

managing a business as a portfolio of



A recent issue of *Fortune* magazine asserted that only the best 20% of a company's customers generate a huge portion of its share price—in some cases, all of it. The trouble is, the authors wrote, the worst 20% may destroy a ton of value with the middle 60% making up the difference. In other words, a company's portfolio of customers determines the bottom line...the real value of a business.

At my company, Indalex Aluminum Solutions Group, we have learned the truth in these words the hard way. We are the largest producer of soft alloy extrusions in North America and second only to Alcoa in total aluminum extrusion production. A series of large acquisitions from mid-1999 to early 2000 propelled us from a seven-plant business, principally in Canada, to a 19-plant network spanning North America. Our strategy was to rapidly build a dominant position in a consolidating industry and transform a mature, successful company into a growth-oriented, customer-focused leader.

We believed that an unwavering focus on customer sat-

isfaction, investment in new technology, and a network of plants close to the customer were among the keys to success. Underpinning this strategy was the common business principle that customer satisfaction equals shareholder satisfaction. Has our strategy proven to be correct?

Not exactly. We are profitable, both historically and year-on-year. We have grown our market share despite less-than-ideal market conditions that include but aren't limited to the pressures of depressed demand. But we haven't yet achieved the level of profitability that we expect and believe we can attain on behalf of our shareholders.



to drive profit

BY MIKE ALGER, CPA

Our analysis points to a number of reasons for our profit performance. Paramount among them is that our recent share gains have been built on a platform of lower-margin business. This has resulted in predictable tension between our centralized sales organization and our manufacturing facilities, which are organized as individual profit centers.

We have reached a crossroads. Do we adhere to the common assumption that we want volume growth because that will result in profit growth? Or do we challenge this assertion and focus on volume growth that is clearly and irrefutably profitable?

We have chosen a clear direction. We intend to maximize shareholder value by truly managing our highly diverse customer portfolio. We have chosen to operate our business not as a collection of products, services, and assets, not as a group of territories, but as a portfolio of customers that can be managed in the best interests of our company and our customers alike.

FIRST STEP—A PROFIT STUDY

We began our drive for profitable growth by conducting a profit study in 2001 at three of our North American

plants to identify variable and full margins. We established a cross-functional task force at each facility and devoted two days to identifying issues and impediments to profitable growth. We focused hard on the issues facing Sales, Operations, and Finance. Our Sales team, for example, was understandably focused on pricing and customer lead-time requirements, but the issues for Operations were scheduling, freight and extrusion die costs, run lengths, billet alloy selection, and even packaging configurations needed to achieve the customers' goals and our profitability. Watching over all of this, of course, was Finance and their focus on issues such as customer profitability, inventories, and credit concerns.

The needs of these departments can be and often are conflicting, yet we figured out a compromise to maximize customer service and profitability. Working on the issues together, as a team, was the key to consensus.

We set action plans in stone. The results are concrete. At our Elkhart, Ind., plant, for example, we realized a complete turnaround from a loss-making business to a significantly profitable, growth-oriented operation. We proved to ourselves beyond doubt that we could improve profitability both significantly and relatively quickly.

Gross margins were improved by 3%, packaging costs were reduced by more than \$1 million, and freight costs were cut by more than \$300,000.

But our enthusiasm deflated when we realized that our ability to proceed rapidly company-wide was restricted by a manual process using point-in-time data. At the time, Indalex had eight different financial systems from which we extracted data manually. These systems were a legacy of major acquisitions made in 1999 and 2000. The systems' data definitions differed, which required Excel spreadsheets to be loaded manually by a single individual assigned to the task. As a result, coverage across all of our plants was limited.

Data quickly became out of date. Limited human resources for the manual process also hampered our ability to update data to assess progress against designated action plans. And the lack of a centralized database for managing data limited our visibility to both the data and the pending action plans.

But we had a strategy. We had proven it would work during a pilot project at our Toronto and Montreal facilities where we identified savings of more than \$500,000. Yet we simply didn't have the ability to capture and assess the data we needed to enact our plans. We were reminded immediately that the engine in our drive for profitable growth was decision making—decision making based on the facts we needed, not just the information that traditional cost accounting provides. The fuel for our engine is information that points us in the direction of profits, not an understanding of costs. Let me explain.

MAKING THEORY OF CONSTRAINTS WORK

During our profit study at the three facilities, we focused on shifting our thinking from the belief that we sell pounds of aluminum to our customers to one that says we actually sell time on our extrusion presses. It was a significant shift that altered the way we looked at plant performance and, ultimately, led us in the direction of managing our business as a portfolio of customers. Accomplishing this strategic shift required overcoming internal disagreements between Sales and Operations that were based on different measures used to gauge performance. Sales, for example, was compensated based on pounds of aluminum sold and net sales price. Operations' performance, on the other hand, was measured by production metrics and plant profitability. The result was that Sales would sometimes sell business at a loss, as long as it had high volumes, and at net price, which impacts plant profitability. Aligning these performance metrics was critical.

Goldratt's Theory of Constraints (TOC) displayed the debilitating effect of excess inventory and alerted followers to thinking about throughput, not costs. Throughput is the rate at which the factory generates money through actual customer sales. Inventory, on the other hand, is money a factory or business has invested in product it *intends* to sell. Operating expense is the money a company spends to turn inventory into throughput.

Using a cumbersome, manually driven Excel database, we were able to extract the throughput data we needed, but the process was so time-consuming that we concluded we could only satisfactorily complete analyses at the rate of two plants a month,



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if that. To put it mildly, this was not a rate of change that was going to achieve our profit improvement goals.

And then along came the answer. We discovered a little-known, emerging new generation of business intelligence software designed in Canada called the Profitability Dash Manufacturing Intelligence Software. It shifts the focus of a manufacturing company from traditional cost accounting measurements to measuring the generation of dollars per unit of time. It provides an automated analysis of customer profitability and segmentation, action plan development and tracking, lean manufacturing tools, and scenario building. And it provides decision makers across our entire manufacturing enterprise with time-based financial metrics using TOC concepts to identify bottlenecks.

We decided to test the Dash at our Toronto and Montreal plants. The successes included identification of issues surrounding alloy mix and customer lead times as well as margins by product line and customer profitability by plant with an ability to evaluate our entire network.

PROFIT IMPROVEMENT

Numerous trend analyses revealed co-relations between size vs. margin and distance vs. margin, for example. We

discovered a total savings of more than \$500,000 at the two plants in just one fiscal quarter. These improvements excluded improved productivity that would surely result from providing this information to plant operations.

We worked closely with Dash designers, pVelocity Inc. of Toronto, Ontario, to further develop this powerful new measurement capability. The result is the best decision support tool I have encountered in my career. We will rapidly accelerate our profit optimization capability. Rather than conducting in-depth analyses at the rate of two plants a month, we are now able to perform more than 200 such analyses thanks to the Dash technology.

More important is our confident—and conservative—realization that we will achieve profit improvement of more than \$3 million. This estimate is based on targeted improvement arising from a customer segmentation review to establish profitability levels in each of our segmented groups of customers, which are:

- ◆ Low margin/low volume,
- ◆ High margin,
- ◆ Low margin/high volume.

Our next step in the development of the Dash alongside pVelocity is to blend our quote model into the software to help us establish the correct pricing levels before we sign any agreements. This allows us to understand the economics before we make any commitments to customers. The end game is to establish a means of determining price on a methodology that complements “market price,” allowing us to align our costs to the prices charged to our customers.

This data, we believe, will help us avoid customer churn and grow share even faster. Customer segmentation is fundamental to our anticipated improvement, so we have categorized customers according to profitability and volume criteria. We are addressing action plans for each customer segment including:

- ◆ Identifying pricing opportunities,
 - ◆ Identifying production cost opportunities,
 - ◆ Monitoring profitability,
 - ◆ Implementing pricing changes where prudent,
 - ◆ Looking at the most optimal plant to produce an individual customer’s products,
- ◆ As a last resort, dropping a customer to enrich our customer mix because we simply cannot meet their needs profitably.

PROFIT VELOCITY IS THE KEY

It’s clear to us that profit optimization can only result from understanding the true product costs by customer

and by die. To us, true costs are accurately assigned actual costs based on the resources consumed to produce them. Understanding those costs isn’t possible, however, without having a clear view of how the velocity of production impacts profitability. We call this “profit velocity.”

To understand how profit velocity works, consider two products manufactured on the same production line. Product A has a contribution margin of 50% and product B, 33%. It appears product A makes more money than product B, but this analysis doesn’t tell the whole story.

What if the cycle time for product A is three hours and the cycle time for B is only one hour? Now we can create a formula that will tell us that product A earns only \$333 per hour, but product B earns \$500 per hour. If all we did was run one or the other of these products on that line for an entire year, product B would earn \$1.2 million more than product A. This is exactly the opposite of what the margin analysis told us.

The other factor that comes into play is that the return on capital employed (ROCE) for the plant would be significantly lower if, in fact, on average it only earned \$333 per hour rather than \$500 per hour. But if the organizational metrics drive marketing toward selling high-margin over high-profit-velocity products, the outcome will be predetermined.

True profit velocity is driven by “the manufacturability of the product” in relation to its technology. Constraints or bottlenecks impact different products in different ways. For the extrusion industry, the complexity of the shape or the hardness of the metal that is being extruded impacts the speed of the production. By understanding these issues in relation to the pricing of the product, we can dramatically increase profitability and return on capital.

WHAT’S NEXT?

Activity-based costing (ABC) also still has a role to play because we must understand our end-to-end customer order costs. To us, TOC and ABC are both useful, complementary measurement concepts. Focusing on TOC’s constraint issues is the key, then, to harmonizing the two disciplines. ■

Mike Alger, CPA, is executive vice-president and CFO, Indalex Aluminum Solutions Group, Bannockburn, Ill. Indalex is the largest producer of soft alloy aluminum extrusions in North America. With its equity partner, Asia Aluminum Group of the The People’s Republic of China, Indalex is the second largest aluminum extruder in the world. You can reach Mike at mike_alger@indalex.com.