

# Hidden gems

Companies of *all sizes* can find pearls of wisdom in their data.

*by David A. Kelly*



**T**hese days, it's not the biggest company that wins, but the smartest. And becoming one of the smartest companies requires paying attention to data, really understanding data in detail and how to use it to gain advantage. Attention to data's value is especially important—and can make a big difference—for companies of all sizes that use data to make fact-based decisions and nimbly compete on any scale.

For many organizations, this is where data warehousing comes in. Unlike other systems that can keep track only of *what* happened, data warehouses also allow organizations to analyze and understand *why* something happened. While data warehouses were originally adopted by large enterprise organizations, they are not just for the Fortune 500 companies anymore. In today's global marketplace, businesses of all sizes need to do everything they can to keep up with their competitors. A proven way to stay on the leading edge is to invest in a data warehouse.

Of course, a data warehouse is not just a new piece of IT equipment to install and turn on. A data warehouse must be built with end users in mind. Using best-in-class technology, an evolutionary process and a company's data, a data warehouse quickly becomes an effective tool companies can use

to understand their business and customers better. A company does not have to be the biggest player in its market segment to take advantage of data warehousing. Like any growing organization, smaller companies must make smart decisions about basic business challenges. And that's where data warehousing comes into play.

### Thriving on change

From increasing global competition to widely dynamic Internet traffic, businesses are faced with growing challenges. Successful organizations must be able to cope with, understand and respond to rapidly changing business conditions and IT requirements. Sudden ramps in business volume or direction can dramatically alter business information needs and business managers' abilities to respond effectively.

For years companies have invested in a variety of systems that enable them to do more, from Web sites that provide information and sell products or services to customer relationship management (CRM) systems that track customer information. However, in many cases, what is missing is the capability to consolidate and analyze data from all of these systems consistently and effectively.

Many organizations realize the benefit of data to support strategic initiatives. Dallas-based Brinker International, one of the country's leading casual-dining chains, understands this value. Kenny Sullivan, director of business intelligence (BI) at Brinker, states: "Brinker has become more strategic in its thinking over the past several years. But the information wasn't there to support strategic analysis. We needed a way to provide better insight from the management perspective and operational facts—not

just go with a gut feel."

Investing in a data warehouse can help organizations address these types of needs as well as help define new growth opportunities. Although the term "warehouse" evokes thoughts of a large structure, data warehouses are actually not just for the megabusinesses with petabytes of data. They are critical for all organizations to be able to understand, analyze and proactively act on corporate data. Understanding data well is key to running a business well. Many data warehouses start with limited data volumes, more in the range of 500GB or so. They begin with a single subject area and then add data for additional analysis and cross-functional pattern identification later in the life cycle.

In fact, all businesses have similar goals for a data warehouse: obtaining consistent information and a single view of the business across the entire organization. Creating a consistent view of business-critical data is the starting point for making successful business decisions for any-size organization. Consistent views of data enable an organization to leverage that data and use analytics for strategic decision making. As a result, investing in data warehousing solutions that can help analyze corporate data can be one of the most effective business decisions a company can make.

### Increasing effectiveness and efficiency

Almost any organization can benefit from a data warehouse. Making key business data more consistent and accessible while also enabling business managers and employees throughout the organization to use and analyze data to make better business decisions can greatly contribute to

## Questions to ask

Developing the scope of an initial data warehouse project starts with identifying the business need or opportunity. Once you know what information you need, you can determine whether the data already exists in the organization or whether you must start collecting that data. Then you can build your plan for how much data you need and estimate how it will grow and change over time. At this point, consider tactical needs, such as equipment, tools, staffing and support requirements. By thinking through some of the questions up front, you can define your scope and set up an effective plan to achieve business success.

- > For what **business need** or opportunity will the data warehouse be used?
- > What **application** will we use, or do we need to build a custom application for our needs?
- > What **tools** will we use to maintain the data warehouse?
- > Who will have **access** to the data warehouse, and how will access be controlled?
- > What are the **performance and response-time** requirements for the initial application?
- > What metrics will be applied to measure and **evaluate** success?
- > Should I take advantage of **support services** from my vendor, or will the current staff be able to handle the work?
- > How much might the system need to **grow**?

—D.A.K.

an organization's effectiveness. Consider a few of the key benefits that organizations can gain from implementing a data warehouse:

- > **Consolidating data.** Few companies have all of their business data in one database or system. Implementing a data warehouse allows an organization to consolidate and integrate data, creating a centralized and consistent view of that data so that multiple departments can look at the same business results. Consistent data helps eliminate the problem of getting different answers from different data.
- > **Better customer insight.** Understanding customers and prospects better than the competition can help a company improve customer profitability, sustain loyalty and increase market share.
- > **Consistent enforcement of best practices.** Too often business knowledge is inside employees' heads. If (or when) they leave an organization, that company is vulnerable to losing important business assets. This can be particularly critical when fewer people are doing more jobs or if single individuals are completely responsible for certain activities or tasks. A data warehouse can help enforce best practices and institutionalize corporate knowledge, as well as help enforce and put governance models in place.
- > **Faster and easier growth.** It is difficult to be agile and respond to quickly changing market trends if you are not actively monitoring the trends in your business and your customers. Within your business you have a baseline and a plan to drive growth. With a data warehouse, you can identify new, unexpected areas that may show higher growth trends. This can enable an organization to quickly put plans in

place to leverage this information.

- > **Upgrading analytics processes.** A data warehouse gives an organization a chance to institute or upgrade its analytics processes. A company might be collecting and accumulating data in transactional systems, but it may lack a way to easily and effectively analyze that data, at both a macro and micro level. Data warehousing provides a platform for business users to perform analysis that can identify trends, new opportunities and sometimes issues that can be addressed before escalation is required.
- > **Simplifying compliance.** It can also significantly help facilitate compliance requirements by eliminating extra work required to reconcile and track different data sources and enabling more efficient use of consistent data across the business. What's more, data warehousing enables the reuse of compliance data for other purposes.

## Data warehouse entry points

While many companies share similar business challenges, each organization's situation is unique. So it is important to understand that the road to data warehousing has a number of different entry points. Since data warehousing is not a product but an evolutionary process, organizations can easily start with an important, but perhaps focused, business problem and expand the solution over time.

Many companies implement a data warehouse because they need better reporting capabilities, and data warehouses provide the tools that business leaders need to help them make better decisions. With a data warehouse, a business manager can gain a greater understanding of what is actually happening in the business, perhaps by establishing a baseline for understanding what the sales actually were this year, last year or for

any period. Once an organization has a handle on its current baseline, it can take steps to establish strategies for growth.

Data warehouses can house all types of corporate data, while providing an opportunity to put that data into a business user's hands, often without disturbing existing individual systems. In fact, with the right vendor and the right tools, a company can utilize the applications to which it is already accustomed and make the data warehouse accessible to more users of all types across the business.

Some organizations will want to expand their current operations by doing more analysis and different types of analysis on business data. Users may want to drill down into the numbers on a report to gain a better understanding of why the results exceeded or missed plan. With a data warehouse, users can slice and dice data at a detailed level. Other users may want to extend analyses to include predictive or "what if" scenarios, so they can create better business models to proactively manage corporate strategy.

Some organizations turn to data warehousing to operationalize corporate decisions—providing the information needed for employees to make the right decisions in the field, such as with inventory management for just-in-time replenishment.

Regardless of the starting point, a good data warehouse solution should be flexible and scalable to grow and evolve with the business.

## Implementation considerations

While data warehouses can have a strategic impact on an organization, the implementation need not be difficult.

The easiest way is to start with a well-defined, achievable scope. Some may think that means starting small, but it is helpful to be aware that "small" can mean different things to different organizations when it comes to data warehousing.

For example, a company could start with a small solution aimed at a single subject area, or for a limited number of users, or for a small set of data or a single application. What is most productive is to select an important but manageable scope for a data warehousing project—something that will provide tangible business benefits when implemented. The ability to report success quickly will encourage usage, expansion and proliferation of the data warehouse, making it more valuable company-wide.

Most data warehouse solutions should be architected for scalability, instead of trying to solve all of an organization's problems in one step. An organization should pick an easy entry point and plan on growing it over time. A company may simply start collecting data from one or two key operational systems and design some basic reports and analysis to address its tactical needs, then expand its capabilities as time goes by.

Another consideration is making sure the company has a "champion" for its data

warehousing project. In order to be successful, it is important to identify someone who will act as the gatekeeper and sponsor the project. Companies that do not have the resources to dedicate a specialized staff to the data warehouse project may be able to allocate responsibility to the existing IT department.

## Data puts your business at your command

These days, few things are static—especially when it comes to business. Managing a business means guiding it and incrementally improving it each year, and that requires making the right decisions at the right time using the right data. Growing that business requires both effective strategic analysis and planning, and efficient operational systems.

Data warehouses provide businesses with the foundation for making the smartest decisions, improving an organization's operations and making it more competitive. Sullivan recognizes the impact of the data warehouse at Brinker. "The biggest benefits lie in our ability to analyze everything, aggregate all the data and look at it in different ways," he says. In essence, data warehouses enable organizations to find a winning strategy for growth and business success. **T**

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