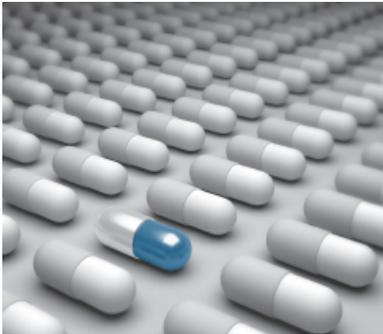


BI Case Study

The Very Model of Success

Stephen Swoyer



Abbott Laboratories tapped Kalido's model-driven data warehousing infrastructure to revamp—and revive—an overworked BI system.

Business change disrupts, undermines, subverts, and in many cases wrecks the best-laid plans or strategies of business and IT executives.

It doesn't have to be that way. Along with disruption, change also produces *opportunity*—to revisit, tinker with, improve upon, and in some cases radically alter a business or IT status quo. Change can be a positive force—even in the most risk-averse of organizations.

Take Abbott Laboratories, a multinational pharmaceutical giant with operations in more than 130 countries. Over the last half-decade, Abbott pursued an ambitious growth strategy in which it significantly augmented its international sales and marketing activities. Growth of this kind entails disruption, and as Abbott sought to integrate and consolidate sales data from 65 international sites, its business intelligence (BI) infrastructure started to show the strain.

Abbott officials saw the impetus for change as an opportunity—not just to address existing or foreseeable demands, but also as a means to revamp existing business processes, introduce new services, improve information delivery and reliability, and insulate their BI infrastructure against the disruptiveness of change.

Abbott tapped the Kalido Information Engine from data warehousing (DW) specialist Kalido to power its new BI infrastructure. Abbott's Kalido-based data warehouse lets the company have it both ways: its BI and DW infrastructure is largely shielded from the disruptive effects of change (e.g., merger and acquisition activity, changes in the business cycle, planned or unplanned growth) even as it gives Abbott more flexibility—and more reliability—than ever.

For example, says Peggy Mathias, manager of HQ IT applications with Abbott, company managers once used aging or incomplete information to supplement their decision making. With the new Kalido-powered system, however, they're able to view accurate, timely data in each of several different contexts—historical, current, or future. The new system also gives Abbott's sales and marketing executives—some 250 of them, in 65 different

locations—better insight into how efficiently the company is allocating its sales and marketing investments, particularly in emerging markets. From an IT perspective, Kalido delivers as promised: Abbott can now reconfigure its DW and BI infrastructure in as little as two weeks to accommodate acquisitions, mergers, new services, or other disruptions. No, Mathias concedes, it isn't quite on the fly, but for a multinational company with 65,000 employees, it's breathtakingly responsive.

Best of all, she concludes, Kalido brings a business-first perspective to DW and BI, courtesy of its Business Information Modeler, a graphical, declarative modeling tool that encourages collaboration between DW architects and business stakeholders. "It really lets us manage the data warehouse from a business point of view, and not requiring technical skill to design database tables or figure out what a star schema is and build a star schema," she observes. "We now have a single version of the truth for sales and marketing information that we're using to populate the people who need that information as a verified source, and it [also] ties together with our general ledger system, which was the key, and now we're adding more data because of this success."

Change You Can Believe In

It wasn't always smooth sailing, of course. Two years ago, in fact, Mathias and her colleagues were

ready to throw their hands up in frustration—with good reason.

Abbott has had a busy seven-year stretch. In 2001, it acquired Knoll, the pharmaceutical division of German conglomerate BASF. Since then, it has spun off an internal group (its hospital products division, which became Hospira), acquired several entities (including TheraSense, which Abbott merged with its MediSense division, and the vascular products division of life sciences manufacturer Guidant), and notched an agreement with General Electric to sell assets worth about \$8 billion. (The latter deal ultimately collapsed—but not before both parties had committed time, money, and energy to transition planning.)

One constant was disruptive change. Mathias and her colleagues had built a functional, reliable BI system, based on BI and database software from Cognos and Oracle, respectively. Abbott's growth was beginning to pose problems, particularly as the company sought to augment its international sales and marketing efforts. "We've had difficulty with having multiple systems with the same sort of redundant information for sales and marketing in particular. We are responsible in [our] Chicago [operations center] for consolidating the results of operations across 65 countries. Once we got all that data here in Chicago, we were having too many different systems that were reporting the information at different levels with different calculations and getting different answers," Mathias explains.

"The result was that everybody was spending most of their time doing maintenance with reconciliation and cleaning up the data."

Kalido and its Information Engine were not a silver bullet, Mathias stresses. Before Abbott could lay out its new BI infrastructure, it first had to do some housecleaning: chiefly studying its reporting processes, identifying bottlenecks and other potential problems, and—most important—improving the quality of the data it received from its international offices.

"We had about a year-long process to improve the process of reporting sales information from the 65 countries. We worked for a solid year on the financial reporting process and really cleaning up the data that was being fed into Chicago to make sure that it was consistent and had good quality. After that, we started with the data warehousing," she explains. "We ended up putting a lot of editing rules in place that weren't established previously. We actually put the onus back on the countries to make sure that they were doing the editing at their systems and were sending us data that was fully edited."

Time-to-Implementation You Can Believe In

Kalido was on Abbott's short list once Mathias and her colleagues had finished cleaning up (and improving) its sales and financial reporting processes. There was a reason for that, she acknowledges: at least two other units inside the

company had already deployed the Kalido technology. Based partly on feedback from these units and on her own assessment, Mathias decided to tap Kalido.

“What we were intending to do was sending data marts out to each of our 65 affiliates so that they could have their own local copy of the data to analyze locally,” Mathias says. “Kalido was already in use in two other divisions in the company, so they were one of the first [options] we considered,” she continues. “They weren’t the cheapest, but what was really of interest to our executives was the time-to-implementation. Like I said, they weren’t the cheapest, but I doubt anyone else could have been implemented as quickly.”

Rapid time-to-implementation, more than anything else, ultimately helped clinch the deal. “We did the proof of concept [where] Kalido came in, took all of our data, and in less than a week, had Cognos hooked up to it,” she says. “It was amazing how quickly they had it [a proof concept] up and running. We just did the business case that if we had to do the development ourselves, it was going to take a lot more time. It was really the time that attracted us to them.”

During the assessment phase, Mathias and Abbott got to see just how flexible—i.e., how quickly reconfigurable—Kalido really is. “When we did the initial demonstration for our CFO, for example, he wasn’t happy with the hierarchies, so

he asked if they could be changed. It turns out that the way we were reporting financial information wasn’t really the way that [finance] liked [to consume] it,” she explains. “Now that [reconfiguration] is a non-trivial task in most environments, but with Kalido, it was surprisingly simple. We started out with something like five views in Cognos and we ended up with 20.”

Kalido’s rapid configurability derives from its emphasis on business modeling, which uses an abstraction layer (basically, a conceptual layout of a business—represented by core business entities such as customers, products, or assets and bound together by pre-defined business rules) in place of hard-coded data models. One advantage of such an approach, Kalido officials maintain, is that it lets line-of-business stakeholders and BI architects view integration through a business-centric prism, understood in terms of declarative business concepts or terms. “Typically you develop [your data model] with hand-coded ETL tools and hand-coded BI configurations, and it becomes ... rather expensive to deliver business change,” argues Cliff Longman, Kalido’s chief technology officer. “The Kalido Information Engine is driven by a business model ... where if you make changes, you’re making changes to the *abstraction* of the business model. That makes the whole infrastructure much more agile.”

Kalido CEO Bill Hewitt frames the issue even more starkly: “It is an abstraction layer that [is designed

to] insulate you against the effects of change,” he explains. “[Y]ou can make some significant changes to the physical implementation [of a warehouse] that only involves really simple changes to the business model, and if you have the right [modeling tool], you can automate [those changes].”

That jibes with Mathias’ experience, too. Once Abbott got down to brass tacks, overall implementation took about four months. Abbott tasked a six-person team—consisting of Mathias and five of her colleagues—with getting things done. As soon as they were finished, Abbott’s new Kalido-powered system got its first real test, Mathias says—in the form of a huge potential disruption.

“[R]ight after implementation, we had a geographical reorganization. It was our first geographical reorganization in 30 years! If you ask any business intelligence professional about that, they’ll tell you that it’s going to be a headache [reconciling] all of that with the data warehouse,” she says. “It was all pretty painless in Kalido. Two weeks after that reorganization, we had made the changes in the warehouse and everything was running smoothly.”

Outcomes You Can Believe In

Mathias thinks Kalido’s business model-driven approach has another advantage, too: it helps foster closer collaboration between line-of-business stakeholders and BI practitioners like herself. “It brings business units and IT closer together. It’s designed so that the business

and IT can collaborate together [to define the model]. It has an intuitive, graphical interface, and it's clearly designed so business users can have meaningful input into the process," she indicates.

One upshot of this, she says, is that business executives have quickly become hip to the capabilities—and the potential—of Abbott's new BI infrastructure.

"We're starting to add more data [sources] because of the success we've had. For example, our general ledger owner was very skeptical about using his data in the data warehouse, but we've been able to win his business, and we'll be doing more reporting of his results through the warehouse," she explains.

Abbott, like many adopters, didn't commission an official ROI study to assess the dollars-and-cents benefits of its Kalido-centric BI overhaul. Mathias believes such a study would have been both misleading and insufficient; there's a sense, after all, in which ROI studies are backward-looking propositions. To be sure, they *do* help organizations understand how much they're saving (or, in many cases, how much more they're spending) vis-à-vis the ante status quo, and they also identify income that stems from the introduction of new products or services, but they're less compelling when it comes to pinpointing ROI that derives from intangibles—such as potentially costly business disruptions. It's difficult to put a price

on agility, Mathias argues, citing the geographical reorganization that Abbott completed in just two weeks after it went live on Kalido. An effort like that would have been extremely costly—chiefly in terms of person hours—using Abbott's old, loosely federated system.

Moreover, she maintains, much of the system's value accrues from as-yet-unrealized projects, services, and products, many of which Abbott plans to roll out over the coming months. To a surprising degree, business stakeholders—and not just IT visionaries—were quick to see the potential value in the system. "I had a really strong business sponsor who ... did some prototyping ... before we went ahead [with the implementation]," she says. "He was doing some really interesting things to build the business case for how valuable this [project] could be and working through the executives to show them how valuable this can be."

One forward-looking project involves the unprecedented (for Abbott) introduction of analytic capabilities into greenfield business processes. Abbott's CFO is particularly excited about an effort to augment the company's monthly sales reports with analytic insights, Mathias reports.

"We're working with the CFO now to do some more use cases with him, so we can start to embed the use of the warehouse into the business process. The main thing is the monthly sales flash process, where [analysts are] looking at the numbers and

starting to give their initial feedback on why the numbers are what they are. Initially, we're looking to be able to do some analysis on the monthly sales flash—what's good, what's bad, what's going on."

You Have to Believe

Abbott completed its Kalido implementation in just four months, but—in many respects—its broader BI project remains unfinished.

At this point, Mathias says, managers can generate reports based on key performance indicators, product profitability, and finances. They have better insight into sales information, too, inasmuch they can now break down sales by location, currency, product, or even financial metrics. Mathias sees this as just the beginning: the tactical benefits, so to speak, of a Kalido-based BI strategy. "It just introduces this whole new model for delivering information to the business. This is just a foundation to build upon for other data types and for other applications. The flexibility is just tremendous, and we're very confident that we have a very solid strategy to build on going forward." ■

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