

A BPM Partners Case Study



Pervasive Performance Management Transforms a  
Manufacturing Environment

© 2009 BPM Partners, Inc. All material contained in this document remains the property of BPM Partners and cannot be published or duplicated without the express written consent of BPM Partners, Inc.

#### **About IBM Cognos BI and Performance Management**

IBM Cognos business intelligence (BI) and performance management solutions deliver world-leading enterprise planning, consolidation and BI software, support and services to help companies plan, understand and manage financial and operational performance. IBM Cognos solutions bring together technology, analytical applications, best practices and a broad network of partners to give customers an open, adaptive and complete performance solution. Over 23,000 customers in more than 135 countries around the world choose IBM Cognos solutions.

IBM, IBM Cognos 8 BI and IBM Cognos PowerPlay are trademarks of International Business Machines Corporation in the United States, other countries or both.

**BPM Partners, Inc.**

Six Landmark Square  
Stamford, CT 06901 USA

Phone: (203) 359-5677

Fax: (203) 359-5877

Email: [info@bpmpartners.com](mailto:info@bpmpartners.com)

Website: [www.bpmpartners.com](http://www.bpmpartners.com)



## Table of Contents

Executive Summary .....	1
Business Background and the Case for Change .....	3
Project Objectives .....	3
The Solution .....	4
Solution Architecture .....	4
Powerful Results .....	4
Implementation Approach .....	5
Scope and Timing .....	5
Business Impact .....	6
New Intelligence .....	7
Supplier Benefits .....	8
Examples of Pervasive Performance Management at Vicor .....	9
Return on Investment .....	11
Lessons Learned .....	12
Why IBM Cognos Solutions? .....	13
Going Forward .....	14
Conclusion .....	15
Fast Facts: Vicor .....	15

## Executive Summary

Since 1981, Vicor has engaged in the development, manufacture and sale of power conversion components and systems. The company's sales approach \$200 million, and it employs 1,100 people at its headquarters in the United States and offices throughout Asia and Europe, selling to more than 8,000 customers worldwide.

Vicor also manufactures and sells complete configurable power systems, accessory products and custom power solutions. It licenses certain rights to its technology in return for ongoing royalties. The principal markets for Vicor's power converters and systems are large original equipment manufacturers (OEMs) and smaller, lower-volume users, which are broadly distributed across several major market areas.

Vicor's customers include OEMs in the communications, data processing, industrial control, test equipment, medical, and military electronics markets. It runs an unusual combination of high customization and high-volume manufacturing. Selling over 8,000 distinct versions of its products, Vicor runs a business that is complicated in most aspects. Manufacturing, inventory tracking and supply chain management, production planning, quality control and customer relationships are all critical and complex. Each process generates large amounts of data.

Starting with its initial investment in business intelligence (BI) in 2002, Vicor set out to do more than capture and present metrics. The company's strategic objectives included ambitious financial goals such as dramatic increases in gross margin. Vicor achieved those goals with state-of-the-art manufacturing and by delivering both historic and forward-looking information to every employee who could influence performance. Vicor aimed for and attained pervasive performance management using IBM® Cognos® PowerPlay and, later, IBM Cognos 8 Business Intelligence to tie together its key processes, effectively linking individual employees and each customer order to the company's strategic objectives. This system enables all Vicor employees, from the shop floor to the CEO, to monitor and adjust performance within their domain of influence. The six-year-and-ongoing development of pervasive performance management was driven by the manufacturing division, resulting in metrics and analysis that are carefully geared to manufacturing decisions.

Power components are manufactured using highly automated processes in Vicor's ISO 9001 registered facilities in Andover, Massachusetts. Now that its key groups of users have access to the right strategically relevant information in near real-time, Vicor has proved it can boost manufacturing efficiency and customer satisfaction metrics, delivering remarkable bottom-line gains, such as a leap in gross margin from percentiles in the mid-20s to ones in the mid-40s.

Vicor establishes company objectives at the highest level and then flows them down through all areas of the organization into improvement plans that are tied to



the year's corporate strategy. Its BI metrics and reports, customized for manufacturing, are the vehicles for tracking execution and improvements.

## Business Background and the Case for Change

Vicor is an unusual manufacturer, combining mass customization with high-volume production. The company regularly ships more than 3.4 million units of 8,000 product numbers each year to 8,000 customers worldwide from its manufacturing facility in the US. With a flow of more than 84,000 production work orders annually and complex bills of materials that feature up to 11 levels, Vicor does not run a simple business.

Vicor relies heavily on IT, with supply chain applications, engineering systems and integrated robotics assembly, while it uses PeopleSoft ERP for planning, costing, inventory management and master recipe generation data. These systems are closely integrated, creating a very large data universe. Exploiting this universe of manufacturing-related data to achieve performance and financial goals has been the focus of Vicor's performance management initiative for several years.

The project team that Vicor dedicated to performance management (PM) had strong manufacturing backgrounds and was able to see how to apply the system to improving production metrics such as the major components of gross margin: labor efficiency and utilization, and cost of materials.

When it started BI initiatives in 2002 with Cognos PowerPlay, Vicor's employees had been expending considerable time to compile static metrics with tools such as Excel. In such a complex and dynamic environment, reliance on Excel was not practical, and the achievements since then would not have been possible without an enterprise solution. The company needed a strong metrics program to track manufacturing and financial improvement initiatives "without the hassle," according to Joe Jeffery, Director of Manufacturing Systems at Vicor.

In 2006, Vicor began developing Cognos 8 BI models, seeking to help the company link strategic goals, major initiatives and improvement efforts. With the addition of strong analytics, Web access for pervasive use was a necessity. All the available metrics would need to roll up to build the strategic picture and be accessible for analysis.

## Project Objectives

Vicor's performance management initiatives began with the goal of enabling the company to fulfill strategic objectives, defined as specific manufacturing or financial improvements such as reducing scrap material by 50% or increasing gross margin by 50%. The electronics maker saw the opportunity to harness the great quantity of data generated by its manufacturing-related processes. Over time, the Manufacturing Systems group has worked towards the objective of having every employee take part in fulfillment of strategic goals, whether to improve on-time delivery to customers or cut production cost per unit by \$10.

The software features needed by Vicor were defined by these broader goals. As examples, the customer satisfaction objectives made it easy to define the need for

at-a-glance snapshots of late shipments, and dashboards showing when on-time shipments are below plan. Employees needed the ability to drill down and identify production bottlenecks due to material shortage. Development has focused on leveraging the right metrics for each process and each employee.

## The Solution

Vicor selected Cognos 8 BI to supplement its existing PowerPlay models. In this new system, Vicor found the capabilities needed by its different types of potential users: trend reporting, drill-down, fast access to dashboards, anomaly investigation, real-time access to performance information, and ease of access. In addition, Vicor was confident in IBM Cognos' ability to succeed, knowing it had already delivered systems that were successfully helping thousands of manufacturing enterprises to improve service levels, control costs, and better manage extended, complex supply chains.

## Solution Architecture

Cognos 8 delivers a modern Web services architecture that integrates easily with PeopleSoft ERP. This modern, multi-tier, service-oriented architecture takes advantage of open modern Web standards and includes several key features:

- ❖ A 'model advisor' that includes best practices and guides the model builder
- ❖ Application development support
- ❖ A single authoring environment, which Vicor ranks as an important aspect, that offers easier delivery of performance management content to other environments or applications

Vicor has an Operations Accounting group that supplements the Finance group, and operational accounting data such as average sales price and book-to-bill are heavily leveraged in Cognos BI. Data flowing through Cognos 8 at Vicor helps drive nearly every other system, including MRP modules like purchasing and inventory. "If it's measurable, then Cognos helps us manage it," notes Jeffery.

## Powerful Results

### Gross Margins Up 20%

*In the power supply industry, you can take gross margin to the bank. It's very unusual in an onshore model that a US manufacturer could generate this improvement in gross margin.*

*In Q3 of 2003, Vicor's gross margins were at 23.9%. In just two years, that metric had vaulted to 42% for Q3 of 2005, and then further to 43% in Q2 2006. It remained stable at or close to this high level for more than three years. This has resulted in an extremely stable cost environment that helps to generate better cash flow, and positions Vicor to weather difficulties in the global economy.*



## Implementation Approach

Vicor's use of BI began in 2002 after it implemented PeopleSoft Manufacturing. "PeopleSoft provided a robust data pool, and we took advantage of the changeover to reengineer certain processes because we had a strong internal team that could handle this task," explains Jeffery. His previous experience with Cognos PowerPlay, responsibility for some BI modules, and already-purchased licenses led him to roll out two Cognos PowerPlay models. One in particular, which focused on supplier spend rates, caught on by itself. Soon Jeffery was given a team and started a group called Manufacturing Systems.

"Our charter was originally more focused on full integration of bolt-on ERP applications, but our people were also able to leverage the information coming out of PeopleSoft very effectively. Our analyst team knew without asking what would be useful," says Jeffery. "We could cover that gap from 'I want to do this' to coding the application and testing the beta model."

There was never a notion of wrapping up the overall performance management implementation and calling it done because it was clear that the ideas for more applications would keep coming. And they did: 80 models and 35 dashboards are now in use, with more on the way. The Manufacturing Systems group took a top-down approach, starting with a corporate objective such as improving gross margin, carrying through to tactical objectives, and then finally to individual employee metrics like percentage of material scrapped. Every PM project idea was validated against strategic objectives before investing time and resources to develop new OLAP data cubes. From the strategic objective, the team defined tactical objectives, then detailed metrics.

Perhaps most notable about the Vicor implementation of performance management is that it was not finance-centric. It began as a manufacturing initiative and has delivered the useful side effect of serving finance-related objectives.

## Scope and Timing

From Vicor's start with PM in 2002, widespread usage was part of the vision, and Vicor deployed client/server PowerPlay cubes with individual metrics in nearly every area of the company. Beginning in 2007, Vicor began adding dashboard capability to integrate several metrics for specific business entities into a single forum. The goal expanded to pervasive application of PM throughout Vicor's operations and decision-making levels in support of clear strategic objectives. As a result, the scope of the project was ambitious both horizontally (across operations departments) and vertically (presenting information and covering processes from the production level on the workshop floor up to strategic rollups and executive decision-makers). Now the company has about 80 production data cubes in use and 35-plus IBM Cognos Report Studio dashboards, with IBM Cognos Event Studio used to interact with entities outside Vicor.

## Business Impact

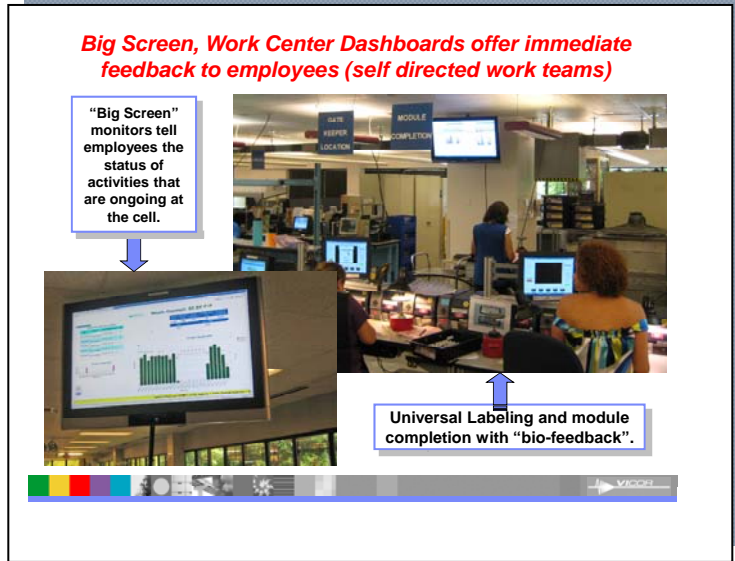
Clearly Cognos BI has helped Vicor become a state-of-the-art manufacturer and boost its financial performance, but there have been benefits well beyond those goals. In fact, the systems, applications and metrics that Vicor assembled around Cognos 8 have led directly to higher productivity and driven continuous improvement throughout its manufacturing. With the help of PM, Vicor's technical and operations staff can now solve problems that previously were difficult even to identify. Analytics in its IBM Cognos applications let Vicor's employees detect and correct problems early and, in some cases, anticipate them before they occur. The cross-functional metrics implemented by Vicor help to improve communication and break down silos between different groups. Perhaps most impressive is that nearly all of Vicor's employees have access to and actually use this system.

At Vicor, performance management is linked to critical processes to make a positive impact on:

- ❖ Labor productivity
- ❖ Inventory management
- ❖ Quality assurance
- ❖ Supply chain management
- ❖ Purchasing
- ❖ Production
- ❖ Customer satisfaction
- ❖ Financial results

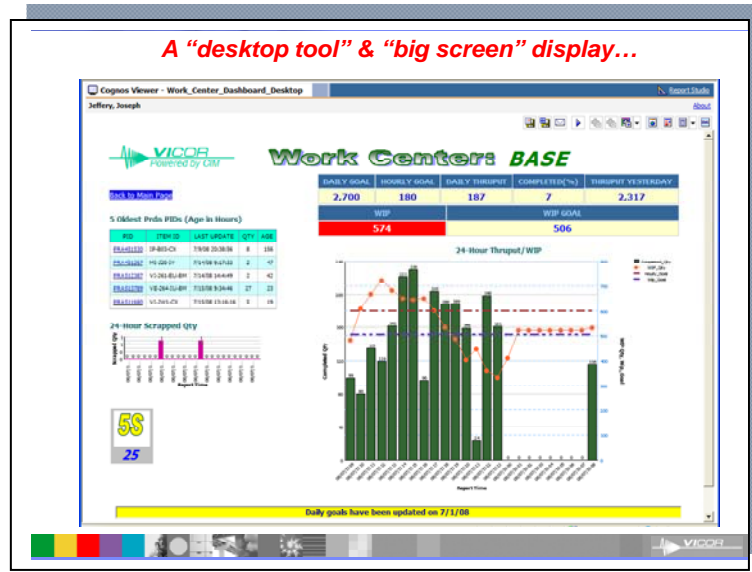
## New Intelligence

The system is already accessible by virtually all of Vicor's 1,100-plus employees and is used daily on an interactive basis by 200 to 300 regular users, while big-screen displays on the production floor keep the entire direct labor force up to date. By using IBM Cognos 8 BI integrated with its various manufacturing-related applications, Vicor decision-makers not only can see clearly what has already happened, but also better prepare for what is likely to happen next. "It's not only pinpointing problems, it's anticipating them," states Jeffery. With advance warning comes the ability to head off supply or manufacturing problems, in certain cases.



"Our engineers and analysts can view work order history in a single snapshot and recognize any problems that affect production on a model," according to Jeffery. The system's drill-through capabilities allow rapid, thorough investigation of anomalies,

particularly the root causes of any delinquent backlog or other issues that could hinder on-time delivery.



Such statements are often made about BI and corporate performance management projects, but Vicor's creative yet painstaking adaptation of performance

management to the key business processes of its mass customization manufacturing has achieved more than most: It has delivered strong bottom-line improvements while engaging nearly the entire employee base. For example:

- ❖ The financial and business analyst who needs to explore data can do it in real time and easily develop new models and metrics to support strategies and tactical initiatives.
- ❖ Casual users can automatically receive reports, in context.
- ❖ Business managers can see their dashboards and scorecards, but with the ability to drill down.

The impact reaches outside Vicor, with forward-looking data helping vendors in their planning and stocking. For example, one well-known semiconductor

## Supplier Benefits

### Forward-Looking Data for Suppliers

*Vicor's ERP system supplies the data that tells its vendors, "Stock up, deliver to us." But the vehicle for delivering materials and order data to suppliers is IBM Cognos-based, as is the sales pipeline data that allows forward planning.*

distributor operates an in-house store located at Vicor. The ordering and inventory are driven by data that issues from the ERP system, but material replenishment instructions flow through Cognos' Event Studio to a vendor resource center link.

The system allows users to drill from item family (product platform) to item group (routing similarity), then down another level to an individual item that is having a problem. Then they can click through to individual work orders where the source of the problem might be hiding. The end user easily chases an

anomaly – which could be a purchase price variance, an incorrect delivery to a customer, or excessive cost of goods sold – down to its root cause. Vicor's users can drill into Cognos BI from their intranet, as well as drill out of BI at will to pass parameters to the MIS and ERP systems.

A user can add new dashboards and data cubes into the Cognos 8 BI reporting environment easily, with full access according to his or her assigned role via the intranet. Vicor needs that information presented according to formally defined reporting lines, and its IBM Cognos applications adhere to Vicor's hierarchical structure. On most of the dashboard screens, the client-server-based IBM Cognos applications with drillable data "share real estate" with Web/intranet reports or dashboards.

"We can take a business entity and build a dashboard for several metrics that relate to that specific entity," explains Jeffery. "This results in a very intuitive process for managers because they are assessing the health of a business entity."

## Examples of Pervasive Performance Management at Vicor

At Vicor, performance management is widespread and well accepted: Cognos 8 and Cognos PowerPlay have thoroughly penetrated the company. Within Vicor, there are many examples of applying a performance management solution successfully to manufacturing to improve performance. BI models are created to serve nearly every group of possible users, and dashboards are not just for the executive layer of management; they are used even more on the factory floor than in the boardroom.

### Example: Deploying New Performance Management Models at Vicor

On an annual basis, Vicor's senior management meets off-site to outline new strategic objectives, which are often updated through the year. The process starts with a strategic objective like improvement of on-time delivery to customers. Management then establishes tactical objectives, such as improving the initial material and capacity checking algorithms. The objectives and assumptions tied to them are incorporated into the annual budget.

Detailed metrics are set for the new tactical objective, which might be time-phased backlog, on-time delivery stats and a root cause Pareto tool. These tracking metrics can be used not just during manufacturing, but later in appraising individual employees for performance reviews.

### Example: Keeping the Production Floor Humming Efficiently

"Work center" dashboards on large overhead flat-panel displays offer immediate feedback, with production metrics, to employees who operate in self-directed teams on the factory floor. A team member need only look up to find a real-time dashboard that shows information such as Delinquent Work in Process, Scrap Dollars Occurring and Throughput Work in Progress. "This is very popular when we bring customers through the shop floor," mentions Jeffery. Displayed prominently throughout the production area, these dashboards present metrics that track the pulse of manufacturing, so employees can see goals that are adjusted and updated throughout the work shift. These production operators "never experience vagueness about objectives or metrics such as how much material remains, the scrap rate, etc.," says Jeffery.

### Example: Quality Control

Vicor uses the BI system to communicate with key customers about their open order activity. Under its Preferred Services Program, a report card is automatically generated that includes such results as Supplier On Time Delivery. After review and commentary within Vicor, the scorecard goes out to select customers, showing each a list of their open order activity.

### **Example: Anticipating Production Problems**

In Vicor's high-volume, high-mix environment, the manufacturing resource planning cycle is complex. Cognos BI at Vicor receives a feed nightly from the PeopleSoft MRP system, which guides production planners on what to build for each product platform. This also supplies data to a module that displays the production yield based on historical experience; with one mouse click, the user can jump to new actual build numbers for that product. All nine production planners rely on this system daily to give them a comprehensive view of upcoming problematic builds where yield has been variable over time, or simply to show whether the yield trends are going in the right direction. The user can explode to specific details within the work center. According to Jeffery, "When we see a build coming that has presented yield problems in the past, we can prepare by assigning a team to correct the technical issues prior to the build."

### **Example: Routing Standard for Valuation of Inventory**

At Vicor, a model for the "routing standard" enables accurate tracking of the value of inventory, including work-in-process, or WIP, as it changes with each step in the manufacturing process. A routing standard gives the expected materials and labor usage for each type of unit produced. On Vicor's charts, this appears as a red line with actual labor time shown in green. The chart is updated nightly at Vicor and ideally shows that actual performance is following the routing standard. If not, management may need to correct the routing standard, a critical value in a manufacturing environment.

### **Example: Sales and Marketing "Funnel Management"**

Sales forces should be out selling, not sitting at home forecasting. PM makes it easier for the sales force to be effective, telling them where to spend their time. Using the sales dashboards, sales reps can readily see what products are hot, average sell price for their territory, what activities are pending and which programs are ready to book. For territories with multiple sales reps, the dashboard shows how every rep and product is trending.

Managers at Vicor can "slice and dice the world" for their sales teams, with regions broken into territories, allowing drill-downs to show activity by representative and by customer. The BI-based sales applications evolved in large part from biannual meetings where Vicor's worldwide sales force requests BI tools, changes and data for models. The requests have shifted from booking and shipment models, which they use now, to forward-looking requests such as information on leads, project registrations and sales forecasts – the elements of "funnel management." This information helps the VP of sales, regional sales directors and individual reps to drive their decisions for the best payoff.

### **Example: Diagnostics for the MRP System**

Vicor's MRP nightly batch is a very complex set of 25 jobs that run in sequence to extract what happened during the day. If at any point that overnight process fails, it

could create a catastrophe because the factory wouldn't know what to do in the morning. Cognos 8 is used at Vicor to monitor the timing between MRP jobs, and provides diagnostics for any failure, time lags or other problems during the overnight batch processing. A suite of metrics monitors the batch jobs running with lights out, shows the operator the timing trends for each piece of the MRP, and can even indicate which segments of that overnight batch might be heading for trouble. When something looks questionable, Cognos Event Studio can notify the operator of impending trouble.

### **Example: Supply Chain and Logistics Management**

Vicor uses Cognos PowerPlay client/server OLAP cubes in supply chain management, where users need to explore a single topic very nimbly. The system offers automated monitoring of the supplier base, purchase order spend and inventory levels. The PowerPlay client allows a user to drill up and down very quickly, as well as check open PO commitment, inventory aging along with predictive excess and obsolete inventory, and predictive purchase price variance (PPV). A manager can look at commodity spending, as well as supplier management in a layered view of the cube, plus inventory scrap and adjustment monitoring.

Vicor's applications for supply chain management show detail on upcoming "builds" by product platform and by family, to warn about what is imminent in the pipeline and to place orders further out. This enables the manufacturing teams to order materials on time as well as check the precision of the MRP data. The analytics in this particular model show past performance on a per-build basis and whether the yield is historically consistent and stable or variable. While the MRP system drives the dispatch directing the factory to order materials, the PM applications help analyze the order quantities to avoid missed delivery by short shipments or waste of excess material. This particular application helps check the yield; it is a planning attribute that controls the gross quantity on dispatched work orders. It is critical in order to ensure that the net quantity meets the customer demand. If it is wrong, the planning team can adjust the numbers in PeopleSoft ERP. If the yield has been erratic, a copy of the report goes to Engineering with instructions to proactively repair associated problems before they start the build on the production floor.

### **Return on Investment**

Vicor annually sets improvement initiatives designed to involve all employees. Cognos' PM system has been used to track, measure and report on these initiatives, which helped increase Vicor's gross margins from the low 20 percent range to the mid-40s over a two-year period. This impressive improvement equates to about \$40 million in increased gross margin annually. Vicor achieved this by designing models that specifically address materials, labor and overhead costs, all three key elements of margin.

Other significant benefits, but harder to quantify, include a new assurance and speed to management decisions. “The general manager and vice president of operations have Cognos BI reports in hand every day,” says Jeffery. “All our senior management meetings are littered with data cubes. Previously, like in most companies, these meetings had a large group of people looking at charts on the wall, showing high-level summary data. When there was a question, it was often ‘What went wrong there?’”

For the past few years at Vicor, the same questions have been asked, but the detail behind any variances is available with a click, drilling down to a granular level. “The bosses know how to use the models and pursue questions. Culturally, the bar has been raised and keeps going up,” says Jeffery. This means managers must and do arrive with the tough questions answered, and solutions to business issues are identified more rapidly.

## Lessons Learned

While any implementation brings lessons and experience, the distinguishing aspect of the Vicor PM project is that it aimed for and achieved almost ubiquitous application of business intelligence throughout the company, both horizontally and vertically. Vicor methodically defined and developed new applications of Cognos 8 BI in more departments, and with its focus on strategic goals and manufacturing metrics, nearly every initiative has yielded benefits. All 1,100-plus Vicor employees have access to the system, taking advantage of named user licenses that cover the entire staff of the company, plus 24 IBM Cognos Report Author licenses.



## Why IBM Cognos Solutions?

Vicor's selection team had previous experience with the Cognos PowerPlay tools, but Cognos 8 was chosen because it delivered the full set of capabilities that Vicor needed, replacing spreadsheets and tying together planning, budgeting and forecasting on a single platform. Cognos 8 BI gives Vicor a full range of report types and performance management capabilities.

The IBM Cognos solution also met the requirement for Web-enabled access to dashboards, as well as client/server for drilldown and analytics. From the start, Vicor regarded the IBM Cognos single authoring environment as a critical aspect because this feature lets all PM content be sent to different environments and wireless devices without reworking or duplication, regardless of language or locale. With single authoring, there is no need to build and maintain a separate PM deployment for wireless delivery, as one example.

Vicor typically integrates several data models behind a single dashboard, geared to the user type. Both IBM and Vicor emphasize how important it is to tailor the information to each user. The IBM Cognos offering provides a clear framework for designating which information is delivered to each type of user.

Scalability in the face of future growth and acquisitions should not be a problem, as Cognos 8 BI scales to thousands of users.

## Going Forward

From its current 80-plus production models, Vicor plans to continue with more forward-looking, predictive metrics as well as pervasive delivery of forms and reports, making key information available via a variety of delivery methods depending on the various sets of users.

Vicor relies on a clear-cut methodology in deciding how to extend its BI capabilities. “We wouldn’t think of launching any initiative if we did not agree from the outset on what we wanted to measure, how we were going to assess it, and how we would improve it over time,” comments Jeffery.

Using PM to look forward with forecasting is a priority now that many historical metrics have been instituted successfully at Vicor. For example, Cognos 8 BI will soon be applied to management of Vicor’s CRM initiatives, handling leads, project registrations, forecasts, quotations and marginal pricing requests. Its regional sales managers will see CRM data integrated with ERP data on their dashboards. Vicor will even go beyond tying worldwide sales forecasts to manufacturing activities; it aims to create a predictive business model to help forecast financial values and the cost of back-end measures. “What everyone wants now is funnel management,” explains Jeffery. “Looking at the sales pipeline, or job funnel, lets sales optimize its bookings based on leads. The idea is to go as far upstream as possible.”

Another area for looking ahead is predictive labor loading. Vicor not only needs to have the right raw materials ready, but also the right people for each production “cell” when a job comes up on the schedule. “We’re not fully there yet,” says Jeffery, “but we have developed a flexible labor pool that can move across any of our product lines, as long as the individual is certified for a particular process. Knowing what jobs are coming at them lets the manufacturing managers and VP of Operations slot the right on-staff and contracted people.” The better its predictive capabilities, the better Vicor can staff for sustainability, but also handle surges in business.

## Conclusion

The hallmarks of Vicor's implementation of IBM Cognos 8 BI and IBM Cognos PowerPlay are:

- Thorough integration with its manufacturing systems
- Many cross-departmental applications that were designed or suggested by operations personnel and are now widely used
- Vertical usage from the shop floor to the CEO
- Continuous extension, with employees continually proposing new projects
- Many success stories of widespread usage and performance improvements
- A progression from historical to forward-looking predictive metrics
- New PM projects annually to help achieve new strategic objectives
- Carefully selected metrics that help managers and production employees
- Make the right decisions

There are many metrics used at Vicor, but all derive from strategic goals. Every metric rolls up to the strategic picture and contributes to getting the job done each day. The result, achieved with the ongoing participation of many operations staffers, is pervasive PM with nearly 100% of Vicor's employees relying on Cognos 8 BI

applications at some point in their work week. PM helps them plan, build units to fulfill customer orders, reduce scrap losses, deliver on time, identify anomalies and fix problems – and in some cases, anticipate and head off manufacturing issues before they even happen. Pervasive PM has enabled Vicor to fulfill crucial strategic objectives, including the “hard numbers” manufacturing and financial improvements that distinguish this state-of-the-art manufacturer and have helped it weather the toughest business environments.



### Fast Facts: Vicor

#### Power Solutions to Meet Any Need

**Industry:** Electronics Manufacturing

**Geography:** Worldwide

Functional Areas of Deployment:

- Manufacturing Teams
- Quality Control
- Production Planning
- Sales

**Users:** 1,100 +

Potential Users Engaging with System: 100%

**Information Needs:** Analytics, Real-Time Reports, Dashboards, Scorecards, and Web Access

**Platforms:** PeopleSoft ERP/MRP, IBM Cognos 8, IBM Cognos PowerPlay