

Viewpoint paper

Shift from data to insight

A new approach to business intelligence
and analytics



Table of contents

- 1 Lacking insight
- 1 Taking a scientific approach
- 2 Offering clear benefits
- 3 Implications for financial operations
- 4 Improving BI outcomes
- 5 Addressing BI in the real world
- 5 Providing the right approach
- 6 Leverage relationships for better BI analytics
- 6 About the author

Lacking insight

It's a familiar story to chief financial and executive officers. After reviewing detailed reports and analytic summaries—which required hundreds of hours of staff work crunching billions of bits of data—those seasoned managers are compelled to observe:

“Everything you say is true, but it just is not so.”

The fact is, after spending heavily on technology, people skills, and consulting, organizations still often lack clear visibility and insight into their fundamental business situations. Business managers across industries burn the midnight oil to try and retain their company's competitiveness, reduce uncertainties, and “future proof” their firm. But companies continue to misunderstand the true story behind the numbers, a reality that translates directly into a growing number of financial restatements, serious strategic missteps, or worse. Despite a generation of investment and effort, financial analysis and reporting often miss the mark.

Taking a scientific approach

Organizations have invested billions in technology, data warehouses, and enterprise resource planning (ERP) systems to capture and store an abundance of data. But many have failed to develop the talent, tools, and processes needed to effectively turn that data into usable business insight.

To realize the full value of those vast stores of information, companies can no longer view financial reporting, business intelligence, and analytics as an “art.” Instead, savvy executives now take a more “scientific” approach to financial analysis and reporting, and should work to build a robust and repeatable framework for extracting pertinent data and converting it into actionable business insight.

That is obviously no simple task, but leading organizations worldwide have realized the power of analytics and are defining their future strategies based on them. This is why a growing number of organizations now partner with proven experts to generate high-quality business intelligence (BI) and analytics. By adopting this more scientific, collaborative approach, financial organizations can leverage fact-based insights to improve reporting results, recognize and understand potential opportunities, and deliver better business outcomes.

There is no shortage of data available to most organizations. This data should lead to facts, facts must lead to information, that information then appears in reports, and those reports should be used to provide insights for making decisions. But in the end, many organizations fail to breed true enterprise insights. Research findings support what managers already recognize.

Why is this so? Certainly, organizations face substantial external and internal challenges. Companies struggle with increasing globalization of their business, disparate systems, fragmented organizational decision processes, and internal cultures that are resistant to change—all in an economy that demands greater enterprise speed, focus, and agility.

“... most organizations find they do not have the information, processes, and tools needed by their managers to make informed, responsive decisions. Too many enterprises under invest in their information infrastructure and business users tools.”¹

“Through 2012, more than 35 percent of the top 5,000 global companies will regularly fail to make insightful decisions about significant changes in their business and markets.”²

There is the ongoing requirement to balance the cost and effectiveness of performance. Companies work to retain their organizational structure, enforce corporate protocols, and foster business intimacy, all while competing against rivals and allies for key talent. Organizations must also deal with varied reporting and analytics standards. Most enterprises face increasingly stringent governmental controls, from the continuing impact of Sarbanes-Oxley and International Financial Reporting Standards to other emerging regulatory requirements.

Most corporations also assess themselves through a lens focused primarily on issues such as cost management, return on investment, and hierarchical support structures. The external market, however, tends to focus on issues such as market share, how a firm influences portion-of-wallet debates, the social/political/economic events that may influence the firm's prospects, and how the firm is positioned to survive and capitalize on market shifts.

Most financial and analytical systems tend to reflect an internal perspective, where a focus on cost center budget cycles often represents the sum total of corporate planning and wisdom. If organizations adopted a pure market view—with variable business support models and robust integrated analytics—they would enjoy intelligent and strategic budgeting cycles that yield far more reliable business outcomes.

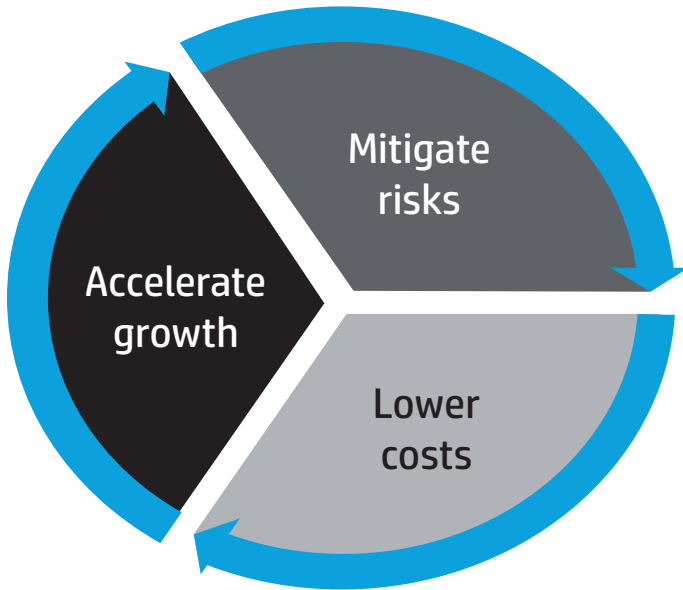
The fundamental problem is that, while financial reporting may be driven by standards and compliance to regulatory requirements, it is not always informative or helpful in decision-making.

Many organizations spend a great deal of time and money on the mechanics of reporting, yet give comparatively little attention to the process of analysis. Executives recognize the need for transformation and innovation, but those changes require more than technology. They call for a new way of thinking about challenges, innovation, and how managers view and understand their businesses.

¹ Gartner—Predicts 2009: Business Intelligence and Performance Will Deliver Greater Business Value, December 2008

² Ibid

Figure 1. Benefits of analytics



Organizations need a more structured, predictive program of analytics to improve compliance, mitigate risk, and discover new business opportunities. To make that leap, finance managers are now considering a new approach to BI, analytics, and reporting. This relationship-based approach realigns key responsibilities—rebalancing owned-based assets and project-based resources—to better match the needs and capabilities of the business enterprise.

Offering clear benefits

The relationship-based approach to analytics described here offers significant benefits to organizations across the industrial spectrum.

First, it establishes a repeatable process that is not dependent on the solo practitioner and leverages all available data to support faster and better decision-making. This analytics model enforces an adherence to structure and policy, giving companies clearer and more consistent views across business units, markets, and geographies.

By supporting definition-based and observation-based judgments, this model enables companies to fully use all available data, standards, and policies, and also apply their experience to gain a fuller, truer understanding of their situations. Those qualities translate directly into more efficient use of resources, faster and more efficient closings, and greater freedom to focus on value-added issues.

Also, by shifting the transactional mechanics to a competent outsource provider, companies are not only able to achieve clear cost benefits, but also have access to leading-edge technologies and new research findings, as well as to standardized analytic tools and methodologies. An outsourcing partner will provide ongoing training

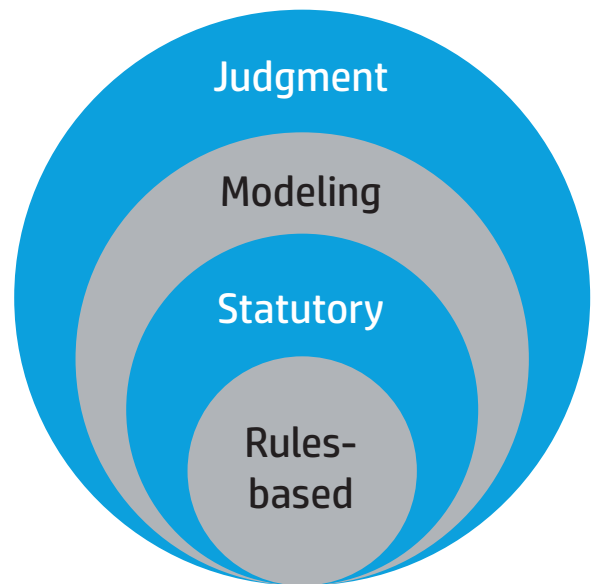
of staff, addressing both soft skills and new analytic frameworks and techniques. By delivering labor and intellectual arbitrage, a reliable analytic partner can apply the right talent to every task, while ensuring a seamless transfer of skills and knowledge.

By focusing on analytics as a process rather than an outcome, a model can be developed in which set-defined, attribute-based activities are assigned to a BPO provider—enabling the retained organization to focus on higher-level judgment applications. Key analytic processes are visible and accountable, and the retained organization has final, non-negotiable responsibility for enterprise reporting.

This represents a substantial shift in the responsibilities of most organizations. But if C-level executives hope to gain a clear understanding of their financial realities, it is an important and needed change. Companies need to use this approach to drive down cost, mitigate risk, and find opportunities to accelerate profitable growth.

This approach leverages economies of scale and enables better business outcomes for firms, including reducing working capital requirements, lowering the cost of customer acquisition and management, and reducing overall supply chain and procurement costs. At the same time, it gives organizations improved visibility into all spending related to analytics and reporting.

Figure 2. Analytics as a process



Companies can leverage this approach to mitigate risks, for example, by better managing credit exposure, creating supply chain flexibility to optimize inventories, and to reduce losses from diversion, counterfeits, revenue leakage, and fraud.

Implications for financial operations

How an organization chooses to manage analytics can significantly impact a wide range of financial operations, including record-to-report, order-to-cash, source-to-settle, and other critical activities.

In the relationship-based approach to analytics described here, retained staff functions as the “tip of the iceberg” by applying enterprise intimacy and strategic high-level judgments required to manage final outputs and responsibilities. The BPO partner, meanwhile, functions below the visible “waterline” to provide consistent data quality, operational excellence, rules-based transaction processing, and standard reporting muscle.

Many types of firms can benefit by outsourcing a growing portion of their business intelligence and analytics requirements, including those organized around the centralized and federated business models. Historically, companies with a single centralized center of governance enjoyed the best results from shared service centers. Today, by correctly balancing the BPO and retained organizations, companies that use the centralized and federated models are enjoying very positive results. Also, by leveraging the geographic strategy of a globalized BPO partner, the shared services approach can help overcome the localized talent challenges faced by many traditional organizations.

Companies must understand the skills and talents needed to produce the required outcomes. They can then construct an end-to-end process for talent management that focuses internal personnel on early-phase strategic planning and later-phase outcome management endeavors, while leveraging a BPO partner organization to handle the middle-phase work of transaction processing, light judgments, fiscal reporting, and analytics. This talent approach takes full advantage of economies of scale and place, as well as sophisticated labor arbitrage to deliver the optimum skill sets at the lowest cost.

This model also enables organizations to harness a “center of excellence” that brings greater automation and business process management to the financial close and reporting cycle. The goal of this approach is to push the mechanics of creating a financial report to the center of excellence, where the repetitive processes of formatting and applying rule definitions and standards can be done in a timely and economic way. After the transactional work is done, the retained staff—those most closely engaged with the business—can take those outcomes to make higher level judgments, gain insights, and drive real business value.

A more scientific analytic model also enables organizations to accelerate growth through initiatives such as improving the effectiveness of marketing spend and campaigns, by better managing their product and service portfolios, by spotting new growth opportunities, and by enabling new products and services to be launched more quickly and successfully. Thus, organizations can leverage BI and analytics to go beyond mere compliance, and move up the value chain by turning data into insight, and translating insights into better business decisions.

While some talk of the need for an idealized “single version of the truth,” the fact is most business organizations must necessarily address multiple perspectives, and therefore, divide and analyze data accordingly. Corporations must, for example, reconcile the very different requirements of accounting for sales commissions versus revenue-based billing, and reporting to comply with statutory or tax requirements and internal financial analysis.

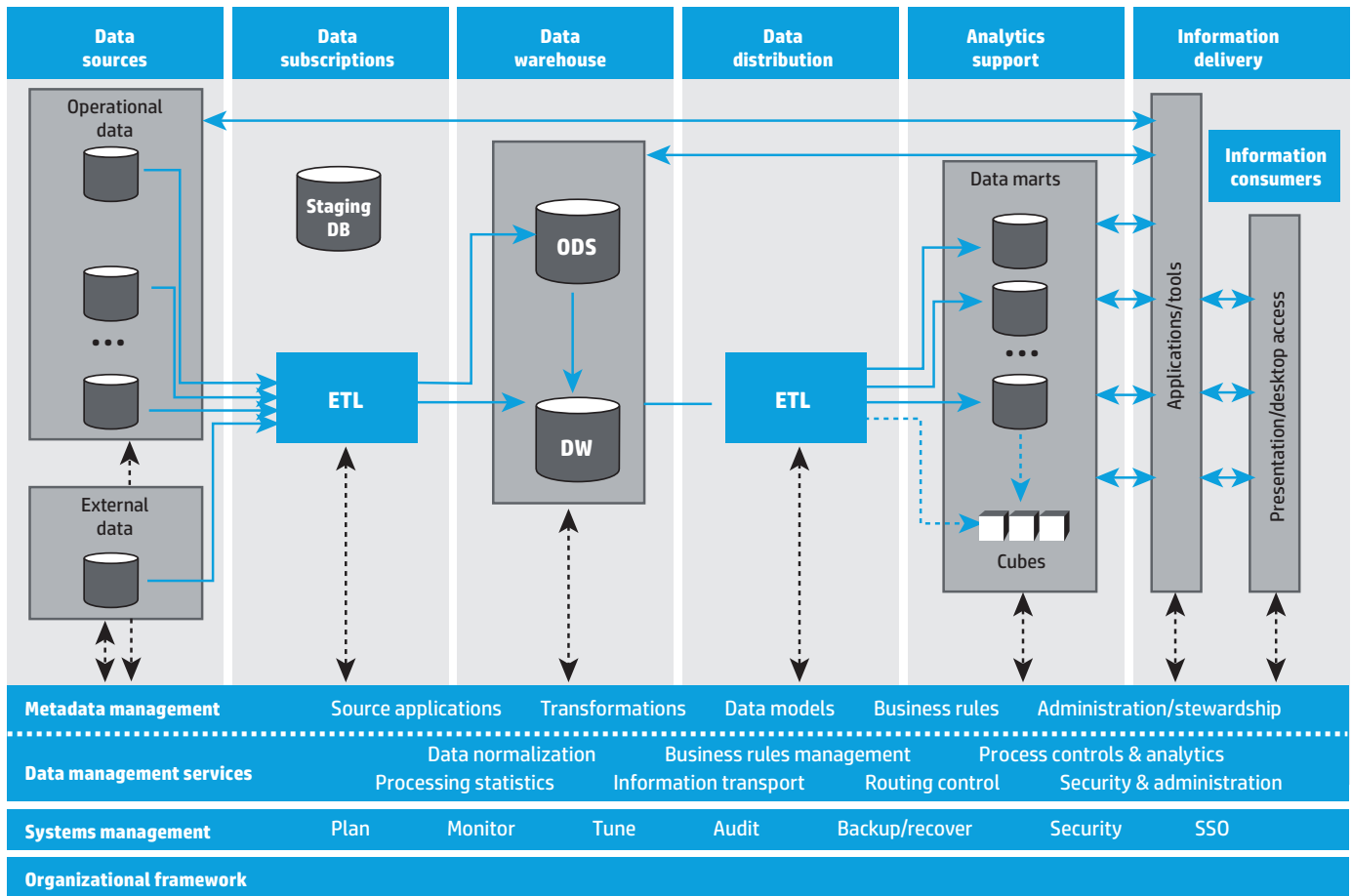
A properly aligned outsourcing partner can provide the reporting capabilities needed to support those necessary versions of the truth.

This analytic approach can help organizations better manage many of the operational aspects of financial reporting. By tasking a BPO partner to handle rules-based activity early in the analytic process, organizations can have their retained staff focus on higher-level judgments and outcomes. This approach better prepares organizations to meet inevitable ad hoc analysis and reporting requests. It establishes a clear delineation between rules-based policy and compliance analytic activities, and the higher-level qualitative and interrogative judgments needed to bring ownership and credibility to financial statement outcomes. Separating the transactional from the higher-level analytics also supports a heuristic, experience-based approach to sampling and modeling that enables companies to balance and prioritize risk, speed, cost, and other important operational variables.

By starting with a clear understanding of all required statutory and analytic outputs, and by using dashboards and other workflow tools to link and map all variables through the reporting system and out to the statement, companies can streamline the process, ensure visibility, and improve the outcome of financial reporting. To optimize the results of this relationship-based analytic approach, companies should establish a tolerance-based system for dealing with exceptions, and should use robust process definitions and communications to filter the flow of exceptions to the retained organization.

In many ways, this outsourced approach to analytics recaptures the lost art of financial reporting. It forges clear links from the transaction systems to the profit and loss statement and balance sheet and through to business outcomes. As noted, relationship analytics also transforms the role of the BPO provider, requiring those partners to move beyond simple bookkeeping to become true business allies.

Figure 3. BI-oriented service delivery



Improving BI outcomes

While BI depends heavily on data-related integration and analytics technology, the foundation layer of data warehouse generation and data quality software often pose the greatest challenges. Research suggests that investments, governance, data integration, and quality controls can measurably improve BI outcomes, primarily by giving managers the right data at the right time, backed by established policies and procedures.

Surveys by industry analysts and HP show that successful BI initiatives focus on master data maintenance, data quality, and providing a solid foundation for analysis and accelerated decision-making. By treating data as an asset, organizations can focus less on acquiring and storing information, and more on the business value derived from leveraging that data through its full strategic lifecycle. This requires accountability from the business and IT sides of the enterprise, and a commitment to demand a measurable return on the investment made in those data assets.

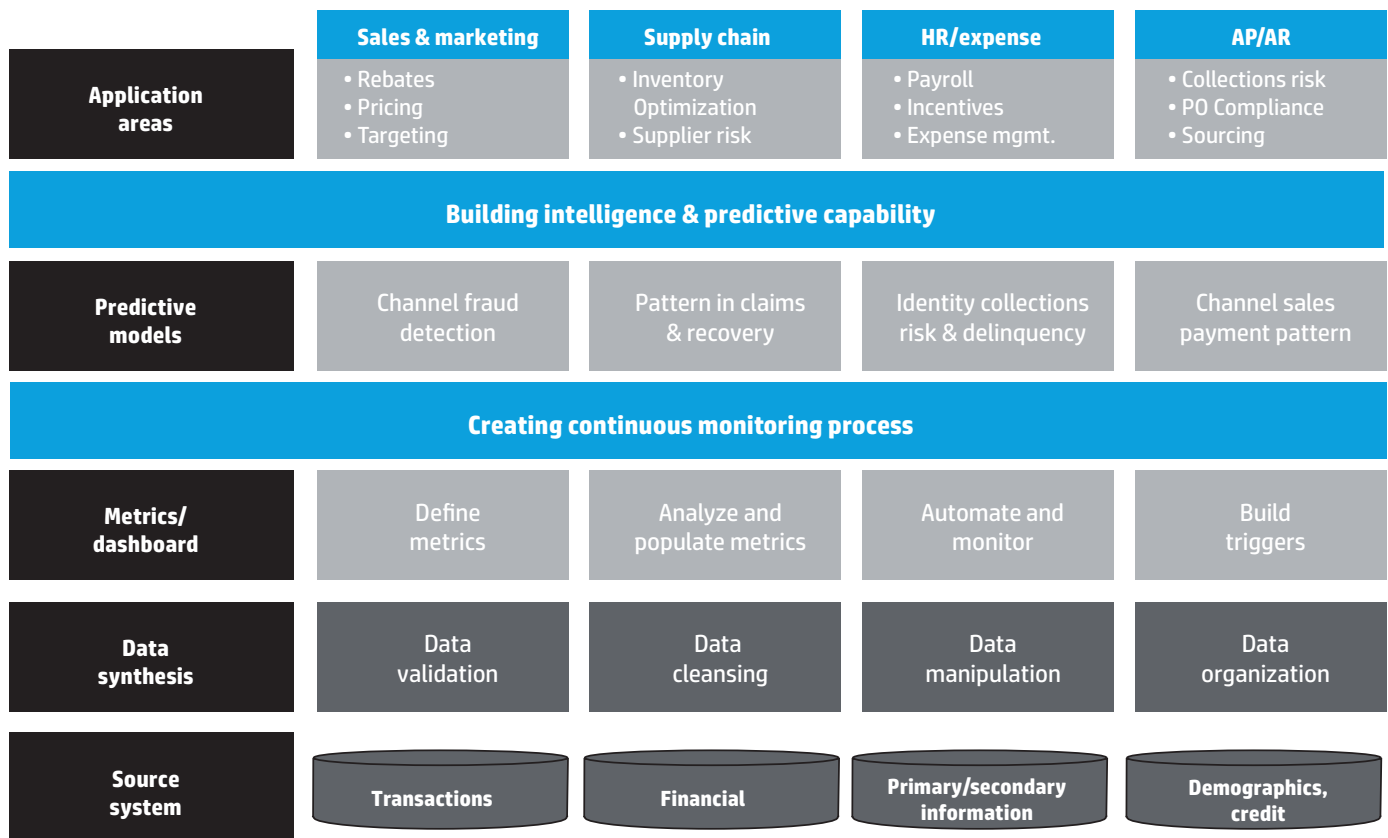
Even when they have timely access to quality data, organizations have won just half the battle. Leading businesses worldwide now recognize they must make sense of that data by leveraging robust analytics to lower operational costs and improve efficiencies, to reduce business risk, and to accelerate growth by responding faster to real-world conditions.

Today, HP sees leading organizations moving from offline-only analysis using siloed data and applications to an environment where BI, analytics, and reporting are integrated to the extent that they can improve processes, enable better decisions, and increase organization-wide productivity.

Figure 3 illustrates how a business intelligence framework can be developed and delivered for data provisioning and reporting.

Financial managers can leverage advanced BI, analytics, and reporting capabilities to meet a number of critical requirements. Cash flow and return on investment (ROI) modeling can be used to optimize offerings by segment and to better manage budgets and resource allocation. By better understanding procurement spend, pricing, and the macro-economic environment, companies can reduce supply chain costs, spend more effectively on marketing, and better understand and manage diverse business units.

Figure 4. Driving growth through analytics and monitoring



As shown in Figure 4, having access to primary, secondary, and transaction data; decision support; and analytical services helps firms drive growth through greater insights around market and competition, improved marketing spend effectiveness, or growing the wallet share of the existing customer base. It also can help improve operations efficiency through optimization and automation. Organizations can manage business risks at a transaction, customer, or portfolio level through sophisticated risk assessment, predictive modeling, and financial research.

Other analytic tools—such as procurement risk and discount-capture analysis, supplier risk assessments, and fraudulent claims modeling—can be used to enforce internal compliance policies, optimize collections, and streamline supply networks.

Addressing BI in the real world

In one recent real-world example, a large U.S. technology firm was experiencing losses due to fraudulent claims from channel partners. To address this problem, an end-to-end business intelligence and analytics solution was deployed.

The first phase involved data collection, validation, and analysis, followed by a process of building and validating workable analytic models for interactions, memory affect, decision-making, and ROI. To justify the investment, the team then estimated the expected project gains, analyzed key drivers, and established a process for tracking and assessing segment-based improvements.

The fraud model helped the company establish a more efficient and effective framework that resulted in reducing the time and effort of fraud detection by 50 percent and also expanded the coverage of claims that could be analyzed to detect the potential fraudulent transactions. The new framework and model resulted in an incremental lift of 13 percent in fraud prediction compared to previous efforts.

Providing the right approach

HP provides a relationship-based analytics approach designed to reduce costs, help mitigate risks, discover potential opportunities, and deliver better business outcomes. We have over 1,000 experienced professionals—most with advanced degrees in management, economics, or quantitative sciences—focused on delivering business intelligence and analytics services to internal and external clients.

HP services include agreed service levels, data security measures, and governance mechanisms along with a pool of industry-specific experts on data security and IT architecture. The HP technology leadership position helps reduce costs through consolidation of licenses and centralized purchase contracts for the various tools supported. Robust recruitment and in-house training on the latest technology advancements ensure that the HP team has the technical expertise on relevant tools like SAS, Unica, iLog, SAP, and CATRisk. HP Labs develops solutions that enable companies to accelerate growth, mitigate risk, and lower costs. Additionally, ongoing

research and discussions with academicians and analytic vendors provide insights for continually improving analytic methodologies and frameworks. HP offers BI and analytics expertise, proprietary analytical methodologies and algorithms, and the ability to integrate business intelligence technology frameworks with analytics to provide the robust capabilities world-class companies require.

Leverage relationships for better BI analytics

The demands on finance organizations have changed dramatically. To meet those challenges, organizations are realigning internal and external resources to better meet business intelligence, analytics, and reporting requirements.

Forward-looking companies now realize they can leverage extended relationships to do more than rote transactional processing. By outsourcing an expanding range of supportable analytic services to a reliable partner, organizations can harness a proven, consistent center of excellence-based framework for extracting relevant data, gaining truer understandings of their business, and translating that knowledge into actionable business insights.

This approach frees retained staff to focus on higher-level judgments, strategic decisions, and mission-critical accountability. This more scientific, relationship-based approach to reporting and financial analysis can and does yield better results. It enables organizations to be more proactive, more forward-looking, and to future-proof their reporting and decision-making processes. Leading organizations are using this model to reduce costs, discover new opportunities, mitigate risks, and deliver better business outcomes.

About the author

Rajesh Krishnan

Rajesh Krishnan is HP manager for Business Intelligence and Analytic Services. He is responsible for supporting solution design including marketing, presales support, and transition activities for all new engagements within the Analytical Services group. He has 12-plus years of experience across marketing, business development, and finance. He has a master of business administration degree and a bachelor of mathematics degree from the University of Delhi.

Get connected

hp.com/go/getconnected

Get the insider view on tech trends, support alerts, and HP solutions



Share with colleagues

© Copyright 2009, 2011–2012 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

4AA2-8647ENW, Created August 2009; Updated July 2012, Rev. 5

