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# Why Integrated, Transparent Information Systems Provide More Effective Control

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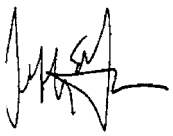
Most organizations work under the assumption that they can dictate and direct information from the corporate center – in other words, that people only need to see what they need to know. Leaders must abandon this command-and-control assumption and move to a devolved and adaptive organization. An enterprise-wide integrated information system with "one truth" is critical to the successful development of self-managed teams and enables both quick response and innovation.

In this paper, Jeremy Hope examines how adaptive organizations work under different assumptions about the transparency of information to improve governance and control.

To compete effectively in today's world, companies must operate more like networks and markets and less like hierarchies and central-planning systems. They need the benefits of effective devolution (such as innovation and adaptation) and effective performance management (such as fast, relevant information and performance insights). The combination, well implemented, produces responsible managers who are more likely to generate imaginative ideas for improving the business and set goals that stretch their performance to beat the competition consistently. Leaders must free managers from the shackles of bureaucratic strategy-formulation processes and harness the intellectual capital inherent in their people – a change that is hard to make without dismantling the management factory.

"Why Integrated, Transparent Information Systems Provide More Effective Control" is the ninth in a series of papers written for the IBM Cognos Innovation Center for Performance Management by Jeremy Hope, Research Director of the Beyond Budgeting Round Table. Jeremy is an advisor to the Innovation Center. He is also a tireless champion for innovation in performance management theory and practice, believing that business-as-usual is NOT a route to success.



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According to survey after survey, most CEOs have three primary complaints about information technology (IT): it is too expensive, too slow and too inflexible. When author Ken McGee asked Fortune 1,000 executives, "Is there information that would help you run your company far better if you had it in real time, and, if so, what is it?" the answer was a unanimous "yes," followed by two or three key indicators. Dave Doman of AT&T asked for real-time customer transaction information, such as contract renewals and cancellations. Rick Wagoner at General Motors wanted real-time progress reports on new vehicle development. Dick Notebaert at Qwest wanted customer satisfaction numbers.[1] But none of these executives or others interviewed by McGee could get what they wanted. Their information systems were not up to the task.

The problems lead back to integration. The ultimate goal is one unified system – one database – for the whole organization to increase speed and reduce complexity, a key driver of high costs. An immediate advantage of the unified system is the time saved in re-keying data and a reduced need for huge numbers of month-end journals. The impact on costs can be dramatic. The Hackett Group report that companies that have just one enterprise resource planning (ERP) platform *and* that embrace consistent technology and data standards incur 23 percent lower costs than other companies.[2] According to Gartner, integration can reduce costs by 30 percent.[3]

Despite billions of investment dollars in ERP systems in recent years, the level of integration is not what you might imagine. The average number of ERP systems is 2.8[4], and the overall level of systems integration remains poor – only two percent of systems are fully integrated, 69 percent are partly integrated and 29 percent are not integrated at all[5]. Only 12 percent of corporations have a single, unified financial reporting system; forty-nine percent have between two and four systems to consolidate and 27 percent have five or more.[6]

### The evolution of IT systems

Many ERP users have had difficult experiences. While ERP systems were designed to solve integration problems, they often struggle to connect with other systems. As soon as companies began buying these products, they saw that enterprise software is just another piece—albeit a big one—in the complex jigsaw puzzle of IT systems in desperate need of talking to one another and exchanging information. To address the problem, vendors created clunky, proprietary methods of connecting their systems with others, defeating the point of system-wide integration. Gradually, ERP vendors realized that to serve customers better, they had to break up their suites into application components and create complex ways to link to them over the Internet. Such a change saved customers from rewriting connections to pieces of the suite, such as financials, which don't change much.

The trauma that often accompanies a new ERP system should not be underestimated. Many companies must customize their systems by as much as 40 percent, which makes upgrading difficult, if not impossible.[7] Such systems also demand extensive changes in the way people do their jobs, which can create a resistance movement that is hard to combat. In a recent Deloitte Consulting survey of 64 Fortune 500 companies, one in four respondents admitted a drop in performance when their ERP system went live.

While ERP systems that integrate applications such as orders, production, sales and accounting might seem like real progress—for they do help managers build a process-based organization—most users need instant information to make fast, effective decisions and to share information with colleagues anywhere in the business. But *integrated* has often meant joining processes within a division or business unit and hasn't always been applied to the whole group. The next phase of integration has spawned a new range of IT vendors who offer planning, forecasting, consolidation and reporting systems, also known as corporate performance management (CPM) systems and business or enterprise performance management (BPM or EPM). While CPM might sound like the Executive Information System of the 1980s, it is distinguished by the closed-loop nature of its design. In such a design, data not only flows toward a decision maker, but also through a company, allowing decisions at all levels to be driven by strategy and, when needed, allowing the strategy to be altered.

A company's survival often depends on managers' ability to use intelligent IT systems to keep abreast of the marketplace and respond more quickly than competitors to unpredictable change. A company must make its strategy highly adaptable and put it in the hands of local managers, who can combine their continuous stream of new knowledge with other leading indicators to make fast decisions on markets, customers, products, prices and new business ventures. Managing a business in this way is known as managing by wire, an expression that draws an analogy to modern aviation's fly-by-wire systems. As Stephan Haeckel – past chairman of the Marketing Science Institute, a corporate futurist and current president of an executive education and coaching firm – explains, "When jet engine technology arrived, airplanes became so fast that unassisted human pilots could no longer sense, interpret and act on information quickly enough to fly them. So computer systems were developed to present pilots with concise displays of essential information and then translate pilot responses into the myriad actions needed to execute the pilot's decisions. This technology mediated and accelerated the pilot's adaptive loop, making it possible to fly a plane travelling at several times the speed of sound. Managers needing to 'fly' modern, fast-moving businesses will increasingly find similar systems both technically feasible and necessary."[8]

What Haeckel describes is also the real value of a CPM system, which gives companies new insights into business performance that, in turn, lead to faster, better decisions and rapid response to emerging threats and opportunities. CPM offers other benefits, too. For example, acquiring a new business or divesting an old one is invariably a nightmare for most finance departments, which must disentangle general ledgers, budgets and reporting systems. With CPM, managers more easily can absorb change and preserve the integrity of the consolidated system. With common standards and coding systems, managers can produce consistently high quality results and plan for more users. A Web-based CPM system empowers people by enabling them to access the information they think will be useful.

Unlike in fragmented ERP systems, the data flowing through a CPM system is also used for planning, forecasting and reporting, so everyone is on the same page at the same time. CPM also benefits companies by helping them meet Sarbanes-Oxley requirements. "Compliance demands are prompting organizations to look at the financial-consolidation applications as the financial-reporting system of record," says Kathleen Wilhide, director of corporate-governance solutions, compliance applications and BPM software at research firm IDC. In the quest for a single view of reality, companies are replacing or augmenting stand-alone software products and spreadsheets with integrated CPM implementations.[9]

CPM deals a new deck of cards to the aspiring adaptive organization. It will become the primary enabling tool of the adaptive business, which must devolve decision-making to front-line people and take fast action to meet new threats and opportunities. But the success of CPM depends on how it is used. If it becomes another weapon in the command-and-control armory, the opportunity is lost and investment returns will disappoint. If it is used as a tool of empowerment, it will spread management capability throughout an organization and greatly add to the organization's intellectual capital. A well implemented CPM system also can provide a stunning return on investment: according to data research company IDC, a company can achieve a return of 430 percent over a five-year period.[10]

#### A new IT vision of openness and transparency is needed

Integration is not the only issue. Of greater importance is how information is used. Most leaders assume they can dictate and direct information from the corporate center – that people only need to see what they need to know – an outlook that disables empowerment and stifles innovation. Many IT systems entrap rather than enable the way we work. IT vendors play to the audience by emphasizing fast drill-down capabilities and detailed analysis (see *Figure 1*). The systems can tell you how many blue pens were bought in the Mauritania office in the third week of February this year versus last year. Many information systems vendors boast about facilitating drill downs to minute levels of detail – or building information cockpits

to better enable central control. Information systems designers often assume that it is the speed and power of data analysis that users value, hence the notion of the information cockpit. Such an outlook sees business performance improvement through the lens of managing results through accounting numbers. The result, alas, is usually more complexity, more work, higher cost and the wrong behavior.

***Figure 1 – Two visions for implementing management information systems***

| Vision A | Vision B |
|---|---|
| • Provide information on a need-to-know basis | • Provide open, accessible information |
| • Tighten top-down planning and control | • Enable local managers to respond to events |
| • Provide more drill downs | • Provide more performance insights |
| • Dictate common reports | • Provide self-service reports |
| • Customize systems to meet specific needs | • Value adaptation over current needs |

Unlike Vision A, Vision B is not about quick-fix solutions. Words such as *clarity*, *simplicity*, *transparency* and *accountability* best describe Vision B, which does all of the following:

- Applies clear and simple principles and practices that lead to the liberation of front-line teams
- Opens the information system and enables employees to analyze and interpret information in ways that make sense to them
- Provides effective IT systems and performance insights that help managers respond more rapidly and improve their decisions
- Provides more self-service reporting capabilities, releasing managers from ties to IT experts
- Values continuous adaptation over current, but often temporary, needs

Devolved operations and open information systems can come with a price—loss of control. Such is not the case at Swedish bank Svenska Handelsbanken, where the control system is multifaceted and richer in content and places managers at every level in a stronger position to take early action if necessary. Svenska Handelsbanken leaders know what is happening at the front line through a fast and comprehensive information system, and more crucially, they have complete confidence that the information is reliable and that people are making the best decisions to further the bank's strategic objectives.

Former group controller, Ulf Hamrin, explains what this means for the company: "Too many senior managers seem to accept that obtaining fast information is beyond their reach. These people don't know what they're missing. Speed is of the essence. Our branch managers know the cost of every proposed transaction and can see what's happening across the customer base at any time. We at head office can also monitor this information, but we don't use it to undermine the authority of the local manager. These are the checks and balances that make our system work. Managers know that we know what's going on, but they equally know that they have the freedom to take risks and fix problems without interference."

U.S. financial services company American Express is another believer in integration, speed, openness and transparency. After implementing an enterprise-wide CPM system over recent years, the company now can produce regular rolling forecasts. The change has helped American Express improve the management of its corporate cash flows, in turn, leading to faster (and smarter) decisions about which projects to fund. CFO Gary Crittenden is proud of the fast, open information system the company has developed over recent years. "A great benefit is that there are no more arguments about whether the numbers are right or comparable year over year. We used to spend a lot of time debating these issues. That's just gone away. The assumption now is that the numbers are correct, and management's attention is focused on acting on the information," says Crittenden. The impact on the bottom line has been huge.

Integration, openness and transparency offer potentially great benefits. For example, companies can

- Monitor customer acquisitions and defections as they happen, at least in industries with regular ordering patterns
- Monitor strategic initiatives and trends as they unfold
- More effectively coordinate and manage action plans and better understand root causes of problems by building networked teams that share the same information
- Improve capital expenditure decisions and test critical assumptions before execution takes place

Arguably, an organization's most powerful control system is one where information is completely open—that is, everyone can see the same information at the same time. If you look at the rankings lists of best-practice corporate governance companies in the year 2000, whose name do you suppose would have appeared high on the list? That's right, Enron. While Enron passed every governance checklist with flying colors, it suffered from one critical weakness: It had little transparency, so one or two senior people could make decisions involving hundreds of millions of dollars without anyone else knowing. The company focused intensely on the profit statement—easily subject to fudge and manipulation—but gave little focus to the balance sheet or cash flows.

To be effective, IT leaders require a change in thinking about the value of information inside the organization. To help every person in an organization to improve their work, a system must provide access to a wide array of information, rather than dictating information. Open access has huge implications for decentralization and control, enabling the corporate center to monitor patterns and

trends across the wider organization and focus where necessary on abnormalities. A primary control in the decentralized organization is the transparency and openness of the information itself. Only in an integrated system can everyone see the performance of everyone else. The payoff is an immediate sharing of problems. CPM systems running on a common platform facilitate the process, as all users work from a single data warehouse. They also allow information to flow more freely within the organization, breaking down the silos that departments and divisions set up to protect "their" data from others.

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