



IQ Improvement Starts Here

Opportunities and Options for Gaining Better Insight and Control of Enterprise Performance

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You wouldn't purchase a car without a speedometer. Nor would you board an airplane if you knew the instruments weren't working. Yet many companies are operating without this kind of basic, timely feedback on their speed, direction and other critical indicators. Many also don't have insight into their operating and financial performance until long after they close the books, and, even then, they often have doubts about the accuracy and usefulness of this historic information. Most don't have information about key performance metrics, including governance, risk and compliance parameters, until after retrospective audits or other reviews. The bottom line: the accuracy, timeliness, reliability and transparency of information are not where they need to be.



In 2005, CFO Research Services in collaboration with Deloitte Consulting LLP embarked on a survey program that illuminated the pervasiveness of poor information quality (IQ) in today's enterprises. The initial survey summary, titled *IQ Matters*, reported that a majority of respondents did not have ready access to high-quality, reliable, useful information on operating and financial performance at their companies.¹ Queried on ten categories of IQ — combinations of the utility, timeliness and accuracy of financial and operating information — a majority of the senior financial respondents reported room for improvement in every category.

The summary of a recent follow-on to that survey, titled *Look Closer, Look Further*, reported that, two years later, the needle has still not moved much in a positive direction.² While companies do well at mandated information management activities, such as reporting financial results, they still struggle to produce the timely, accurate and insightful information needed for strategic planning, supporting board oversight and governance, making investment decisions, and identifying, monitoring, managing or mitigating risks. For instance, a near majority, 47 percent of the 443 senior finance and IT executives surveyed in 2007, reported that their companies struggle to produce and develop the desired quality of information needed to make good business decisions.

We believe one of the main reasons for this ongoing struggle is the perception of the issue as being large and intractable. Simply figuring out where to start is difficult for companies with mazes of disparate systems and variable processes. And certainly, most finance and IT executives, as well as the implementation teams that support them, are not looking for additional things to do as they work to align technology with the business's needs. Nevertheless, the issue of poor information quality is not going to go away because the consequences are far too significant and widespread. Take the recent experience of a large insurance company, for example. This company found that organic growth and acquisitions had resulted in a complex maze of finance and accounting systems and processes that adversely affected information access and quality. Across the company, there were:

- 14 general ledgers
- 20 charts of accounts
- 12 reporting systems
- 17 data repositories

In addition, company managers had created more than 300,000 spreadsheets in an attempt to reconcile and make sense of the data — a clear indication that the manual efforts needed to produce information were impeding productivity.

A large aerospace and defense company also found that it was not spending nearly as much on procuring product for its manufacturing process as its competitors. However, the company's low spend was not due to thriftiness; rather, the company couldn't account for how much it was spending with whom because it had different definitions of vendor codes within multiple systems.

A large life sciences company found that poor IQ was hindering control and performance. Different groups within operations would generate their own indi-

vidual backorder reports. These separate reports would often have conflicting information, which created confusion and delayed alignment around manufacturing priorities.

With such far-reaching effects, it isn't surprising that IQ can have a significant and growing impact on shareholder value. Eighty-one percent of the 2005 *IQ Matters* survey respondents said that better information can improve profitability; 82 percent said it can reduce costs.

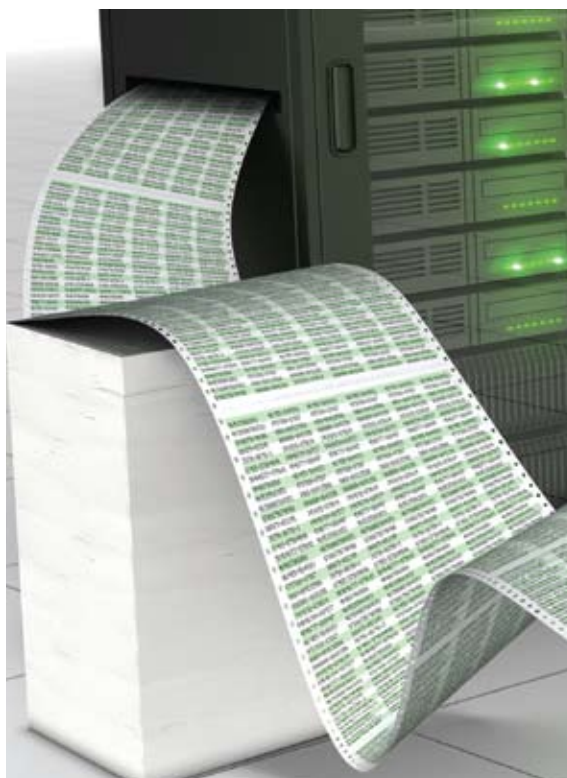
Yet, despite the widespread belief that improving IQ can generate tremendous value, based on the most recent survey, some companies are still reluctant to address IQ problems. Others have begun to tackle a handful of issues here and there, but only a few are approaching IQ comprehensively as a strategic imperative.

OBSTACLES AND OBJECTIONS

One of the reasons that IQ is such a significant problem today for so many companies is that historically it wasn't a priority. After all, we've invested heavily in information technology, so we must be getting the information we need, right? Yet only 41 percent of the senior finance and information technology executives included in the recent *Look Closer, Look Further* survey indicated that their companies consistently produce the desired quality of information needed to support management decisions.

There is also the issue of lack of ownership. Who is responsible for IQ? Many surveyed point to the CIO — after all the “I” stands for “information.” Certainly, the CIO has important responsibilities for people, processes and, of course, the technology related to information assets. But this is not the same as being responsible for the quality of the information. CIOs are usually responsible for the infrastructure that houses, stores, distributes and supports the maintenance of data security, but the CIOs don't control the inputs and outputs, and they don't control all of the strategies, decisions, actions, processes and people that ultimately affect IQ. Indeed, CIOs often don't even control the governance and decision-making concerning technology architecture, applications and IT processes. So who does have responsibility for IQ? In many companies, the hard truth, in our experience, is that this has not been clearly defined.

Another reason for the current, often poor, state of IQ is the complexity of



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today's companies in terms of variability in business processes, disparate and poorly integrated systems, and inconsistencies in data structures and definitions. Asked to identify the drivers of poor IQ, nearly half the respondents in the *IQ Matters* survey (45 percent) cited disparate, non-integrated IT systems and the variability of business processes as an acute problem that constrains management's ability to work effectively and focus on high-value activities. The challenge is to tackle unnecessary complexity that adversely impacts the overall enterprise with a solution that can be embraced by individual functions or business units. This state of affairs means that there is no quick fix or easy answer to this critical problem.

This perception of the issue as being immense and difficult is a primary barrier to doing something about it. Although there is a need to think about IQ comprehensively — from the standpoints of organization, processes, data and systems — it is neither necessary nor feasible to address everything at the same time. The principles of IQ management may be enterprise principles, but they can be applied logically and sequentially. We believe the solution is a journey, not a single project or a “big bang” event. It is possible to start with a particular type of information in a single business unit, geography or functional area and build out from there — the point is to get started somewhere.

A BROADER VIEW IS BETTER

A poor understanding of the business case for the investments needed to improve IQ often prevents companies from taking those first steps. A common mistake is to calculate return on investment based only on how a particular project will reduce IT costs, as opposed to taking a broader view of how better IQ can help the company achieve its strategic objectives. The *Look Closer, Look Further* survey showed a strong correlation between companies that consider a large number of factors in building their business cases for IQ improvement and a higher level of satisfaction with their ability to produce management information. Respondents reporting a broad business case — one that considers not only costs but also the potential impacts of IQ improvement — are more effective at gathering information for financial reporting, monitoring and measuring performance, complying with regulation, and managing risk, among other activities. Furthermore, nearly twice as many (60 percent versus 32 percent) said they “consistently produce the desired quality of information for making business decisions,” and are much less likely to struggle with developing high-quality information for decision making.

Fortunately, it's feasible to look broadly because IQ improvements can generate value in a number of ways. Business imperatives are typically furthered by the commonality of applications, processes and data standards that effective IQ demands. Better IQ can also help businesses to be proactive by allowing them to assess problems before they become crises and to respond more readily to market trends. Other benefits to consider include efficiency savings, effectiveness improvements, and risk reduction. Ultimately, the bottom line on IQ is the bottom line: How can enhanced IQ result in improved business performance?

While, in our experience, companies have begun to grasp the extensive benefits of improved IQ, many are still struggling to quantify the value of these

benefits. Lack of a baseline in terms of what it currently costs to produce management information poses a problem for many. Queried on the cost of management information, respondents in the *Look Closer, Look Further* survey said they have a sound understanding of only the most readily apparent costs, such as IT budget and spending with third parties. Embedded costs, such as unauthorized IT spending and the labor cost of non-IT staff engaged in gathering and confirming management information, remain elusive to most. It is clear to us that incorporating both broader business benefits and the total cost of producing management information is key to strengthening the business case and moving IQ improvement up the list of a company's priorities.

IQ ESSENTIALS

Packing your things for the IQ journey does not require heavy lifting, but it does require a new way of thinking. That's why we believe one of the most important prerequisites for any IQ initiative is to take a new view of the precursor to information: data.

In our experience, most executives, managers and directors suffer from data overload and information deficit. ("Data" is a collection of facts, figures and historic records. "Information" is a derivative of data that can be accessed and used to help develop insights, support decision making, and enable execution.)

It is vital to have a guidepost for determining what information and which information attributes are most important. A good rule of thumb is that IQ initiatives should be focused on the information that matters most in the company's efforts to achieve its goals and objectives. Determining which information matters most requires understanding a company's values and business strategy, as well as specific critical factors and risks that could affect performance.

For example, if the company's strategy is to be a low-cost provider of services, then IQ improvement efforts should focus on managing information related to activity-based costing and the cost factors that drive the business. On the other hand, if the company's competitive hallmark is customer service, it should focus on different information assets and categories, such as call center wait times, customer preferences, and satisfaction ratings. However, no single business objective should supersede achieving larger IQ value company-wide. IQ improvement should be guided by company principles, yet linked to concrete goals within the business units — not the other way around.

This connection is necessary to help build a strong business case for the initiative and to create a sense of urgency among change leaders to help overcome inertia and get the ball rolling.

SIX GUIDING PRINCIPLES FOR GETTING STARTED

1. Begin Somewhere

The journey toward improved IQ almost always starts with reducing unproductive complexity, which is, granted, a mammoth challenge. Why does the journey have to begin where so many fear to tread? Because simplification, repeatability and standardization make it easier to get information. The good news is that you can approach the task of reducing complexity from multiple angles, but you don't have to tackle them all at once. Consider these examples.

EFFECTIVE MASTER DATA MANAGEMENT

SUPPLIER



Vendor Master		
Vendor #	Name	Address
123	ABC	2 Main Street
234	PQR	1 Market Street

PRODUCT



Material Master		
Part #	Description	Unit of Measure
ABC	Widget	Piece
DEF	Bolt	Piece

MASTER DATA MANAGEMENT: ONE PATH TOWARD REDUCING COMPLEXITY

DEVELOPING AN EFFECTIVE MASTER DATA MANAGEMENT (MDM) STRATEGY IS ONE WAY TO HELP REDUCE COMPLEXITY. Master data is any data or construct that is applicable across multiple business transactions. ERP systems and other technology solutions use master data to define basic information required to execute the transactions. For example, a “supplier” is master data used in purchasing transactions. The elements that comprise supplier data include vendor number, name, address, etc. Supplier data is generally maintained in a “Master,” or a data warehouse pertaining to a particular area. In this case, it is often called a Vendor Master or a Supplier Master. On the other hand, a “product” is master data that is used in purchasing transactions. The elements that comprise product data include part

number, description, unit of measure, etc. Product data is generally maintained in a Part Master, Material Master, or Item Master. It is important to identify master data and to define it in a common way. For example, are products called the same thing throughout the business units? If an item is called a “widget” in one business unit, but it is called a “hex-bolt” in another, measuring how many are sold becomes more complicated than necessary. Similarly, if they are sold in “lots” in one geography and in “five-pound boxes” in another, measurement becomes even more complex. The idea behind Master Data Management is to establish a common language throughout the company. This simplified, standardized way of communicating forms the cornerstone of improving IQ.

From a data standpoint, if widgets were widgets everywhere in the company, it would make it easier to count how many widgets you have. From a process perspective, if the company bought things the same way through a standard supply chain system, as opposed to purchasing things differently from multiple vendors, it would make it easier to get information about what you were buying and from whom. The concept can also be extended to IT. If a company had one system instead of 10 disparate ones, then it would be a lot easier to house, maintain and extract the appropriate information when needed. Applying this “less is more” philosophy across organizational hierarchies, data, processes and systems is a good way to start thinking about what types of changes will be required to improve IQ.

2. Take It from the Top

Keeping the need for standardization and simplification in mind, the executive team should build the strategic foundation for IQ improvement by promoting information quality as a strategic imperative and aligning IT with business strategy. One way to accomplish this is by determining — from the top down and not the bottom up — what information is most important. The executive team can begin by asking:

- › What information do the CFO, CIO, VP of Sales, CMO, CEO and the board need to aggregate and understand to manage the company on a daily, weekly, monthly and yearly basis?
- › What are the implications of not having accurate, timely, reliable, and transparent information in these identified areas?
- › Which of these information areas needs to align most closely with the company's top strategic goals?
- › Where are the areas of unnecessary complexity? These can come in multiple forms and can affect any area of the company. In identifying them, some things to look for include:
 - Multiple data sources and inconsistent data definitions
 - Misalignments between data requirements and data availability
 - Redundant processes across business units
 - Manual and error-prone processes
 - Inefficient organizational alignment or human resource programs
 - Non-standardized and non-integrated technologies
- › What should be simplified, standardized and made repeatable along the five pillars of IQ improvement — data standards, processes, organization, governance and technology — to help alleviate the pain points and to improve the quality and flow of information?

3. Getting Things in Order

The next step is to prioritize which improvement issues to tackle first and how to go about doing it. IQ improvement efforts, which can span multiple business units, functions and geographies, can be difficult to explain and justify in and of themselves. Many companies have generated buy-in and improved value creation by linking IQ improvement efforts with other initiatives. Regulatory compliance efforts, such as Sarbanes-Oxley readiness and Basel II preparations, offer the most obvious link. Compliance-related activities can (and should) be used to identify and catalog IQ improvement opportunities. To this end, it is helpful to include an explicit work-thread in the company's compliance program to identify and document improvement opportunities. IQ efforts can also be linked to other initiatives like CRM implementations, supply chain efficiency efforts, and risk management programs.

Once the improvement opportunities have been identified, it is important to prioritize them through a structured process. Companies may wish to develop a framework on their own or use one that has been developed and tested by others. In either case, the objective is to sequence improvement opportunities and to develop solid business cases to help secure support from the board and senior executives.

4. All Aboard

Improving IQ usually requires making changes in data standards, processes, organization, governance and technology. Because of this, it requires all hands on deck. A variety of competencies spanning functions, disciplines and geographies are typically required to effectively carry out IQ projects of any size. It's tempting to see the CIO as some sort of information god, and undoubtedly the CIO should be seen as a key business leader and counselor in any IQ initiative — but not as the sole person responsible for it.

IT and the ultimate owners of IQ — the functional areas — should collaborate closely to help define master data, pinpoint business-critical information, identify information stewards and subscribers, and develop ways to meet the company's decision-making and reporting requirements. Collaboration between finance and IT throughout this process is also very important because finance has become the aggregator and interpreter of most operational information and has critical knowledge about business and analytical requirements. Ultimately, the journey toward improved IQ is a joint venture; it requires collaboration and communication among the business leaders, the CIO and the CFO.

5. Rules of Engagement

The old computer adage, “garbage in; garbage out,” suggests how important information governance can be. An effective information governance framework is essential for providing data accuracy and preserving its integrity. This framework should encompass information-management policies, procedures and principles, as well as assign ownership and accountability for information monitoring and managerial tasks. In developing this framework, consider forming cross-functional councils to oversee information quality in specific areas, such as customer information or product information. These councils should be structured and authorized to act across functional and business unit silos and to help promote stakeholder cooperation and cross-functional collaboration in addressing IQ issues.

Information governance demands a balanced approach both at the policy and stewardship levels. Organizations that have a defined policy with no standards or processes to support the implementation of it will fail and vice versa. Plus, good governance and accountability within the business units are what make IQ improvements stick. Information improvements usually don't fall apart because of the systems per se, but rather because leaders fail to insist upon adherence to the rules and policies and, instead, allow variability and lack of discipline to creep back in.

6. Say What?

IQ improvement is essentially about moving beyond the status quo and overcoming preconceived notions of what IQ is about and who is responsible for it. That is why change management, which is an important component of any type of initiative, is particularly vital to IQ improvement. It's about getting the message across that IQ is a priority, as are the obligations surrounding it. Indeed, ineffective communication of information policies and procedures is a major pain point in advancing new governance strategies, cited by 49 percent of those surveyed in a recent Aberdeen Group study on information

governance.³ The communication plan should also continually demonstrate that the IQ program has been adopted and endorsed by executive leadership. Especially valuable are progressive “quick wins” (changes that can deliver value rapidly) and public recognition of these results. These create buy-in and sustain momentum for the initiative.

CHANGING THE GAME

Moving ahead, companies that effectively implement IQ improvements will set clear IQ goals that go well beyond just getting by. The challenge will be to maintain consistent focus on information accuracy, integrity, transparency and timeliness over the many years that it will take to achieve high IQ. One way to maintain this focus is to develop an information strategy by asking, as a first step: “What **information** do we need to support improved business performance and good governance, risk management and regulatory compliance?” This stands in contrast to what most companies do, which is to skip the information strategy step and to charge ahead in establishing a data architecture by simply asking: “What **data** do we need to feed the system?” As a result, they end up with a new system that runs transactions just fine but doesn’t produce management information any better than before.

IQ improvement is really about changing the game — a shift from viewing information quality as a regulatory burden to viewing it as a way to help create value. Although governance, compliance and risk management have been powerful forces in demonstrating that IQ matters, meeting regulatory requirements should be the starting point — not the final destination — on the IQ journey.

DR

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Endnotes

- 1 *IQ Matters: Senior Finance and IT Executives Seek to Boost Information Quality*, a survey report prepared by CFO Research Services in collaboration with Deloitte Consulting LLP, November 2005.
- 2 *Look Closer, Look Further: How to Build a Better Business Case for Improving Information Capabilities*, a survey report prepared by CFO Research Services in collaboration with Deloitte Touche Tohmatsu, October 2007.
- 3 *The Information Governance Benchmark Report: A Needed Strategy for the Enterprise Backed by Viable Solutions*, a survey report prepared by the Aberdeen Group, July 2006.



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