Riding the Transformation Wave in Government with Performance Management and Next-Generation Business Intelligence

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About the Author



Alan Simon is the author or co-author of 27 books, including *Data Warehousing and Business Intelligence for E-Commerce*, 90 Days to the Data Mart, and Data *Warehousing For Dummies*. He is currently

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Alan is the Managing Principal of his own consultancy, Precision Business Intelligence LLC. He held vice president-level positions in global and national BI practice at several professional service organizations before starting his own firm. His client work emphasizes BI and performance management strategy, architecture, and roadmaps, along with techniques for the revitalization of underperforming BI environments. Alan also serves as the Senior Director for Business Intelligence Solutions at a partnering company, DSK Solutions, Inc., which provides services to the association marketplace and addresses many of the same not-for-profit performance management and BI challenges that confront government agencies.

His government clients have included the Pennsylvania Department of Transportation, Pennsylvania Department of Health, Wisconsin Department of Administration, Santa Clara County, and the United States Department of Defense. From 1982 to 1986 Alan was a U.S. Air Force officer, stationed at Cheyenne Mountain, Colorado. Commercial BI clients have included Coca-Cola, McDonald's, Quaker Oats, Pfizer, PNC Bank, US Steel, and many other global companies.

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Introduction

"What is going to happen, Dave?" "Something wonderful." – 2010: The Year We Make Contact

When it comes to performance management in government, something wonderful is going to happen. And even better: you don't have to wait until 2010, but in fact you can—and should—begin embracing the transformational powers of performance management systems now.

The day-to-day activities of most government agency managers in the United States have been bracketed in recent years within various laws and regulations mandating the measurement of various key performance indicators in the pursuit of achieving and sustaining tangible, quantifiable objectives. These mandates include:

- Government Performance Results Act of 1993 (GPRA), with the charter to "initiate program performance reform with a series of pilot projects in setting program goals, measuring program performance against those goals, and reporting publicly on their progress." (http:// www.whitehouse.gov/omb/mgmt-gpra/ gplaw2m.html)
- The Office of Management and Budget's *Program Assessment Rating Tool (PART)*, which "was developed to assess and improve program performance so that the federal government can achieve better results." (http://www.whitehouse.gov/omb/part/)
- *The President's Management Agenda*, which contains directives for a number of government-wide and program initiatives under the rubric "Improving Government Performance." (http://www.whitehouse.gov/omb/budget/fy2002/mgmt.pdf)

Furthermore, this move toward a mandated linkage between government and measurable performance extends beyond the U.S. federal government to states and municipalities across the United States. For example, 2005 saw the publication of *Pennsylvania's New Performance Management Plan and Benchmark Report on Current Workforce Programs*, and many states have either laws or executive orders requiring some form of measurable, scorecard-like performance management.

And it's not just government agencies in the United States that have embraced performance management. For example, the Treasury Board of Canada Secretariat *Management Accountability Framework (MAF)* was developed to provide all deputy heads and managers with a list of expectations that reflects public service responsibilities, and "consists of 10 essential elements of sound management, followed by a series of indicators and associated measures." (See http://www.tbs-sct.gc.ca/ maf-crg/documents/booklet-livret/booklet-livret_e.asp for more details about government performance management in Canada.)

Clearly, performance management is permeating all levels of government around the world, a trend with a rate of growth that will only accelerate in the years ahead.

To some, the tracking and measurement, scoring, analysis, and reporting associated with government performance management seem to be a burden—a "tax" imposed on the day-to-day work of government agencies and their employees. But just as the *Sarbanes-Oxley Act of 2002* has a silver lining for private sector companies, in that it forces them to devote significant efforts and resources to internal controls and accountability, mandates for government performance management should also be thought of as a once-in-a-generation opportunity to catalyze and maintain a transformation of work processes and organizational structures so that they more effectively and efficiently serve constituencies.

A laudable goal, no doubt. But is it an achievable one?

Absolutely!

Bringing Together Business Intelligence and Performance Management

The modern era of business intelligence began in 1989-1990, when organizations first opened data warehouses to provide consolidated reporting and analytical capabilities despite the rapidly widening dispersal of applications from centralized mainframes to minicomputers and, increasingly, to environments based on local area networks. Throughout the 1990s, BI tools enabled a broad range of capabilities, from basic reporting through drill-down and other online analytical processing techniques, usually in pursuit of "better decision making using our data" or some similar objective.

However, many organizations failed to fully utilize the power of the new BI tools and implemented systems that primarily delivered after-the-fact, "tell me what happened" reporting. This environment improved decision making only marginally; worse, it did little to actually measure and improve an organization's performance against tangible objectives.

Until recently, many organizations—particularly government agencies—had relatively few "touch points" between their business intelligence and performance management initiatives (see Figure 1):



Figure 1. The Traditional Relationship between BI and Performance Management

Among the many reasons for this historical disconnect between BI and performance management, most are related to either work processes (including both development methodologies and the actual deployment and use of BI systems), or human factors and organizational culture, rather than the BI technologies and products themselves. Or, stated another way: we've had access to tools and technologies that can catalyze and sustain performance management in both the private sector and government, but we're still largely unable to fully harness that power.

Two of the reasons for the BI-performance management disconnect—both briefly mentioned earlier—stand out and are worth exploring further:

- the overarching "making better decisions" mission of too many BI initiatives;
- the inherent, overpowering "rear view mirror" nature of BI that too often impedes real performance management.

Making Better Decisions...But Then What?

The mantra of many BI projects has been to enable users to "make better decisions"—with "better" usually meaning "from our data" rather than from anecdotal evidence and experience (and an occasional flip of the coin) alone. Though few would argue with the merits of data-driven decisions, there is the supplementary question: "What will those 'better' decisions get us?" This question has been posed far too infrequently—and addressed even more infrequently—to result in a BI implementation that has had a material impact upon an organization's results.

Most BI strategists and architects will acknowledge the obvious precedence-successor, cause-and-effect relationship between "better" decision making and performance management: the whole reason for investing time and resources in developing a BI environment to support decision making is that those decisions should improve overall organizational performance. Too often, however, lack of attention to work processes and human factors results in an environment that is technologically sound but functionally limited. Reports and analytics are widely available and tell a fairly good story about what happened in the recent or distant past, yet a linkage between that content and improved organizational performance is not realized.

BI as a (Mostly) Rear View Mirror

The ideal business intelligence solution should provide views into the past, the present, the future—or at least the likely future—and "the

unknown." BI users should be able to access data and perform analytics of the following types¹:

- "Tell me what happened, and why"
- "Tell me what is happening right now, and why"
- "Tell me what is likely to happen"
- "Tell me something interesting and important, even without me asking a specific question or running a particular report"
- "Tell me what I should do"

Too often, a BI implementation does a creditable job of after-the-fact reporting and analytics—the "tell me what happened, and why" requirement—yet comes up short when addressing the other items in the taxonomy above, admirable vision statements notwithstanding. Why? The flaw is often found in the underlying data warehousing environment. Business intelligence has been tightly coupled with data warehousing for many years, and data warehousing (at least in the conventional sense) typically:

- contains a large volume of historical information;
- inherently has latency constraints because of the batch-based extraction, transformation, and loading processes used to refresh its contents; and
- is often a "technology play" with the primary intention of providing "one-stop shopping" for reports from multiple sources.

Data warehouses and the accompanying BI capabilities often succumb to what seems to be a universal force almost as powerful as gravity, which results in an environment that primarily supports "tell me what happened, and why" after-the-fact analysis.

Valuable? Of course. A complete BI solution that catalyzes performance management? Rarely!

Rethinking the Definition of "Business Intelligence"

Many people are familiar with the term *actionable intelligence*. Performance management is very much a matter of actionable intelligence—or *actionable insights*— with the emphasis on the word "actionable."

This author's understanding of business intelligence has nothing to do with vision statements about improving decision making. Business intelligence should be understood as "using powerful tools and technologies to provide *timely*, *accurate*, *high-value*, and *actionable insights*." In this light, business intelligence and performance management are nearly indistinguishable from one another, as represented in Figure 2 below. Indeed, many forward-looking organizations in both the private sector and government have embraced the concept of BI and performance management as two sides of a single coin, and have built and deployed solutions based on that concept.



Figure 2. Today's (and Tomorrow's) Ideal Relationship between BI and Performance Management

However they are conceived, there is clearly a symbiotic relationship between BI and performance management. Best practices demonstrate that aligning not only the respective technologies of BI and performance management but also the work processes and human factors will give an organization a significant head start toward meeting its mandates efficiently and effectively. While conventional BI implementations may not have been effective in "forcing" users to make better decisions—and more importantly, *to take appropriate actions in concert with those decisions*—single-platform solutions can now dramatically increase the actionability of insights available from an organization's data for building and maintaining a gateway to performance management.

¹ This past-present-future-unknown BI taxonomy has gained favor in recent years but is not new; an article for Byte by this author in January 1997 (Better Clients, Better Decisions – http://www.byte.com/art/9701/sec7/art3.htm) described the importance of going beyond simple after-the-fact analysis for true BI capabilities (albeit with references to many long-since-defunct BI vendors and products).

Dealing with Buzzword Bingo and Anagram Anarchy

"In the beginning, there was Management Information Systems (MIS). But MIS was without form, and void. So MIS begat Decision Support Systems (DSS), which begat Executive Information Systems (EIS), which begat Data Warehousing and Business Intelligence (BI).

"And Data Warehousing begat Data Marts and Operational Data Stores (ODS). And Business Intelligence begat Corporate Performance Management (CPM) and its siblings Business Performance Management (BPM), Government Performance Management (GPM), and Enterprise Performance Management (EPM)."

Haven't had enough? Throw into the mix a little Business Activity Monitoring (BAM), yet another BPM—this one Business Process Management—and, while we're at it, still one more BPM: Business Performance Measurement. (Or is that Business Process Measurement? Or maybe Business Process Monitoring?)

What would the world of technology be without opportunities to jump onto the latest "movement" bandwagon with a bucketful of acronyms? A lot less confusing!

Each of these "movements" has attempted to resolve the same problem facing technology for nearly 50 years and the overall world of business for much longer: how to get the most out of tactical and strategic decisions, and the actions that follow, to achieve the best possible performance. Whatever its methodology, an organization can solve this primary problem by architecting, developing, deploying, and committing to a system that can be identified with this all-inclusive prescriptive acronym:

BDAPPMMM

Which, of course, stands for:

Business Decision, Activity, and Process Performance Monitoring, Measurement, and Management

If "business" is understood in the general sense of "doing business" rather than the "lines of business" of for-profit companies, *THE ACRONYM* can be applied to government agencies as well as commercial enterprises.

Even more important is the premise that we must develop—and stick with—a single all-encompassing environment that:

- enables "better" *decision making*, but doesn't stop there, because it also...
- supports all of "the three Ms"—monitoring, measurement, and management—of...
- business *activities* (finely grained work tasks) and larger-unit, longer-duration work *processes*.

After all of this, only one letter from the BDAPPMMM acronym remains: the second "P" for **PERFORMANCE**!

From Concept to Reality

It's not enough to make sweeping statements that business intelligence and performance management are inextricably linked. Government agencies need practical guidance to help prevent the best of intentions from eroding into a disappointing, underperforming implementation that does little for managers who must meet the requirements of PART, GPRA, or MAF, or for those at other levels of government dealing with similar mandates.

If most conventional approaches to business intelligence have often failed to effectively support performance management initiatives, a fresh look at the problem is called for. Organizations must find a way of overcoming the challenges and barriers that so often derail a BI initiative before it can achieve its full potential.

The remainder of this paper describes three techniques that can be applied within any methodology an organization has adopted. So while some tweaking and augmenting of project work plans, checklists, and flowcharts may be necessary to accommodate these techniques, they will not displace the performance management scorekeeping (e.g., balanced scorecard, value-based management) already in place or prescribed by the various government performance management mandates discussed earlier.² These techniques are:

- 1. Create a persuasive collection of "telling a story" representations of both the current state and desired future state of organizational performance for various time periods: one day, one week, one quarter, and one year.
- Borrow key constructs from military and intelligence mission-critical systems while collecting and defining requirements that link measures and indicators on scorecards and dashboards to an underlying environment that actively supports work processes aimed at achieving top-rated scores.
- **3.** Build and deploy a performance management environment on a full-functioned, architecturally

² If by some chance a government agency has yet to be impacted by a particular performance mandate, it will likely happen sooner or later. To see a preview of what might be waiting in the wings, check out http://www.valuebasedmanagement.net/ for a very long list of methodologies and scorecarding techniques, most of which are dedicated to the discipline of performance management. evolvable technology platform that supports comprehensive performance-oriented functionality, from monitoring to measurement to management (see the sidebar "Dealing with Buzzword Bingo and Anagram Anarchy").

One final point: most commentators have asserted that a successful systems development initiative requires equal attention to technology, human and organizational factors, and work processes. The three techniques described here do exactly that. The "telling a story" representations address the human and organizational aspects of job functions and change management, along with today's—and hopefully tomorrow's—work processes depicted in related diagrams. The second technique involves taking a fresh look at work processes through a focus on the form and timing of various information flows among all parties. And a superior technology platform must include hardware, software, and supporting components that give effect to the initiative's requirements.

Tell – and Sell – a Good Story

Many methodologies call for collecting and depicting functional requirements through use cases, which "allow description of sequences of events that, taken together, lead to a system doing something useful"³ by providing "one or more scenarios that convey how the system should interact with the users called actors to achieve a specific business goal or function."⁴

Use cases are certainly a valuable tool in assembling the finely grained details of functional requirements, but they are utilitarian in nature: rather dry, not very compelling, and not often effective as representations that can meet the challenges of achieving organizational transformation and a culture of superior performance management. Most use case techniques deploy stick figures, lines, and ovals (see Figure 3 on next page) in a simplistic depiction of performance scenarios.

³ Wikipedia.org entry for "Use case" – http://en.wikipedia.org/wiki/Use_case – which cites Kurt Bittner, Ian Spence, Use Case Modeling, Addison Wesley Professional, 2002, pp. 2-3.

⁴ Ibid.



Figure 3. A Portion of a Typical Use Case Diagram: Informational, but Dry and Unpersuasive

For requirements collection and subsequent validation, diagrams such as Figure 3 are fine. But for telling a compelling story about the need for organizational transformation in the pursuit of performance management—and, even more importantly, for depicting a desired future state—use cases usually prove to be inadequate.

Try a variation on the theme: in a graphical depiction, put together a series of persuasive "day in the life" diagrams for both the current state and the desired performance management-intensive future state (see Figure 4 for an example of the latter).

Imagine a day when...



All Branch Chiefs and Field Supervisors have instant access to timely, consistent, and accurate metrics to monitor and measure operational performance for our crisis preparation mission.

Figure 4. A Sample "Day in the Life" Future State Illustration

These "day in the life" diagrams are especially persuasive when presented in pairs, with one illustrating the current state of work activities and processes and how they are monitored, measured, and managed, and the other illustrating the desired future state.

Prepare illustrations that cover four different organizational timeframes:

- a single "day in the life" with emphasis on shortduration, highly operational work activities whose success—or shortcomings—can greatly affect an agency's ability to meet its performance management objectives;
- a "week in the life" that describes longer-duration but still operational—work activities and processes, again focusing on those with the greatest impact on performance management success or failure;
- a "quarter in the life" with emphasis on measuring and tracking key metrics to identify performance problems that can be "interdicted" and turned around if timely detection of shortcomings occurs;
- a "year in the life" with emphasis on measuring success against annual key performance indicators and feeding those results into the planning process to either sustain superior performance or, if performance falls short, adjust for the next year's efforts.

Concentrate efforts on future state depictions of highly functional uses of data—the *actionable insights*—to emphasize the critical linkage between superior business intelligence capabilities and performance management. Provide compelling examples of each item in the taxonomy presented earlier ("tell me what happened, and why," "tell me what is happening right now, and why," etc.) to make clear the need to develop and deploy BI capabilities that go far beyond traditional after-the-fact reporting and analysis.

Borrow Key Constructs from the Ultimate "Performance Management" Missions

Think of performance management as having three layers (see Figure 5):

- the user-facing top layer, consisting of scorecards, dashboard interfaces, reports and analytics, and other features;
- the bottom layer, holding the wealth of available data from which the scorecards, dashboards, reports and analytics will be produced;
- the middle layer, in which the metrics available in the user-facing layer are created and provisioned, with each metric supporting the objectives set for specific operational and strategic work processes.



Figure 5. A Three-Layered View of a Representative Performance Management Environment

What should be included in the middle layer that will make the best use of the available data in order to meet all performance objectives and receive the highest possible scores on the metrics by which performance is being measured? Creating reports and analytics is only part of any implementation; the uses to which those reports and analytics are actually put will determine the success of the implementation—either by design or by happenstance.

Highly useful advice often comes from unexpected sources, and in this case we turn to the operational systems used by the United States military and intelligence communities, which collectively are referred to as either C3I or C4I.⁵

On the following page is a condensed description of the way the United States military handles its mission of missile attack warning⁶. It's not the details of this mission—or similar ones such as air defense or terrorist tracking—that are relevant to business intelligence and government performance management, but rather the *key concepts*. Adopting and embracing these concepts from the outset of any performance management initiative will help enable the use of next-generation business intelligence to achieve success in that initiative.



Figure 6. The Missile Attack Warning Mission: Sequence of Events (Condensed View)

- 1. The U.S. military maintains a network of satellite-based and ground-based sensors either fully or partially dedicated to the mission of detecting missile launches and, as quickly as possible, determining whether a particular launch might be a threat to the United States or its allies (rather than a test launch by "the opposing side"). The term event refers to any missile launch.
- 2. Upon detection of a launch, an initial, very rapid data collection effort begins, in which the missile's point of launch, trajectory, and other data points are gathered and an initial *hypothesis* is formed with regards to whether or not a potential threat is at hand. Simply put, if the missile is headed toward the United States or any of its allies, there's a potential threat; if it's headed toward the usual down-range destination for the opposing side's test launches, then it's most likely not a threat—but still needs to be tracked.

The key point: this event is important enough that it must be immediately detected and tracked; an initial "best guess" must be made with regards to its potential severity; and it *cannot* be "lost in the shuffle" because time is of the essence, and the consequences of acting too late could be catastrophic!

- **3.** Further along the network of sensors, there will be additional tracking by various radars, especially if the launch appears to be a threat. These new data inputs must be *correlated* with information already in the system not only to keep an accurate count of the number of missiles in the air, but to augment the data already collected and either prove or disprove the hypothesis that this particular launch is a threat.
- **4.** Eventually, a hypothesis must be either proven or disproven and lead to a *definitive conclusion* upon which appropriate action can be based.
- 5. In the past, missile warning had no *interdiction* component similar to the corollary air defense mission (sending up fighters to intercept incoming enemy bombers). Now, with a missile shield and anti-missile technology under development, interdiction (or "corrective action") will be integrated into the overall work stream.
- 6. There is a well-defined, well-rehearsed set of responsibilities for every person involved at various locations: at the sensor sites, at Cheyenne Mountain, Colorado, and at other military bases; and for those responsible for ordering and carrying out any potential

interdiction mission to prevent an enemy missile from reaching its target. Frequent *exercises* and *experiments* are held (e.g., launching missiles not only to test those weapons but also to test the dedicated sensors' ability to detect launches and act according to plan).

7. Throughout the process, a constant stream of *communications*, both voice and data, is maintained among all parties at all command centers and other locations. Every effort is made to ensure that all decision makers and operational personnel have the same accurate, timely information upon which to base their respective actions.

The key characteristics of this scenario—events, hypotheses, correlation, definitive conclusions, interdiction, well-defined roles, universal communications—are essential to the middle layer of an effective performance management environment. Dr. Shelley Metzenbaum of the University of Maryland's School of Public Policy describes in *Measure to Comply, Measure to Conform*⁷ a performance management process consisting of three building blocks:

- detection of problems and successes;
- diagnostics and treatments;
- dissemination.

In defining each of these building blocks, Dr. Metzenbaum uses language strikingly similar to the preceding description of the mission of missile attack warning. For example, the first set of activities—detecting problems and successes—is based on the rapid detection and processing of information about both unwanted, adverse events and events she identifies as "beneficial." Not only is similar terminology applied to both mission-critical military systems and performance management, similar technology can also be applied to both sets of challenges.

Dr. Metzenbaum then describes how to address both adverse and beneficial events, suggesting that it is unacceptable to the mission at hand to lose track of, ignore, or otherwise not properly address these events. Diagnostics and treatment represent actionability within the stream of work processes, and include controlled experiments, along with the forming of hypotheses that are eventually proven or disproven. Dissemination activities resemble the constant stream of communications that is integral to the missile attack warning mission: it doesn't do anybody any good to hoard information when the consequences can be catastrophic!

Whether an initiative is conceived in terms of missile attack warning (or air defense, or terrorist tracking, or some other critical mission) or more conventionally, in terms of an agency's responsibilities—public education, public safety, public welfare—it is not only undesirable but also *unacceptable* to pursue a performance management initiative within which the middle layer depicted in Figure 5 is an amorphous cloud with constantly shifting form and functions that, upon examination, proves to be nothing but vapor.

Defining the "right" metrics and indicators to track at the top layer and having a wealth of data available at the bottom layer to provision those metrics isn't enough. A successful implementation must have a **well-defined**, **tightly orchestrated**, and **proven** set of work processes that when properly executed provide the "glue" between those two layers and complete the performance management picture.

Build on a Full-Functioned Technology Platform

Solid concepts are one thing; providing a technological base that can make those concepts a reality is another. In performance management, a well-thought-out, highly functional implementation is almost always possible if it is aligned with both the principles and the "tips and tricks" discussed in this paper. The questions awaiting an answer are how straightforward such an implementation might be and how much "system integration magic" will be required in the course of development efforts.

A case in point: in late 2001 and early 2002, this author was charged with leading a team to develop a nextgeneration BI proof of concept using the Cognos toolset. The functional area was bioterrorism and outbreak

⁷ Available at http://www.complianceconsortium.org/ECCArticles/ wp_measure_to_comply_measure_to_perform.pdf or

management (a high-priority concern at that time), with key performance indicators tightly integrated into the operational mission: detection and confirmation of an outbreak, tracking and management, confirmation of diagnoses in parallel with syndromic surveillance (hypothesizing what was occurring on the basis of collections of symptoms rather than actual disease diagnoses), and more.

From the reporting and analytics perspective, the various capabilities provided by the Cognos toolset delivered the right information to the right people at the right time. But the detection and processing of real-time events, the dissemination and communications functions, the constant updating of up-to-the-second dashboard views, and other key constructs of the performance management environment required a great deal of "system integration magic" to support the necessary capabilities and the overall mission.

Today, less "system integration magic" would be required to repeat such an effort—or to embark on almost any performance management initiative. The integrated capabilities of the IBM Cognos 8 BI environment that are particularly relevant in turning the concepts presented in this paper into a real-world, highly functional, and architecturally evolvable performance management system include:

• Business Event Management (BEM): Whether addressing a mission-critical system such as missile attack warning or a performance management mandate such as GPRA or PART, events must be the starting point in determining any requirements for work activities and business processes that will not only monitor and measure performance but also positively influence outcomes. Event managment, a capability of IBM Cognos 8 BI, enables the detection and correlation of events as well as initiation of a workflow that drives actions and tracks the lifecycle of those events to their resolution.

- Cognos Framework Manager (Enterprise Framework Services): A common infrastructure consisting of metadata management services, portal services, security management, and environment administration is essential to expedient development as well as longer-term systems maintenance and evolution.
- Service-Oriented Architecture (SOA): IBM Cognos 8 BI incorporates a single, modern Web services architecture using widely adopted standards such as XML, SOAP, and WSDL.
- Integrated Scorecarding and Dashboards: BI and performance management require much more than reports, no matter how timely and accurate those reports might be. IBM Cognos 8 BI includes scorecarding and dashboard capabilities for both strategic and operational usage across the full range of work activities and processes.
- Operational Business Intelligence: The IBM Cognos Now! capabilities provide real-time dashboards for a mixture of data warehouse and application source content, delivering a "first line of defense" for monitoring, measuring, and managing performance.
- Search Capabilities: The IBM Cognos 8 Go! Search service helps overcome one of the most frustrating problems that can turn what should be a highly functional BI and performance management environment into a difficult-to-use maze: information overload. Navigating through reports and analytics in the pursuit of performance management objectives is now far less tedious than the "treasure hunting" often required previously to find useful and necessary information.

Conclusions

Without doubt, superior performance monitoring, measuring, and management capabilities in government are no longer optional. Whether by law or by executive mandate, nearly every function performed by government will be assessed against objectives that have been established in the pursuit of enhanced efficiency and effectiveness.

But at the same time, there is now a much better understanding of the work processes and human factors necessary to support a successful performance management initiative, best practices and real-world success stories to draw on, and a solid base of core technologies and products upon which these environments can be built, faster and with less patchwork integration than in the past.

The result: the dawn of the Government Performance Era.

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Cognos, an IBM company, is the world leader in business intelligence and performance management solutions. It provides world-class enterprise planning and BI software and services to help companies plan, understand, and manage financial and operational performance. Cognos was acquired by IBM in February 2008. For more information, visit www.cognos.com. Over 75,000 U.S. federal government employees rely on Cognos to run more efficient, effective, and transparent programs. Cognos also helps state agencies in 40 U.S. states improve their performance.

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		88	${}^{{}_{\!$	Name				Actual	Target	Variance
		۲	▼	Reentry - Family Services				7.00%	8.60%	-1.60%
		۲	-	Abuse - Family Services				0.00%	0.57%	-0.57%
		۲	₹	Recurrence - Family Services				4.00%	6.10%	-2.10%
		۲	₹	Caseworker visit with children - Family Services				27.71%	25.00%	2.71%
		۲	-	Adoption percent - Family Services				33.00%	32.00%	1.00%
		•	-	Reunification - Family Services				43.00%	43.00%	0.00%
		۲	-	Stability - Family Services				81.00%	81.00%	0.00%
		•	-	Number of placements - Family Services				0.13	2.00	-1.87
		•	▲	Placements with relatives / kin - Family Services				38.08%	26.00%	12.08%
			▲	Number of licensed family foster home beds - Family Se	rvices			166.01%	200.00%	-33.99%
			₹	Adoptions finalized - Family Services				3.95%	10.00%	-6.05%

GLOBAL

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