Increasing Profits and Service Levels at Cementos Argos

by Lauren Bossers

With more than 50 percent of the cement market in Colombia, Cementos Argos was well positioned as a local industry leader. The company sought to expand its position regionally and internationally, but its complex network and disjointed supply chain processes and systems made this goal daunting—despite its presence in 10 countries.

From 2005 to 2006, Argos combined eight Columbian cement companies to maximize synergies and economies of scale and acquired another to expand its international reach. However, the acquisitions left the cement manufacturer essentially functioning as nine separate companies, all of which operated in silos.

SCM to expand global reach

As a result, designing a new network posed a significant challenge to the company's management, whose goal was to understand its customers in the United States as well as its customers in Central and South America.

"We wanted to ensure we were attending to our customers in terms of time to delivery and quantities. In the cement industry, meeting the delivery time you provide is the key driver to achieving customer satisfaction," says Luis Cappeletti, supply chain planning manager for Cementos Argos.

To improve customer satisfaction and increase value for its shareholders, Argos needed to create a new organizational structure and supply chain processes. "Supply chain is more than demand and production planning, raw material procurement, and transportation and logistics," says Cappeletti. "We're trying to get as close as possible to supply chain best practices. That requires not just technology solutions, but also a culture, procedures, and processes that support excellence in supply chain management. Argos is taking a holistic approach to supply chain management."

Partnership for supply chain excellence

With these goals in mind, Argos began looking for a company that could provide both superior supply chain management technology and the long-term service relationship to help support a culture of supply chain excellence.

"We wanted to get away from the enterprise resource planning solution we had used in the past, but we had to make sure that we were recommending a supply chain solutions provider that would inspire confidence from our board of directors," says Juanita Quintana, logistics



optimization director for Cementos Argos. "We needed supply chain knowledge and experience to help us change culture, mindsets, processes and procedures. i2 represented all of that. Companies like Oracle or SAP are not just focused on supply chain. i2 was a supply chain specialist, and we were impressed with i2's history. i2 demonstrated its commitment to jointly developing an ongoing relationship focused on supply chain concepts, as well as on the tools."

Argos uses i2 Demand Manager to understand its product movement and its market, as well as to plan demand for up to 10 years. Demand Manager is used on a monthly and weekly basis, enabling the company to alter its demand projections according to new information it receives through the solution.

"Because we are trying to understand our global business for the next 5-10 years, we need to understand what all of our locations are doing," says Quintana. "With Demand Manager, we now have all of our information in one place, which means we can better understand our market."

Demand Manager enables Argos to create product strategies that incorporate special events, external variables, historic patterns, prices and the variability inherent in international orders.

i2 Transportation Modeler and i2 Supply Chain Strategist work in tandem on Argos' network design planning. Supply Chain Strategist operates as the calculator of all of the production and the distribution plans. Together, the two solutions determine long-term network options, stock policies and node locations, as well as transportation, warehousing, and production costs and



capacities. Argos also uses Transportation Modeler and Supply Chain Strategist to create bills of material for grinding and packing.

"Demand Manager, Transportation Modeler and Supply Chain Strategist enable us to have as much information as possible to provide useful recommendations to our production systems," says Cappeletti. "We are operating internationally, and those operations—including our 12 plants and 32 distribution locations—have to be absolutely synchronized every day. Using i2 solutions enables us to understand the full international picture."

Improving profitability, synchronicity and customer satisfaction

By establishing an organization-wide supply chain model, coordinating weekly with its sales and operations planning team, and conducting daily adherence tracking between the plan and reality, Argos has now integrated and optimized its strategic planning processes. The company can define service standards, sales forecasting, production plans, distribution and supply in the long, medium and short terms. i2 solutions enable Argos to closely supervise and monitor production plans, and to make quick corrective actions to adjust those plans when necessary. All of these process improvements help Argos to define, ensure, and improve its contribution margins and to better fulfill service offers.

Synchronizing production plans with demand has enabled Argos to reduce its distribution costs. "We continue to discover lots of new ways to do things more efficiently in production and distribution planning, and our savings continue to go up as a result," says Quintana. "In the first 10 months of our implementation, we reduced transportation costs by 7 percent and increased our delivery service level significantly. We are pleased about the return we have received on our investment with i2. Most important, we have the partnership that enables us to establish the supply chain processes, technology, people, and structure we need to succeed as a company."

The future: Looking for increased savings and service levels

Cementos Argos is also implementing i2 Transportation Manager to increase control over shipments of finished products and raw materials to positively affect production for internal customers, and delivery service capabilities for external customers.

"This is really a culture transformation process," says Cappeletti. "It's not just about IT. It's about the way we are reaching our financial goals, because our sales and operations planning team can make more informed, transformative decisions by leveraging new technologies and new people skills."

At a Glance

Company name: Cementos Argos

Headquarters: Barranquilla, Colombia S.A.

Product/Services:

White and gray cement, lime, prefabricates, aggregates and mortar

Annual revenues: US\$1.8 billion

Employees: 11,000

Global operations:

- 13 ports
- 20 cement plants 8 sand and gravel
- 8 sand and gravel plants 32 distribution locations
- 52 distribution 10

Challenges:

An international expansion initiative was significantly hampered by a fragmented and inefficient supply chain

Key solution components:

- i2 Demand Manager
- i2 Transportation Modeler
- i2 Supply Chain Strategist
- i2 Transportation Manager
- Ongoing support

Results:

Efficient and accurate short-, medium- and long-term sales forecasting as well as production, distribution and supply planning; the ability to make quick, event-driven corrective actions; improved product margins and customer service.



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