



## Microsoft Dynamics Customer Solution Case Study



# New Business Management Solution Helps Petroleum Coke Manufacturer to Integrate Operations

## Overview

**Country or Region:** India

**Industry:** Manufacturing

### Customer Profile

Goa Carbon is **INR 2 billion** company from the Dempo group. It is one of the leading manufacturers of calcined petroleum coke (CPC) in India. The company has a capacity to produce 2,40,000 tonnes per annum (tpa) of calcined petroleum coke, which is next only to Rain Calciner's annual production capacity of around 6,00,000 tpa

### Business Situation

Goa Carbon's legacy software was impacting the efficiency of its business. It required an efficient ERP solution which would seamlessly integrate its different manufacturing units and deliver customer predictability, imperative to compete in global arena.

### Solution

Goa Carbon teamed with Affordable Business Solutions, a Microsoft® Gold Certified Partner to deploy Microsoft® Dynamics™ NAV 4.0.

### Benefits

- Accelerates processes from quotation to production
- Easily adopted across units
- Increases visibility into business
- Streamlines supply chain management
- Improves inventory management

“By integrating our operations, Microsoft® Dynamics™ NAV 4.0 provides up-to-the-minute operational data. As a result, we can get a clear view of our business activities and make the best possible management decisions.”

**Shrinivas V Dempo, Managing Director**, Goa Carbon

Goa Carbon Limited, set up in 1976, is India's leading manufacturer and exporter of petroleum coke to countries across the world. It has three calcination plants across the country with a combined capacity of 240,000 tpa of calcined petroleum coke. To help improve its business processes, the company needed a modern integrated business solution that would integrate its three manufacturing units in order to bring down the cost of logistics, inventory and overall operations. The challenge was to standardize its processes across the three units, all operating on three disparate systems in order to optimise the operating capacity. Goa Carbon decided to replace its disparate legacy systems with new integrated Microsoft® Dynamics™ NAV 4.0 with the help of Affordable Business Solutions (ABS), a Microsoft® Gold Certified Partner. While allowing real-time view of data across multiple units and departments, the solution enabled Goa Carbon to automate business and production processes, speed transactions, and gain insight for operational improvements.



“With the adoption of Microsoft® Dynamics™ NAV 4.0, we are now able to close our books in a day which earlier used to take a couple of weeks.”

K Balaraman, CFO, Goa Carbon

## Situation

Goa Carbon Limited is a company of DEMPO GROUP, a reputed business house in Goa with offices in the metro cities of India. It was set up as a public limited company in 1976, with a paid-up capital of about INR. 91.5 million, and is in the business of manufacturing and marketing of Calcined Petroleum Coke.

The calcination plant of 75,000 tpa capacity, is located in southern Goa, 40 kms away from the Mormugao port. The company also has two other plants, one located at Bilaspur in Chattisgarh and the other at Paradeep in Orissa. The installed capacity of the Bilaspur plant is 40,000 tpa and that of the Paradeep plant is 1,25,000 tpa.

The company is a regular supplier to aluminium smelters, graphite electrode and Titanium Dioxide manufacturers, as well as other users in the metallurgical and chemical industries.

In 1993, Goa Carbon became the first Indian manufacturer-exporter of petroleum coke, and along with its subsidiary Paradeep Carbons Limited exports to Australia, Egypt, Dubai, France, Kuwait, Iran, Saudi Arabia, Singapore, Malaysia, Indonesia, Thailand, South Africa, Russia, Wales and England.

Some of its key domestic customers include BALCO, Indal, Hindalco, Eveready, Bajaj Tempo, Bhagwati Autocast, Jindal Steel, etc. Goa Carbon's overseas clients include David Hart, Iran Aluminium, Amsteel, Natsteel, etc.

Goa Carbon ended the June 2008 quarter on a healthy note. Its net sales were up 130 percent at INR 10.96 billion compared to the corresponding quarter a year ago.

Goa Carbon was not satisfied with its legacy reporting system. It had acquired two manufacturing plants from two different

companies which were running on different ERP applications. Ambitious plans for growth were being hampered by the company's disparate information systems. As a result, it needed to integrate all its three manufacturing units under a single platform in order to optimise its resources. To capture a significant market share in the global arena, the company required an infrastructure partner who could help it standardize business processes across the three units.

The company lacked an integrated process to match products with customer orders. As a result, delivery schedules would go awry and the company was lacking in customer predictability.

“When competing globally, an organization requires a system that can help shrink development cycles, respond quickly to customer trends, and comply with changing regulations,” comments Mr M.R Haldankar.....General Manager – Commercial, Goa Carbon. He adds, “With the right system in place, an organization can improve operations, open visibility into the supply chain, and increase its competitiveness.”

Goa Carbon was lacking in all these areas and thus decided to deploy an ERP solution that would help integrate all its three manufacturing plants. This would in turn help streamline its disparate inventory, bring down cost of logistics and an overall operational excellence.

## Solution

Goa Carbon evaluated a number of ERP products and after a rigorous analysis decided to implement Microsoft® Dynamics™ NAV 4.0, supported by Affordable Business Solutions (ABS), a Microsoft® Gold Certified Partner.

Affordable Business Solutions engaged with Goa Carbon to undertake seamless integration across its three manufacturing plants under a single platform.

The approach was to drive implementation in one go. Microsoft® Dynamics™ NAV 4.0 connected all the critical material, operational data with market intelligence in order for Goa Carbon to make sound, rapid decisions and thus respond quickly to change.

The solution utilised several Microsoft® Dynamics™ NAV 4.0 modules including material, inventory, finance, inter company fixed assets, sales, production and inventory with all the local taxes applicable to the country\_\_\_\_\_.

“Dynamics NAV presents a familiar, intuitive user interface based on the Microsoft Windows operating system. In addition, it is able to provide individual, detailed modules for each plant,” comments Mahesh Charate, Manager - IT, Goa Carbon.

The implementation was completed in six months. The process began in July 2006 and was completed by January 2007.

Microsoft® Dynamics™ NAV 4.0 has been very effective as far as tracking of production, quality and compliance is concerned.

“We have been able to implement full traceability with integrated information, comprehensive lot and production monitoring, and end-to-end transparency,” comments Mahesh Charate, Manager - IT, Goa Carbon. “This in turn has helped us to support fast, proactive, and informed responses to quality variations or unexpected conditions.”

## Benefits

Microsoft® Dynamics™ NAV 4.0, a flexible, attractively priced business solution, aided Goa Carbon in information sharing, controlling processes and improving operational efficiencies.

### **Accelerates Processes from Quotation to Production**

The price of petroleum coke fluctuates depending on the volume produced and the worldwide demand at any time. Since it is a by-product of oil refining, refiners have to ensure that stocks are sold on a regular basis. As a result, it is preferred by the manufacturers that inventory is reduced by selling the product immediately. “I am absolutely certain that our whole process has speeded up enormously. Delivering an order confirmation is now around half the work it used to be,” comments Ganesh, Manager - Marketing, Goa Carbon on the efficiency brought in by the implementation.

The emphasis has shifted from configuration and development of specific bills of materials to other areas of development, and time for value-added activity has increased.

“Employees can focus more on their core function - engineer quality machinery, as the solution takes most of the planning and preparation out off their hands,” says K Balaraman, CFO, Goa Carbon.

### **Easily Adopted Across Business**

Goa Carbon uses Microsoft® Dynamics™ NAV 4.0 to support its entire business process, from sales and purchasing, to manufacturing and marketing. “Better integration means that we have eliminated the need for disparate systems, and, as a result, our employees work from the same, consistent set of information available in the one place,” highlights Mahesh Charate, Manager - IT, Goa Carbon.

He adds, “The move to Microsoft® Dynamics™ NAV 4.0 has been a good

experience because its user-friendliness ensures we can get maximum value from the solution. It was easy for our users to adopt. Now, all employees have clear visibility of processes across the company.”

#### **Increases Visibility into Business**

Microsoft® Dynamics™ NAV 4.0 has been able to deliver a single, real-time view of data from multiple units and departments. The solution reduces the need for extensive IT support at individual sites by quickly generating reports based on relevant parameters. It has helped provide centralized access to reliable, role-based information across the entire operations.

Microsoft® Dynamics™ NAV 4.0 has improved collaboration between internal research, production, sales teams and external associates. Most importantly, it has helped control inventory with real-time insight into production schedules, capacity, shop floor activities, and production costs.

Emphasizing the point, **K Balaraman, CFO**, Goa Carbon says, “Microsoft® Dynamics™ NAV 4.0 makes it easy to speed up decision making, so we can respond more rapidly to new competitive challenges and seize new market opportunities.”

#### **Streamlines Supply Chain Management**

Stressing upon the benefits of efficient supply chain, **M.R. Haldankar, General Manager – Commercial**, Goa Carbon says, “Since data is more accurate and visible, we are able to smooth production planning and reduce supply chain costs through less on-hand raw materials and finished goods.”

When one unit relies on another unit for delivery of raw goods, delays can affect the entire supply chain. The management at each plant, location must react appropriately and quickly to prevent the delay from creating negative impacts downstream.

“Microsoft® Dynamics™ NAV 4.0 helps us to track items accurately and effectively. As a result, we target just-in-time inventory, thus reducing the holding cost significantly, as we always know the status at any given moment,” says **K Balaraman, CFO**, Goa Carbon. “This becomes extremely pertinent as petroleum coke being a by product of oil refining, should be sold immediately.”

#### **Improves Inventory Management**

Through the new system, Goa Carbon has catalogued its entire inventory, which provides information to efficiently manage the flow of materials, utilize people and equipment, coordinate internal activities, and communicate with customers. In effect, inventory reliability at a low cost is the key factor to ensure the smooth functioning of all related operations. Hence having a real time view of the same is crucial.

**Mr. Ruben Doss**, General Manager - Production, Goa Carbon highlights, “The Inventory module in Microsoft® Dynamics™ NAV 4.0 supports us across the manufacturing units in achieving their goals of having accurate inventory data and reliable availability figures. We have been able to reduce the company’s inventory by an impressive 2 percent.”

## For More Information

For more information about Microsoft products and services, call the Microsoft Sales Information Center at (800) 426-9400. In Canada, call the Microsoft Canada Information Centre at (877) 568-2495. Customers who are deaf or hard-of-hearing can reach Microsoft text telephone (TTY/TDD) services at (800) 892-5234 in the United States or (905) 568-9641 in Canada. Outside the 50 United States and Canada, please contact your local Microsoft subsidiary. To access information using the World Wide Web, go to: [www.microsoft.com](http://www.microsoft.com)

For more information about Goa Carbon Corporation products and services, call + 91 832 2441300 or visit the Web site at: [www.goacarbon.com](http://www.goacarbon.com)

For more information about Affordable Business Solutions Pvt. Ltd. products and services, call +91 80 42 457 457 or visit the Web site at: [www.abs.in](http://www.abs.in)

## About Affordable Business Solutions Pvt. Ltd.

Affordable Business Solutions (ABS) Pvt. Ltd. offers a suite of business solutions addressing various industry verticals through an S+S model, offering affordable solutions to the growing SME segment in India. ABS also offers consultancy services in the areas of strategic business planning, business process consulting and business analytics. In the area of education, in addition to IT Usage and administration, ABS's Center for Functional excellence (CFE) offers education and skills upgrading courses for various functions like sales, materials management, finance and accounting or production planning, targeted at employees and executives of Indian SMEs. From 50 percent of its revenue on services, ABS expects its services business to grow and account for 90 percent of total revenue within 5 years – primarily because ABS expects its software resale business would transform into S+S services.

## Microsoft Dynamics

Microsoft Dynamics is a line of integrated, adaptable business management solutions that enables you and your people to make business decisions with greater confidence. Microsoft Dynamics works like familiar Microsoft software such as Microsoft Office, which means less of a learning curve for your people, so they can get up and running quickly and focus on what's most important. And because it is from Microsoft, it easily works with the systems that your company already has implemented. By automating and streamlining financial, customer relationship, and supply chain processes, Microsoft Dynamics brings together people, processes, and technologies, increasing the productivity and effectiveness of your business, and helping you drive business success.

For more information about Microsoft Dynamics, go to: [www.microsoft.com/dynamics](http://www.microsoft.com/dynamics)

### Software and Services

- Microsoft Dynamics
  - Microsoft Dynamics NAV 4.0
- Microsoft Server Portfolio Products
  - Windows Server 2003
  - Microsoft SQL Server 2005
  - Windows Terminal Server

### Hardware

- IBM X3400, Intel Xeon 2 GHz, 4 GB RAM, 320 GB HDD

### Partner

- Affordable Business Solutions Pvt. Ltd.