

# SYNERGY CASE STUDY



*“With VISUAL, it’s like knowing the batting averages of every department in the plant. If you look at the data, pay attention to it and use those tools to make decisions, your business runs better.”*

CHRIS TILLOTSON, GENERAL MANAGER, AMERICAN PRODUCTS, INC

## ABOUT THE COMPANY

American Products, Inc. (API) was established in 1983, and has gained a reputation for excellence and professionalism in the industrial electronic business. API specializes in printed circuit board design and manufacturing as well as cable and harness assembly, panel and chassis assembly.

Company: **American Products, Inc.**

Address: **45 Leigh Drive York, PA 17406**

Website: <https://americanproductsinc.com/>

Number of Employees: **180**

Products & Services: **Precision Machining & Assembly**

## Challenges

API’s General Manager is Chris Tillotson. In 2011, API implemented Infor ERP VISUAL from Synergy Resources to automate the business. Offering an incredible breadth and depth of functionality for small and mid-sized companies, Infor VISUAL is a standout ERP for end-to-end work order-driven manufacturers like API.

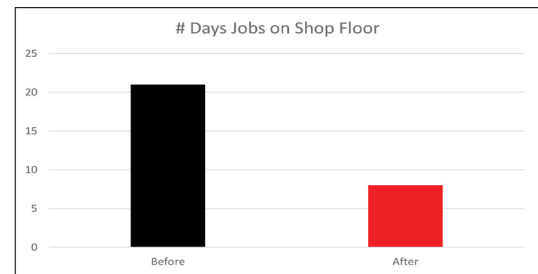
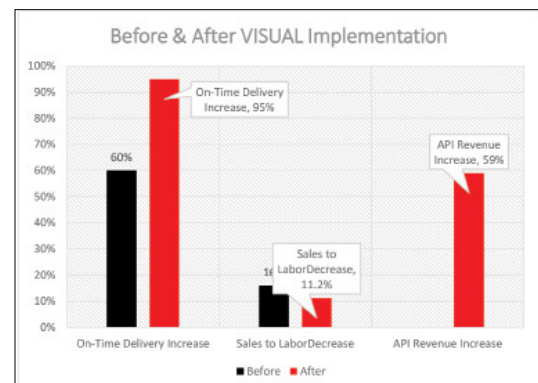
API had several business challenges. As a contract manufacturer in a highly competitive industry, it was important for API to delight its customers by consistently delivering high-quality orders on-time. API was also implementing a business strategy to design more of their customers’ products. Success would require API to implement a solution that could help the company work more efficiently, effectively and intelligently.

In fact, Chris said that VISUAL has become an important business management tool that has helped API achieve its goals. “In the last two years we’ve relied more and more on the data from VISUAL to help run the business,” said Chris. “We use data to constantly evaluate our performance as a company and to think about where we’re headed in the future.”

## Results

A few of the Key Performance Indicators (KPIs) that attest to API’s success using VISUAL include:

### API Improves On-Time Delivery from 60% to 95%



Chris compared and contrasted on-time delivery since implementing VISUAL. Chris estimates that on-time delivery prior to VISUAL was in the 60 to 70% range. After implementing VISUAL, on-time delivery dramatically improved. Chris attributes many factors that impacted this improvement, but having accurate data in VISUAL has enabled API to pay strict attention and improve this metric.

“Last week, we had a celebration,” said Chris. “The on-time delivery average for the year was 95%. We had 92% or above on-time delivery each month. This compares favorably to 85% from the previous year.”

As API's on-time delivery has improved, customer loyalty has increased. "We've gained more business from existing customers," said Chris. "Because we're doing much quicker and better, we're able to pull in customer requirements when they need something; where we couldn't before. It's tremendous!"

#### API Improves its Sales to Labor Ratio from 16% to 11.2%

With VISUAL, API is a leaner manufacturing organization than before. Infor VISUAL is used to clock in and out of every job, enabling API to pay close attention to its sales to labor ratio. "I can call up any part number that we're working on," said Chris. "I can instantly tell whether we're making or losing money on an assembly or job. This enables us to evaluate the labor and material costs of each assembly and take corrective action, if necessary."

Chris explained that VISUAL enables API to look at the standard deviation of labor time on an assembly to establish criteria for Kiazen events. API uses matrix boards to communicate company goals for improvement with employees. "We're pushing things through quicker using VISUAL. We've really gone lean as much as possible. We have matrix boards throughout the shop. We're always talking with employees about the successes," said Chris.

As an incentive, API has tied a performance bonus to the sales to labor KPI. "We award an end of year bonus to employees. As the sales to labor ratio is reduced they earn an incrementally larger bonus," explained Chris. The first year employees achieved half the bonus; the second year, employees attained the top bonus. "This year they'll likely reach their top bonus. It's had a positive effect for everyone," said Chris.

The result is that API manufactures more with fewer people. API gets product through the shop quicker: using VISUAL, the median number of days that jobs spend on the shop floor has dropped from three weeks to only eight days. "We're able to produce more profit with about 30% fewer people. In fact, we've grown our revenue per employee by 59%," said Chris. "That's magical!"

The greater efficiency using VISUAL can be quantified by looking at the sales to labor cost ratio which has dropped from the 16 to 17% range to 11.2%. "There are other factors besides VISUAL that led to this improvement, but again the instant and accurate data enabled us to change the culture of our company," affirmed Chris.

These lower labor costs have benefited API's bottom-line. "We've improved the profitability of the company using VISUAL," said Chris.

#### API Improves Quality

API has used VISUAL to improve quality. Prior to using VISUAL, API generated reject reports but they were not available until the end of month. For that reason, it was difficult for managers to address API's quality issues in a timely manner. "At the beginning of the month, you'd talk to someone on the floor about a quality issue but they couldn't remember because they've done many other things since then," said Chris.

Now that API is using VISUAL, actionable and timely information is available to decision makers. "We get a daily reject report that compares the jobs against how many were rejected," said Chris. "We have Quality, Delivery and Cost (QDC) boards in each department. The report is automatically printed and reviewed every day at the QDC boards throughout the plant. This allows us to discuss issues in a timely manner while the information is fresh in the minds of our assemblers and supervisors. The report might say, 'There are six rejects here, and this is what they were'. We are able to take immediate action to correct the process for future builds," said Chris.

The quality data that API gets from VISUAL is a catalyst for continuous improvement. "It's fresh in their minds. They know what it's about. They can talk about it. They can offer suggestions for improvement. That's why we do it on a daily basis," said Chris.

#### Data Proves Beneficial to API

VISUAL is an end-to-end manufacturing solution. The availability of information about all aspects of the production process is empowering to decision makers. Chris said, "With VISUAL, it's like knowing the batting averages of every department in the plant. If you look at the data, pay attention to it and use those tools to make decisions, your business runs better. Whereas if you say, 'It is what it is,' then that's all it'll ever be. It's that simple."

Data provides greater insight into API's operations and takes the emotion out of decision making. "We've made a conscious decision to run our business more on data versus our personal biases," said Chris. "It's a lot easier to talk about difficult things when you have data that can prove one way or the other. That's the most important thing we've gotten from VISUAL: good, accurate data."

Chris has built an executive dashboard to empower the decision making process. "The dashboard has two key things," said Chris. "What's in the sales schedule for the next 8 weeks? I can look and know how much is booked and what we're averaging. I look at that report every week. The other thing is on-time delivery. In minutes, I can print reports from the dashboard and get to work. It's pretty nice."