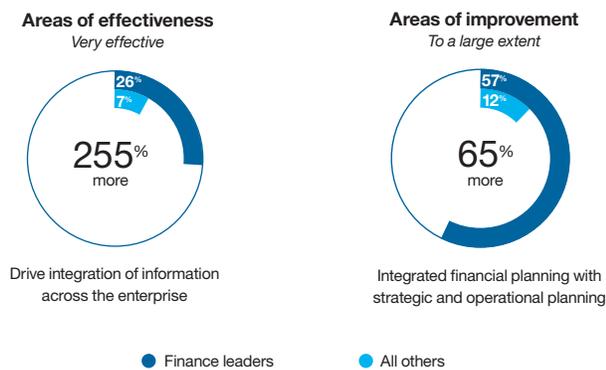


Figure 3: Participants were asked how effective their organizations are in the following areas and which of the following improvements they have undertaken.

Source: IBM Institute for Business Value, February 2016.

**3. They invest in analytics more consistently across the business.** Top finance leaders are ahead in implementing analytics consistently across their business, supporting both finance-focused activities as well as other enterprise activities, such as customer analytics, sales performance and workforce analytics. (See Figure 4.) This investment allows them to plan much more extensively for the future, forecast revenues and manage risk.

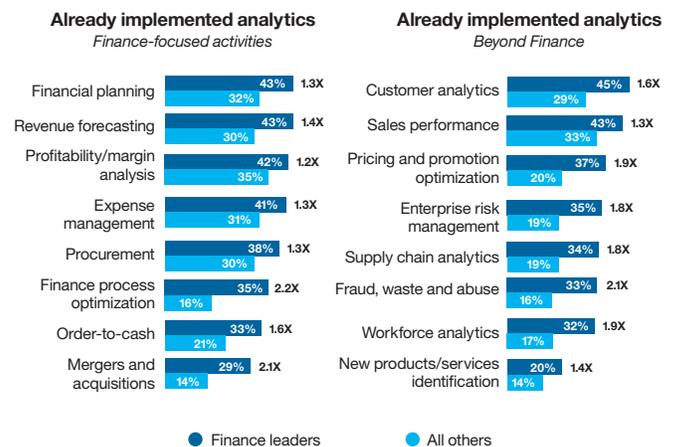


Figure 4: Participants were asked to indicate whether they have adopted or will adopt analytics for the following activities.

Source: IBM Center for Applied Insights, October 2015.

**4. They apply advanced analytics.** Compared to their peers, top finance leaders lean more heavily on predictive and prescriptive analytics. (See Figure 5.) They are 28 percent more likely than others to use forward-looking analytics. These advanced analytics can be used to improve revenue collection by segmenting customers on the basis of a risk profile created by using statistical data modeling and historic trends for payment behavior and disputes. They can also be used to improve and streamline revenue forecasting by including additional variables and developing more accurate forecasts.

**5. They collaborate with their C-suite peers regarding analytics.** Close collaboration across the C-suite on analytics is a significant differentiator for top finance leaders. (See Figure 6.) The CFOs in this group are more likely to closely collaborate with their C-suite peers, including CIO, CHRO, CMO, CSCO and CSO. In fact, top CFOs collaborate 2.2 times more on analytics with the CMO, which enables them to work together to identify new growth opportunities, measure ROI for digital marketing strategies and assess overall performance. Top CFOs also collaborate more on analytics with the CHRO to address decisions related to issues such as workforce planning and skills gaps.

Type of analytics currently used to support financial processes

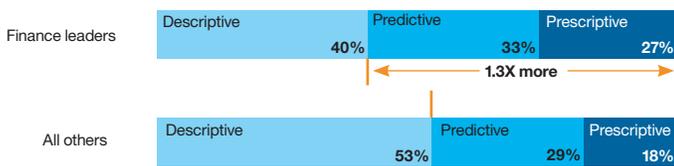


Figure 5: Participants were asked to indicate, by percentage (totaling 100%), the amount that each type of analytics is used to support their financial processes.

Source: IBM Center for Applied Insights, October 2015.

Finance collaboration across the C-suite on analytics

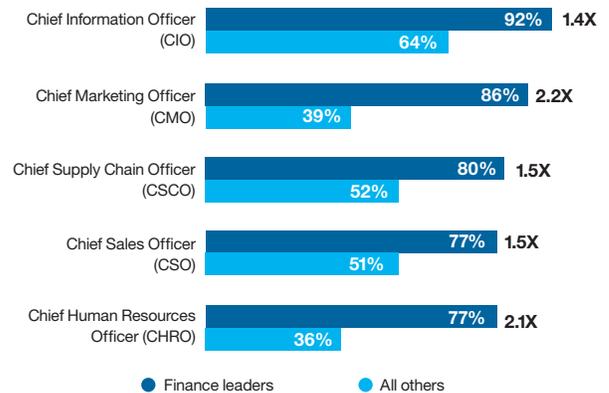


Figure 6: Participants were asked how closely they collaborate with the following roles, in terms of analytics.

Source: IBM Center for Applied Insights, October 2015.

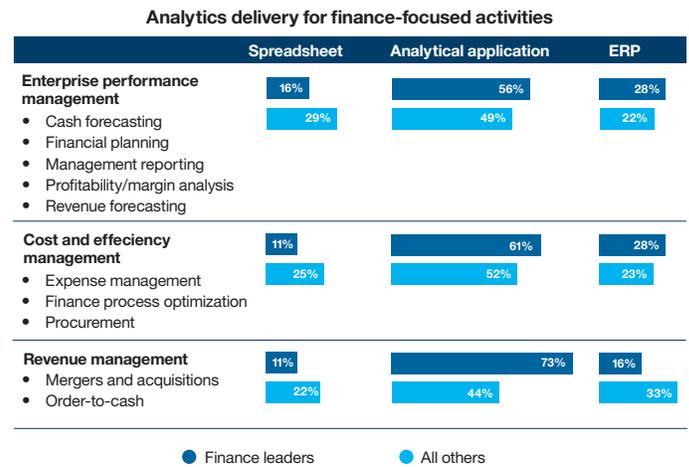
### The importance of collaboration

The point on collaboration is worth exploring in more detail. In an earlier installment of the Global C-Suite Study that was released in 2013, IBM researchers found that 92 percent of CEOs at outperforming enterprises cited CxO collaboration as a top factor in C-suite effectiveness.<sup>4</sup> Analytics provides CFOs with an opportunity to collaborate with CHROs, CSCOs and CMOs to improve talent acquisition and workforce performance, effectively respond to supply chain challenges and achieve greater revenue growth.

Analytics creates the opportunity for CFOs to work successfully across the C-suite and other CxOs recognize the importance of the CFO role. In fact, 72 percent of CxOs collaborate with the CEO to be successful, and 65 percent collaborate with the CFO to be successful. The CEO turns most often to the CFO to develop the enterprise business strategy.

The key is to link financial and operational performance management. This requires cross-functional coordination, and increases the ability of the entire enterprise to respond to market dynamics. This is where the big analytics payoff lies.

**6. They deliver analytics differently.** Top finance leaders are heavier users of analytical tools and are less dependent on spreadsheets compared to their peers. (See Figure 7 and Figure 8.) This allows them to leverage best-of-breed applications to execute analytics. When it comes to the delivery platform for analytics, top finance leaders are ahead on use of cloud. Cloud-based solutions can provide more speed and agility, lower capital expenditure and operating costs, generate more productive use of IT resources and allow easier collaboration.



*Figure 7:* Participants were asked how analytics were being conducted for those activities where they have already, or soon will have, implemented analytics.

**Source:** IBM Center for Applied Insights, October 2015.

Finance analytics delivered via cloud solutions



Figure 8: Participants were asked approximately what percentage of their finance analytics are delivered via a cloud solution.

Source: IBM Center for Applied Insights, October 2015.

**7. They develop analytics talent and adopt centers of competency and shared services to expand analytical expertise.** Analytics cannot yield significant benefits unless they are deployed with commensurate people talent and operational dexterity. (See Figure 9.) Finance leaders develop analytics talent to partner with the business 3 times more than their peers. Finance leaders have also established centers of analytics excellence to centralize and share expertise 5 times more than their peers.

Areas of improvement  
To a large extent

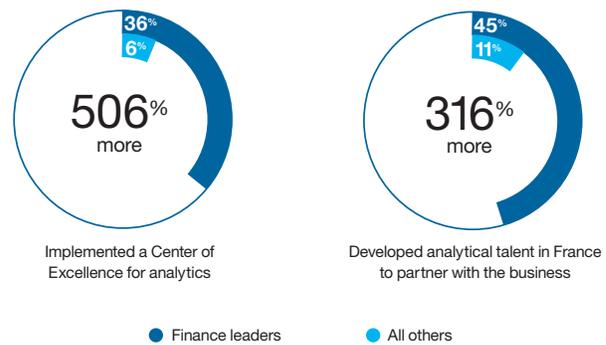


Figure 9: Participants were asked which of the following improvements their organizations have undertaken.

Source: IBM Institute for Business Value, February 2016.

## Conclusion

As a finance leader, you already have a ton on your plate. You understand that your role is evolving and will continue to change rapidly. To adapt and thrive in these tempestuous times, lean on the power of analytics.

If you're a CFO or finance leader who is already well down this path, these findings suggest it might be time to double down on your investment in data analytics. If you've yet to get started, it might be now or never. First, determine the key business issues you need to address with analytics. Second, build the business case. Third, establish an integrated data strategy.

There's low-hanging fruit to be picked, including automation and a common data foundation. The costs to start now are low. Take advantage of cloud trial software to educate your team on what is available. Automating 30-year-old practices is not enough. Adopt best practices (e.g., driver-based, rolling forecasts) and link your financial performance to operational performance.

Finance leaders who follow these lessons to better understand their companies and markets are the ones who will win as disruption and convergence continue to shake the foundations of the status quo.

## About the Authors

**Spencer Lin** is the Global CFO Market Development Lead in IBM Market Development and Insights. In this capacity, he is responsible for market insights, thought leadership development, competitive intelligence, primary research, social research, and market opportunity analysis on the CFO agenda. Spencer has a combination of financial management and strategy consulting experience over the past 20 years, with extensive experience in Finance transformation, strategy development and process improvement. He was a co-author of the last five IBM Global CFO Studies. Spencer can be reached at [spencer.lin@us.ibm.com](mailto:spencer.lin@us.ibm.com).

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## About IBM Analytics

IBM Analytics software delivers data-driven insights that help organizations work smarter and outperform their peers. This comprehensive portfolio includes solutions for business intelligence, predictive analytics and decision management, performance management, and risk management.

IBM Analytics solutions enable companies to identify and visualize trends and patterns in areas, such as customer analytics, that can have a profound effect on business performance. They can compare scenarios, anticipate potential threats and opportunities, better plan, budget and forecast resources, balance risks against expected returns and work to meet regulatory requirements. By making analytics widely available, organizations can align tactical and strategic decision-making to achieve business goals. For further information please visit [ibm.com/analytics](https://ibm.com/analytics).

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