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## Enterprise Synergy

Merging business elements to work better together



Photograph by Robert Landau/CORBIS

# Opportunity Ahead

MERGING THE PRINCIPLES OF SYNERGY TO REAP AN ABUNDANCE OF BENEFITS FOR YOUR ENTERPRISE.

**A** *t first glance, the basic ideas behind synergy seem simple, even elementary: Two or more entities merging together to reach a common destination. Disparate elements moving in the same direction to gain better opportunities. But drive onward, and there is much more to synergy than first meets the eye—many more benefits and challenges.*

Large corporations possess a tremendous amount of resources, assets and expertise. However, while these elements exist under a single corporate banner, they often are controlled by discrete subsidiaries, divisions or departments. This means one division might not know what another is or isn't doing, or of what it is or isn't capable. That can lead to disjointed efforts and assets that can cause corporations to unwittingly forfeit business opportunities.

Synergy is one key to unlocking these opportunities. The savvy executive understands the need to centralize and share resources, assets and expertise to provide maximum benefit to the organization. With

a synergized enterprise, companies can expand brand awareness and corporate reach, maximize investments in people and infrastructure, achieve growth and improve return on investment (ROI).

The special focus section of this issue of *Teradata Magazine* offers an overview of how to create enterprise synergy, a dynamic look at synergy in action and the next steps for synergy-based data warehousing efforts.

Like any enterprise-wide initiative, driving toward optimum synergy can be a slow, challenging process. But once the rewards start becoming evident, your organization will see how the road to success can be a smooth ride.

# Illuminating Synergy

DIRECT THE RESOURCES, TALENTS AND ASSETS WITHIN THE ENTERPRISE  
FOR A SPECTRUM OF OPPORTUNITIES.

*by Cheryl D. Krivda*



Illustration by Roy Wiemann

**L**ike a prism untouched by light, many enterprises are in the dark regarding their most precious business resources. Across their diversified operations, companies own assets, employ personnel and hold resources that are inefficiently or insufficiently deployed or applied. From disconnected service operations to siloed data to unrecognized expertise, the potential value of many enterprise assets is untapped. The result can be squandered opportunity—unused talent, misplaced priorities, unproductive efforts—that compromises effective operations and ultimately diminishes business success.

Decision makers with the savvy to look beyond their immediate functional requirements can take a centralized view of enterprise resources and learn to optimally use all assets. By leveraging the organization's resources to their maximum effect, executives can drive new enterprise synergy.

Enterprise synergy efforts tend to be driven by recognized problems or opportunities, rather than executive mandate. "Often, it isn't C-level executives who understand the need to address synergy," explains Richard Winter, president of Winter Corporation, an independent data management consulting firm. "It often comes from decision makers on the front lines who identify an opportunity."

Yet launching an overarching enterprise synergy initiative would be overkill. Instead, experts in maximizing the value of corporate resources advise you to tackle one disjointed class of assets at a time, delivering quantifiable results in predictable increments. Although there are no "enterprise synergy gurus," you can learn valuable lessons from those who specialize in viewing organizations from the outside in.

### Lessons from mergers and acquisitions

One common reason that large organizations analyze their assets is to meet the requirements of a merger or acquisition. If your company has experienced any merger and acquisition activity in the recent past, you know the scrutiny of assets, such as facilities, labor and supply chains, is brief but intense. Yet a business case can be made for executing this type of assessment as a matter of enhancing corporate value.

John Powers, a principal at Deloitte who specializes in supporting merging companies, has also worked on "simplification" projects with enterprises interested in maximizing synergies. With mergers or acquisitions as well as simplification projects, companies must begin by understanding their assets and how their value can be enhanced. (See table 1, page 48.)

Most assessments focus on hard assets because they provide tremendous opportunities to:

- Lower the cost by consolidating operations or reducing headcount
- Increase the revenue by selling the same

goods to an expanded customer base or producing more goods using the existing facilities

"If you can leverage one infrastructure instead of two, you can usually provide more consistent, responsive service," says Powers. "This will help you get better returns on your costs."

### Synergizing soft assets

Yet enterprises seeking to enhance synergy need not limit their efforts to hard assets. "For many companies, the soft and intangible assets are where the synergy is lost," Powers says. "Soft assets can be defined, but they are more difficult to value in the same way as a hard asset. Yet addressing levels of synergies on anything that overlaps—such as service or people—is always a wise move."

For example, most service and support functions—such as customer service, IT and finance—can be shared in designated or pooled offerings. (See table 2, page 48.) Processes that can serve multiple organizations can improve both quality and consistency, leveraging information more effectively. "The more information you share, the easier it is to consolidate data and spot patterns, and the faster you can take informed action," says Powers.

Another soft asset that can be synergized is personnel—both at an individual and group level. "There are few strategic goals of a company that couldn't be improved through better synergy of personnel assets, especially where it concerns time management, communication and a sense of responsibility," says William McKnight, senior vice president of data warehousing for Conversion Services International, a consulting, data warehousing and business intelligence (BI) services firm.

“Companies tend to hire for talent and fire for a lack of these qualities. But we need to train for these assets and lead by example.”

Optimizing personnel assets may require a top-down mindset change, however. Too many executives focus exclusively on short-term goals, ignoring the planning, communication and delegation of tasks that would help organizations make the most of their personnel. “If you don’t set the tone from top leadership, you cannot expect to drive people to behavior that will help you meet your goals,” says McKnight. “By investing in people and infrastructure, you help people contribute to enterprise success.”

## Deconstructing decision support

Another way to help personnel succeed is to synergize corporate data. In many organizations, enterprise data is difficult to access in a way that makes sense to users. The result

is that workers attempting to execute a business process must access multiple systems to get the data they need. This inefficiency compromises productivity and increases users’ frustration.

“The key component is to understand how people make decisions,” explains J. Paul Kirby, senior analyst for Forrester Research. “People need to use information to make better decisions and take actions that are better for the bottom line. But if these processes impede the use of the information, it may be time for a realignment of the assets.”

Effectively supporting the organization requires an understanding of how the data is used. Kirby classifies decision makers into three groups: **strategic**, **tactical** and **operational**. Each type of decision maker has different decision support needs and related technology requirements:

- > **Strategic decision makers** usually exist in small groups of people. Data latency

is not critical for these users because each decision may take weeks or months. These users rely on detailed information to deliver a single view of the enterprise.

- > There are larger numbers of **tactical decision makers** who require little or no data latency. These users need fresh data, and performance is important; reports that take 10 minutes to generate may be unacceptable. Tactical decision makers require both aggregate and detailed data.
- > **Operational decision makers**, such as call center agents, need the most current data with zero latency. A customer service representative on the phone with a customer must be able to provide information immediately, without having to search through multiple systems. An integrated environment such as a portal creates an efficient presentation. Because these users typically require only one or two systems to get their information, siloed applications are acceptable if the information is easily accessible.

Simplifying data assets is another way to pursue enterprise synergy. “By removing the unnecessary complexity that builds up in enterprises over time, you can not only reduce costs but also increase synergy,” says Powers. “When you simplify, you begin to standardize data forms, which improves the value of the data. Because it’s easier to understand, you can get more leverage from it. Using the same platforms and people and processes improves value to the customer. The added benefit is that the data is then sorted, analyzed and categorized the same way, so you can start to spot patterns and use it more effectively.”

In fact, lacking the will to consolidate the business on standardized platforms may be one of the biggest potential pitfalls of simplification projects. “It takes a lot of discipline and energy to convince people that there is value to the company to do this,” says Powers. “You must use incentives to make it attractive to people, so they are willing to go through this change.”

**Table 1: Corporate assets to be valued**

TYPE	EXAMPLES	HOW TO INCREASE VALUE
Hard	Factories, infrastructure	Scale to reduce costs or increase revenues
Intangible	Intellectual capital, patents, processes	Use more efficiently or effectively
Soft	People, brand	Can only safeguard and use appropriately

**Table 2: Shared resources for a customer service operation**

TYPE	DEFINITION	HOW IT WORKS	EXAMPLES
Dedicated	Used by only specific divisions, groups, employees or customers	Services or support for high-value customers	Individual account rep for high-tech company handles any problems with customized software
Designated	Shared within certain boundaries	Service provided to restricted group of users	VIP customers have special access to rapid response service team
Pooled	Any resource available to any user	Member of large service group answers calls from equally valued customers	Phone customer service center

## Create a strategy for success

Creating a winning approach to enterprise synergy requires several key ingredients. Critical components for enabling enterprise synergy efforts can include:

- > Infrastructure
- > Enterprise data warehouse (EDW)
- > Enterprise resource planning (ERP)
- > Master data management (MDM)

“The simpler you can make the application architecture, the easier it is to make these changes,” says Powers. “A data warehouse is absolutely essential. If you can process standardized data inputs, you can retrieve patterns and insights. ERP systems are great because they standardize the input, which saves time and money.” Moreover, combining ERP and MDM in an EDW facilitates an enterprise-wide standard for data definitions ensuring cross-organization data consistency.

Furthermore, IT professionals can improve the chances of success by ensuring they are aligned with the organization’s strategic goals. “The challenge for IT is to develop a level of trust and understanding with the business,” says Kirby. “Only then can they understand how to present exactly the data that users need, so they can do their jobs efficiently.”

To build on the vision for enterprise synergy, companies must develop a plan to create and celebrate a series of simplification successes. “It’s important that you create smaller near-term wins and build on those,” says Winter. “If you begin with a few data sources and produce a business solution, then you can tackle additional stages over several phases of the project.”

Treating the simplification process as if it is a long-term corporate journey is the best way to convince employees that you are serious about the effort. “There must be continuous progress toward the end goal,” advises McKnight. “You need to do something every day that shows you are taking steps, that it is an important initiative for the company. If you don’t, people will sense that this is just a whim and they will act accordingly.”

Moreover, good governance can help the organization determine which resources should be leveraged to create synergy, establishing priorities and controlling the scope of the project. When properly executed, this governance can help set a responsible scope for the project, resolve conflicts and ensure that all parts of the organization are well-represented in the project—so that everyone has a fair chance to help shape the new enterprise direction.

Kirby advises decision makers to focus on what the organization needs, rather than on what already exists. “Something you have may

not be as valuable as you think, while something you are missing could be just the thing you need,” he says. “It’s better to be grounded on your goals and requirements than on your current state. By comparing what you have with what you need, you can identify gaps and resolve them. That’s the best way to achieve the synergy your enterprise requires.” **T**

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## A strategy of synergy

Continental’s transformation from the worst airline company in the United States to the best is nothing less than inspiring. As documented in an enterprise case study developed by Continental and Teradata, Continental recognized the need to synergize its employees, departments and technology to work for not only a greater finished product, but also survival of the company.

An enterprise data warehouse (EDW) was identified as a means of centralizing the information and systems to fulfill this need. Though the demands of the Revenue Management application initially began the EDW program, brainstorming sessions with Continental employees generated further uses for the development of the EDW.

The EDW provides centralized, consistent information for applications, allowing employees all around the company to make better tactical decisions quickly. The EDW supports four primary applications:

- > **Revenue Management** provides real-time revenue projections for any flight so appropriate pricing and booking decisions can be made.
- > **Customer Relationship Management** provides a single, integrated view of each customer to give accurate, up-to-date profitability pictures.
- > **Flight Management Dashboard** tracks all flights and monitors late flights.
- > **Fraud Detection** identifies noncompliant reservations and profiles suspicious booking and ticketing transactions.

Demonstrating additional cooperation between employees and departments, the distinction between Continental’s IT and business users is difficult to pinpoint. IT understands the business needs, and many business users are technically savvy enough to develop reports on their own.

Now, when additional business cases for further EDW projects are presented, employees recognize the impact of the project not only for the specific application but also for other departments. This cooperation is critical to the ongoing success of the EDW.

With a strategy of synergy, Continental converted itself to a profitable, growing company. Read more about Continental’s turnaround at [Teradata.com/customers/continental](http://Teradata.com/customers/continental).

—Julie Heileman

# Driving Synergies Across the Infrastructure

INCORPORATE MULTIPLE DATA SOURCES TO GENERATE A  
NEW VEHICLE FOR INTEGRATION.

by Cheryl D. Krivda

**M**any companies struggle to give their workers complete, transparent and real-time access to information. Yet a multitude of the legacy applications in use today were developed using arcane and proprietary technologies, thus creating information silos across departmental lines. Seeking to streamline operations, enhance efficiencies and improve visibility across the enterprise, some organizations have leveraged comprehensive technical solutions, such as enterprise resource planning (ERP) systems and enterprise data warehouses (EDWs).

Simply deploying ERP and building an EDW is no guarantee that an organization will gain maximum synergy from the two systems. For example, many ERP systems are deployed in multiple instances; the data is stored in a similar format, but it is not centrally located. In other companies, different ERP systems are used for human resources, manufacturing and financials.

The current business imperative is to incorporate operational data into the EDW and take advantage of the synergies that result. "From a business point of view, resistance is futile," says Bryan Rockoff, director of client services for Baseline Consulting. "As ERP data is used for more real-time decision making instead of strictly historical reports, the linkages between the operational and analytic environments must become tighter."

Enterprise information integration (EII) strives to draw the ERP and EDW systems together to deliver new organizational synergies. "It's easier to manage one data point than multiple ones," says Rockoff. "The EDW is the first point of data integration and data consolidation for many companies," Rockoff adds.

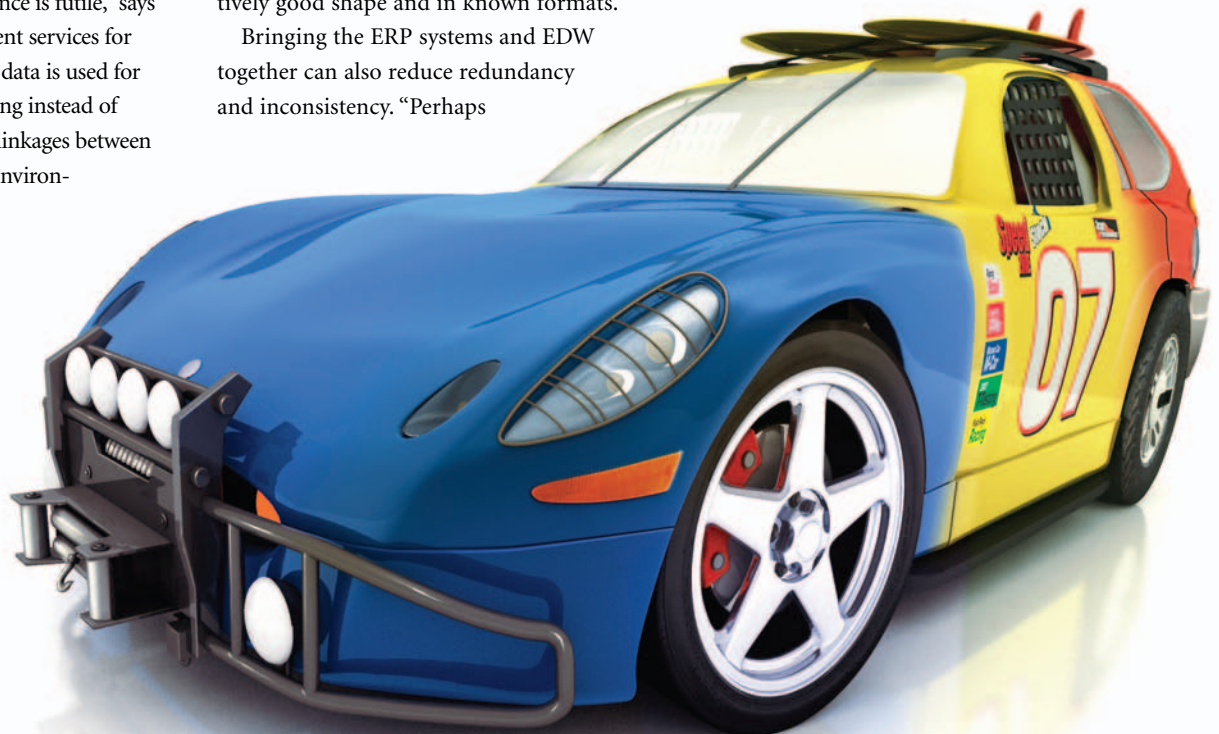
## Under the umbrella

Integrating data across the enterprise offers a host of benefits. "If you have an EDW that is providing enterprise business intelligence (BI) results, it is a natural fit to integrate those results with the ERP systems," says Claudia Imhoff, president and founder of Intelligent Solutions. "Using the ERP system eases the heavy lifting of data integration processes. Even if you have multiple instances of an ERP system, data integration processes are much simpler because the data is delivered in relatively good shape and in known formats."

Bringing the ERP systems and EDW together can also reduce redundancy and inconsistency. "Perhaps

equally important, this type of synergy can reduce the number of system interfaces," explains Sid Adelman, principal of Sid Adelman and Associates. "Multiple interfaces create incredible IT cost. Reducing those interfaces can improve IT's responsiveness to business demand."

Companies can also use EII to take better advantage of common information on customers, suppliers, materials and business processes. Master data management (MDM)



is a likely jumping-off point for many integration efforts. “MDM gives organizations a framework to answer the questions of what it means to have a material, who is responsible for its quality, and how it moves through the system,” says Bill Swanton, vice president of research at AMR Research.

Companies are also turning their attention toward customer data integration (CDI)—the ability to aggregate customer information that is dispersed throughout the enterprise and use it to make better business decisions about when, where and how to engage customers. “We’re seeing a mandate for MDM and CDI in just about every industry,” says Rockoff. “CDI and MDM represent the umbrella of data integration at the operational level within the EDW.”

Organizational maturity is key to determining when a company begins to rationalize technology and gain synergies. According to Imhoff, organizations typically build BI capabilities piecemeal—adding new technology by department, group or business function. Many begin to consolidate as they gain sophistication about their BI requirements. “In the next level of maturity, companies create enterprise resources,” Imhoff says. “They rationalize their technologies into a core set of business intelligence capabilities that are used enterprise-wide.”

The final step in the maturity curve is to create centers of excellence in which the expertise and technology are controlled in a single resource. “The center of excellence supplies the entire organization with intelligence in a coordinated fashion,” Imhoff explains. Early adopters have been financial services companies that centralize their data to benefit customers and meet Basel II and Sarbanes-Oxley mandates.

## Success from the top down

The key to EII project success is unwavering support from the top. “You need a CEO who

understands the value of integrating these systems and can break down the political barriers to success,” says Adelman. “Then you need a high-level executive in the IT organization to set standards for how to use BI and establish appropriate quality levels. Having these two people identify the goals and create a business case for this change is the only way to keep the project on track.”

Experts also advise that you start small, recognizing that you cannot convert the entire enterprise at once. Also, understand that any center of excellence has two balancing

# Organizational maturity is key to determining when a company begins to rationalize technology and gain synergies.

concerns: bringing high-quality, complete data into the BI environment and making appropriate information available to authorized users. “To get a center of excellence going, you need to pick a thread that handles both sides,” says Imhoff. “In a single process, you need to ensure the appropriate data is properly collected, stored and distributed. Then build from there.”

For example, one company began its center of excellence by implementing a complete campaign management workflow, which consisted of BI applications that rated campaign success and explored which products sold best in past campaigns. Center of excellence personnel conducted the full workflow analysis to determine the complete process. Then they ensured that the right data was available for the analytics, analytic applications were correctly developed,

necessary interfaces were in place, and personnel using the workflow were properly trained and familiar with the new capabilities offered by the center of excellence.

Center personnel monitor the workflow to ensure that it still fits the campaign management process, it is efficient and easy to use, and customer service representatives are actively using the workflow. The center also studies how these capabilities can be incorporated into other workflows.

Finally, select a project that allows you to set a course and address a critical business

challenge. “Find the problem where people are looking for a single version of the truth and determine what is keeping them from achieving that,” says Swanton. From there, he advises, work incrementally—and pay close attention to the MDM issues.

“Developing tight processes for managing master data is critical to getting value from both ERP and the EDW,” says Swanton. “Smart companies know that you must apply discipline to the master data as part of the project, not after. Dealing with this need ahead of time is the surest way to get you to value more quickly.” **T**

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# Working in Concert

ORCHESTRATING ALIGNMENT WITH AN ENTERPRISE DATA WAREHOUSE.

by David Garrett

**I**t's done. Your data warehouse, the opus of planning and execution, is in place and in use. So what comes next? How do you arrange your new tools to orchestrate better, more synergized decisions across the enterprise?

Because as many as tens of thousands of employees rely on the enterprise data warehouse (EDW) for immediate and long-term decisions, it's vital to align the enterprise around a cohesive view of its data. "Your technology architecture has to be seamless," says Lisa Loftis, senior vice president at Intelligent Solutions. "It has to bridge the gap between the insights you get from a robust

business intelligence [BI] environment and the actions the business is taking on a day-to-day basis, on the front line with your customers."

Finding ways to bring departments together and suffuse the corporate culture with the power of an EDW is more than a key to high sales. It's a key to survival.

Much of the work in building enterprise synergy around BI tools is not just technical, but also cultural.

“The technology is the easiest part of this,” says Loftis. She adds that the nuts-and-bolts needs of people and their personalities go hand in hand with the questions of logical data models (LDMs) and master data management (MDM).

According to Loftis, alignment starts with an effort to share high-level strategies throughout the enterprise, because it’s not only C-level decisions that define a firm’s success but also how well the front-line employees make the millions of day-to-day decisions that impact customers. “You have to have a very effective communications plan,” she says, adding that it should be one that articulates the role of each employee with precision.

Alignment also means bringing together the business and technical stakeholders. According to Donald Feinberg, vice president and distinguished analyst at Gartner, high-level managers should also play an active role in technical decisions, from the schema to the platform, metadata, reporting and training. “When everyone feels like they’re picking the tools, then guess what? They use them,” says Feinberg. “The chances of success are much better.”

The chance for partnerships built on shared information is also much better. “If it’s done properly, business must collaborate with IT,” Feinberg adds. “And the word ‘collaborate’ is very different than the words ‘talk to.’”

## Promoting alignment through smart technology

Among the hardest tasks in launching an EDW is getting people to use it. “One of the comments I’ve heard many times from IT,” says Feinberg, “is that we’ve built this great data warehouse with everything that everyone wants. Why isn’t anyone using it?”

Thankfully, there are technologies that grease synergy’s wheels and tie the enterprise together. “If you’re going to do active enterprise intelligence,” says Loftis, “you really have to have an architecture and a discipline so that you eventually connect your intelligence applications with your front line and your customer contact activities.”

One such architecture is SOA, or service-oriented architecture, in which a service can be accessed regardless of its back-end design, thanks to standard application programming interfaces built with XML, Simple Object Access Protocol (SOAP) and other common tools. It allows divisions, departments and even project teams to integrate their work without squabbling over the tools for integration. As a result, they can innovate on the platforms they want, yet still tie their information together to support decision making that neatly aligns with top-line objectives.

Hand in hand with SOA come governance strategies and solutions like MDM. By presenting

a single view of core data—such as account lists and customer or product information—across the enterprise, MDM helps end users eliminate costly duplications and mistakes. MDM’s well-governed set of procedures can also standardize the way that master data is accessed, maintained and changed, without inviting downtime.

Being able to link enterprise strategies, objectives and data answers basic questions, such as what data the enterprise has and what data it needs to support new projects. Additionally, by mapping data to decisions, business and IT users understand it quickly, which speeds time-to-value and reveals points where deep access to data can be coupled with new business opportunities.

## Finding the right skills

Even the largest firms can lack the skills to meet, then master, the challenge of intelligence-based alignment, turning data into decisions through the alchemy of the data warehouse.

Firms with a strong grasp of the subtleties of logical models can form an in-house team—what Loftis calls a “center of excellence”—that in turn lends its knowledge to business units that need it.

If you lack the human assets to build such a team, engage with the appropriate data warehouse consulting service providers for both the team and training needed for development, deployment and support. They can do more than provide you with the head count you need; they can lend you the data warehouse and project management expertise to cut your time-to-goal. That improves your project’s perception in the eyes of the high-level managers and front-line employees alike.

Even with your project complete, no data warehouse is ever done. It grows as new data is added and new insights are gleaned, giving the enterprise a chance to base decisions on information rising to the level of intelligence. **T**

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## Good governance matters

**H**ow do you promote alignment and turn warring factions into partners? Governance is key. “One of the things that governance actually does is provide strategic direction to the program, to ensure that objectives are aligned with business priorities,” says Lisa Loftis of Intelligent Solutions.

Donald Feinberg of Gartner agrees. He mentions the Business Intelligence Competency Center, or BICC. “You need to form a group that is put together with people from every single line of business and every single other department: finance, human resources—because training usually falls under human resources—and IT,” he says. Feinberg adds while the BICC can have different structures and meeting times, one thing is vital. “The BICC sponsorship needs to be at a very senior executive level, preferably above even the CFO: the COO, the CEO, the president, the chairman,” he explains. Good governance, he notes, demands the political heft of top-level managers to ensure that strategy and objectives are rigorously aligned. —D.G.