### IBM

#### Overview:

With integrated IBM Cognos performance management software and services, electronics companies are:

- Improving operations, processes, initiatives and return on investment.
- Gaining better visibility into customer needs, and improving customer service.
- Aligning sales, marketing, supply chain and finance.
- Standardizing the planning process, consolidating and gaining consensus between top-down and bottom-up operational plans.

# The power of performance

Customer successes in electronics

In a fast-paced, highly competitive and global economy, electronics manufacturers can't afford lackluster performance. They have to get the job done faster, and still maintain a high level of quality. This is especially true in electronics, where ever-shorter product lives mean faster and faster production schedules.

These organizations need to actively monitor operations and employ a dynamic, integrated planning process to guide their decisions and results. So they can stay on top of trends and customer requirements, and quickly adapt and evolve as needs and challenges arise.

IBM® Cognos® performance management – planning, scorecarding, reporting, analysis and dashboards – provides the foundation electronics organizations need. It allows them to budget, manage performance, and model the financial impact of business scenarios and monitor results across the organization.

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- Gaining better visibility into customer needs, and improving customer service.
- Aligning sales, marketing, supply chain and finance.
- Standardizing the planning process, consolidating and gaining consensus between top-down and bottom-up operational plans, and ensuring all parts of the company are managing to a single set of financial measures and business goals.



Hundreds of electronics manufacturers worldwide already use Cognos to optimize their business. Read on to learn more about how:

- Enhanced process efficiencies have led to much more rapid access to BI at Alpine Electronics. By using IBM Cognos software, monthly financial closes can be completed up to 30 percent faster than before, and there has been a 40 percent reduction in operational workload for the finance department.
- With the help of IBM Cognos planning and BI, PKC Group can create forecasts 30 percent faster than before. As a result, the company can create new 12-month forecasts every month

   helping it to respond to changing economic conditions.
- Using IBM Cognos software, Vicor has improved business outcomes through greater insight, enabled business process improvements and increased staff efficiency.

## **Alpine Electronics**

Based in Torrance, California, Alpine Electronics USA Inc. develops and markets a wide range of leading-edge integrated mobile media entertainment, and navigation systems for mobile use. The company employs 300 people and has a separate sister company that has strong focus on research and development – continually striving to generate and enhance a new kind of in-vehicle experience, based on the convergence of high performance audio, video, navigation and telematics in the form of integrated mobile multimedia systems.

"Alpine operates under two separate business elements," explains Mick Ono, Senior IT Manager at Alpine Electronics USA Inc. "The first is aimed at the after-market, working through retailers and representatives to sell products that can be fitted to existing vehicles. The second works directly with automotive manufacturers to integrate advanced mobile media solutions into new vehicles."



#### **Predicting future trends**

"Working with the automotive manufacturers is a unique challenge: they are already designing vehicles that will not reach the dealerships until 2012. To supply integrated mobile media solutions that will meet the needs of drivers and passengers three or four years in the future, we need to be able to plan sales, quantities and pricing a long way ahead."

Without a single integrated enterprise resource planning and supply chain management solution, Alpine lacked the consolidated business data required for accurate long-term planning.

By establishing a central database as a 'single source of truth,' and by gaining the ability to collect and analyze data in real time, Alpine could understand its current position and sales history, and analyze market trends from other sources to help forecast its future direction.

#### Finding a way forward

"We were coming from a situation where our North American manufacturing and sales companies were separate entities, each with its own IT systems," says Ono. "We decided to consult IBM to find the best way to implement a single centralized solution that could manage our operations and long-term planning processes from end-to-end."

"Looking beyond the bells and whistles, you need to have a system that can manage your finances and supply chain effectively. SAP provides the building blocks of that system, and IBM Global Business Services continues to be a highly valued partner in our effort to improve quality and efficiency in all our business processes."

Mick Ono, Senior IT Manager at Alpine Electronics

IBM Global Business Services performed a feasibility study to explore the unique requirements of Alpine's business, and recommend both a target technology platform and a project management methodology that would ensure the success of the move to a fully integrated solution.

Alpine then sent out a request for proposals to a number of leading business and IT consulting companies.

#### The need for industry-specific expertise

"We received four responses to our request for proposals, and IBM Global Business Services was by far the strongest candidate," comments Ono. "In addition to technical expertise, we wanted a partner that not only had experience in the electronics sector, but could also provide insight into the demands of the automotive sector, and IBM was one of the few companies that could deliver.

"IBM also has one of the most advanced project management methodologies for ERP implementations, called Ascendant. This gave us confidence that we could achieve this business transformation, fast."

IBM Global Business Services designed and modeled a wide range of enhanced business processes for Alpine, helping to simplify and automate key workflows in the finance, procurement, sales and inventory management departments. These new processes are managed by applications from the SAP Business Suite, running under Red Hat Enterprise Linux and VMware on IBM x3850 servers.

#### End-to-end integration of business data

The solution provides an end-to-end process management framework, collecting and integrating data from a wide range of inputs, both digital and physical.

Interfaces developed by IBM using the SAP NetWeaver Process Integration component enable Alpine to gather, process and seamlessly exchange data (future usage planning, purchase orders, inventory information and so on) with its local suppliers, its distributors and its largest clients.

This enables total traceability of each financial transaction and physical component throughout the supply chain – an ability that is highly prized by clients in the automotive industry.

With all key business data held in a single central SAP system, Alpine now has a reliable, accurate and accessible historical record of its entire business – which forms a basis for the creation of long-term planning and forecasting activities.

#### A clear view of business activity

The solution also delivers a wide range of other advantages. Since application support and strategic development is handled by IBM Global Business Services – Application Management Services, Alpine benefits from a cost-effective and scalable support model, reducing the need to maintain highly skilled SAP administrators and developers in-house.

IBM maintains the entire SAP environment, ensuring smooth business operation, configuring new business requirements as per standard SAP practice, providing end-user training for new users, and conducting monthly meetings with key customer stakeholders to present the deliverables and project status reports.

IBM has also recently helped the company upgrade to SAP ERP 6.0, bringing its IT infrastructure into line with the parent company in Japan, and potentially paving the way for further ERP integration across the whole group.

Case Study

Keeping up-to-date with the latest SAP application releases also helps Alpine to minimize support costs and implement new functionalities as and when the business requires.

Since IBM provides an onshore/offshore support model by leveraging resources in both the US and India, development of the environment can continue 24x7.

#### Reaping the benefits

The end-to-end automation of key financial and sales processes has reduced workload for the accounts department by approximately 40 percent, and enabled monthly financial closes to be completed up to 30 percent faster.

"The ability to share the long-term future throughout business owners is very important to us, and it depends to a large extent on doing the simple things right: getting the right information in the first place and handling it reliably in our back office operations," comments Ono.

"Looking beyond the bells and whistles, you need to have a system that can manage your finances and supply chain effectively. SAP provides the building blocks of that system, and IBM Global Business Services continues to be a highly valued partner in our effort to improve quality and efficiency in all our business processes."

## **PKC Group**

The PKC Group offers design and contract manufacturing services for wiring harnesses, cabling and electronics. The group has production facilities in Finland, Brazil, China, Mexico, Poland, Estonia and Russia, and employs about 5,000 people. PKC Group Oyj is listed on NASDAQ OMX Helsinki, and achieved net sales of 311.7 million Euros in 2008.

In an often volatile economic climate, PKC Group needs to be able to keep its operations in close alignment with its finances. Budgets for investments and fixed costs, sales forecasts and production plans need to be created and updated regularly to help the group deal effectively with changing market conditions.

Marja Sarajärvi, Chief Financial Officer at PKC Group, comments: "The group has subsidiaries around the world, and works in many different currencies - which makes centralized financial planning a complex proposition. Collecting and checking all the data used to be a major task for our finance department. It took around two weeks to prepare each forecast, which meant that in practice it was difficult to update our forecasts more frequently than four times a year."

Looking to improve this situation, PKC Group asked Soleno, a Finnish IT consultancy that specializes in IBM Cognos technologies, to find a new solution.

"With IBM Cognos Planning, our 12-month forecasts for sales, production and investment and fixed costs can be updated every month, instead of on a quarterly basis. This means that if the economic climate changes suddenly, we are able to adapt more quickly - potentially making us more efficient and giving us an advantage over less agile companies."

Marja Sarajärvi, Chief Financial Officer at PKC Group

"Soleno has an excellent reputation in Finland, and has worked on several important projects for us in the past," says Sarajärvi. "The Soleno consultants understand the way our company works, and the solutions they have delivered make a real contribution to our business."

Soleno advised utilizing the ETL capability within IBM Cognos to integrate and manage data from the subsidiary companies, and provide it to IBM Cognos Planning for forecasting. Reporting and analysis would then be performed by IBM Cognos Business Intelligence, which would deliver the results to users via a simple Web interface.

"The whole project took about six months," comments Hannele Rinne, Controller at PKC Group. "We did it in three stages – first the sales forecasts, then the production planning, and finally the investment and fixed cost planning. Soleno did an excellent job: the consultants were totally committed to planning and delivering the implementation successfully, and coped well with the challenges of coordinating such a large project across several countries."



With the IBM Cognos solution in place, PKC Group has seen numerous improvements in its planning processes. For example, the solution provides a simple Web-based interface, and does not require the installation of any client software. As a result, it has been easy to introduce more users to the solution and promote teamwork, without increasing IT maintenance costs.

"Collecting the data is much easier now," explains Rinne. "A lot of the work has been automated, and we can manage the manual parts of the process more easily. Previously our central finance department had to input all of the data themselves;

now the local sales organizations can help too. Using the simple Web interface, they can enter and check data themselves – so we have 50 or 60 people collaborating on the forecasts instead of a few staff working full-time."

As a result, data quality has improved significantly, and the forecasts can be created much more quickly – approximately 30 percent faster than before.

"Making forecasting a quicker and easier process means that we can afford to do it more frequently," says Sarajärvi. "With IBM Cognos Planning, our 12-month forecasts for sales, production and investment and fixed costs can be updated every month, instead of on a quarterly basis.

"This means that if the economic climate changes suddenly, we are able to adapt more quickly – potentially making us more efficient and giving us an advantage over less agile companies."

IBM Cognos BI delivers the forecasts to business users in the form of intuitive graphical reports, helping them to analyze business performance easily and take decisions rapidly, based on accurate, up-to-date information. As a result, the business can potentially operate more efficiently in response to changing market conditions.

Hannele Rinne concludes: "The combination of IBM Cognos software and Soleno's expertise has enabled us to simplify our planning and forecasting processes while increasing accuracy and flexibility. The increased insight into our operations should help us make better decisions and react more effectively to the needs of our customers."

## **Vicor**

"Cognos has really become a way of life. 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. Cognos is our key to staying on track and ahead of the competition."

Joe Jeffery, Director of Manufacturing Systems, Vicor Corporation

Vicor Corporation designs, manufactures, and markets modular power components and power systems used in the communications, data processing, industrial controls, test equipment, medical, and defense electronic markets.

Headquartered in Andover, Massachusetts, the company also maintains offices in North America as well as across Europe and Asia. Vicor has annual revenues approaching \$200 million and employs more than 1,000 people worldwide.

Vicor decided to implement a BI solution to track and analyze production processes and issues more effectively. IBM Cognos provides Vicor with a framework for performance management and accountability, allowing the organization to tie together strategic goals, major initiatives, and improvement efforts.

#### Challenges faced

For Vicor, the goal was simple: focus on breakthrough improvement in measures designated within the strategic objectives for each year's operating plan. Many different techniques and technologies were used to achieve the objectives, including Hoshin Breakthrough Planning, Kaizen, 5S and statistical process control.

Ultimately, the company adopted annual improvement themes to stimulate the full involvement of all employees. These included the "4 x 50s" (50 percent improvement across four strategic objectives in one year), "10 bucks a brick" (pull \$10 of cost out of each product) and "faster, better, cheaper" (build the product more efficiently).

These initiatives helped to bring Vicor's gross margins from percentages in the mid-20 range to current levels in excess of 40 percent.

The next challenge was to find a BI solution that would help Vicor track, measure and report on their progress. In addition, access to real-time information was a critical requirement.

"We needed to correlate a set of objectives with the initiatives that would accomplish these objectives and apply them through successive levels of planning," states Joe Jeffery, director of manufacturing systems at Vicor.



Case Study Cognos Software

#### Strategy followed

Vicor's operating environment is complex. Their business model is one of mass customization, which involves high-volume production and a complex mix of individual models. The company routinely ships more than 8,000 different products to 8,000 customers each year. This is accomplished using onshore manufacturing, based in Andover.

Bills of materials are highly complicated (indented up to eleven levels), and manufacturing routings include up to 20 tracked operations, as well as many information tasks. Vicor's manufacturing systems include integrated robotic assembly, as well as supply chain applications, engineering systems, and operational systems for storage and shipping.

All planning, costing, inventory management, and master recipe generation data is managed through a PeopleSoft ERP system.

The organization initially deployed IBM Cognos PowerPlay® in 2002 to provide metrics and analytics capability on top of the ERP environment. This activity has led to the creation of 75 production data cubes that act as a robust content store for the new deployment of the IBM Cognos 8 reporting suite. The integration of these new tools has led to 36 production dashboards that are used on a daily basis by the various functional arms of the business.

Jeffery notes that the benefits of IBM Cognos 8 BI were immediately apparent.

"With IBM Cognos PowerPlay, we were able to take a single metric and analyze it in depth, which was great. Now, with IBM Cognos 8 BI, we are able to integrate several data models behind a single dashboard.

"Basically, we can take a business entity, like a family platform or a business unit, and build a dashboard for several metrics that relate to that specific entity. This results in a very intuitive process for managers because they are assessing the health of a business entity."

#### **Benefits realized**

IBM Cognos software is now used across the organization on a worldwide basis to align strategy with tactics in areas such as labor productivity, inventory management, purchasing, and manufacturing. One of the company's goals is to improve in-time delivery for customers. With Cognos, users can track activities and do root-cause analysis of delinquent backlogs or other issues that affect deliveries.

Jeffery points out that this timely, in-depth insight has brought efficiency gains across the business.

"Let's say the user sees an anomaly in the metrics data that he or she would like to investigate," he explains. "The user can simply drill into the information and continue chasing the anomaly down to the individual work order, sales order, or event that caused the problem.

"This has been a great productivity gain compared to our old method of compiling static metrics with tools like Microsoft® Excel®. With our IBM Cognos investment, we can now use our resources to solve the problem, not just to understand that it exists."

In addition to process improvements, metrics and analytics reach across different functional areas, which increases cross-communication and decreases silo-based thinking. More importantly, in-house analysts are now able to view data in real time and develop new metrics and models to further support strategic and tactical initiatives as needs and ideas arise.

"As an output from our nightly MRP process, engineers and analysts can view upcoming factory production requirements and examine historical yield trends in a single, comprehensive dashboard," remarks Jeffery.

"This facilitates proactive problem solving in the prevention of potentially low yielding, work order dispatch. This increases factory productivity and avoids disappointing customers with respect to delayed deliveries."

Vicor has future plans to use IBM Cognos 8 BI to help manage its CRM initiatives and develop forecasting of worldwide activities further. In addition, Vicor would like to take its new-found data wealth to create a predictive business model to help forecast financial values and the cost of backend measures.

Jeffery concludes, "IBM Cognos has really become a way of life. 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. IBM Cognos is our key to staying on track and ahead of the competition."

## About IBM Cognos BI and Performance Management

IBM Cognos business intelligence 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, including 9 of the top 10 high tech manufacturers in the world, choose IBM Cognos solutions.

#### Request a call

To request a call or to ask a question, go to www.ibm.com/cognos/contactus.



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