



Editor's Message

Strategic Reactions to Competitive Forces

by Kendall Hoyd

"Of all human powers operating on the affairs of mankind, none is greater than that of competition."

—Henry Clay (1777 - 1852)
U.S. politician, lawyer. Speech, 1832.

This issue of **SBC** is built on the theme of design and engineering enhancements in our industry. As WTCA president, my typical marching orders are to come up with some material that is consistent with that theme. That won't really happen this time for two basic reasons. One, I am, for lack of more apt terminology, an accountant by background, and therefore don't know enough about engineering or design to even fake it. Two, I know that Libby is about to go on vacation, and by the time this reaches **SBC** staff for review, she won't be around to do anything about it.

Instead, I'm going to lay out a framework for evaluating our industry's position in the competitive landscape of the overall construction industry. In 1979 a Harvard professor named Michael Porter published an article entitled "How Competitive Forces Shape Strategy" (*Harvard Business Review*, March-April 1979). I have always found his ideas very useful in providing a way to think about the strategic problems that a business, or in our case, an industry, faces. Design and engineering intellectual property and knowledge are part of the definition of our competitive landscape, so I'm not ignoring our editorial focus completely.

Dr. Porter wrote that the strength of the competitive forces in an industry determines the profitability of an industry, and a company or industry's evaluation of these forces should shape strategy. Most of what follows is a summarization of his 1979 article.

"Every industry has an underlying structure, or a set of fundamental economic and technical characteristics, that gives rise to these competitive forces."

The basic classification of the forces that govern competition in an industry according to Dr. Porter, (you could also call this a "threat matrix" if you were more dramatically inclined), is as follows:

1. Threat of new entrants
2. Bargaining power of suppliers
3. Bargaining power of customers
4. Threat of substitute products

Here is my view of how component manufacturers are situated with respect to these four forces.

Threat of New Entrants

If you have a stake in the success of a structural building component manufacturer, you probably live with a concern about the threat of a new competitor entering your market. Design software advancements and equipment automation have greatly reduced the need for certain knowledge or experience as the minimum price of entry to open a truss plant. Having strong skills in geometry and trigonometry used to be critical success factors. While they are certainly useful still, you don't need them to open a truss plant. Design software has taken over that function. Another major deterrent generally to new entrants within an industry is high

at a glance

- ❑ Consider this framework for evaluating our industry's position in the competitive landscape of the construction industry.
- ❑ There are basic forces that govern industry competition: the threat of new entrants, bargaining power of suppliers and customers, and the threat of substitute products.
- ❑ Our industry brings value by providing a service/product bundle that lowers costs and raises quality.

Continued on page 8

Editor's Message

Continued from page 7

capital costs or initial investments to get started. As we all know, compared to other industries the initial investment to get started in our industry isn't a really high number.

Product differentiation, access to distribution channels and non-scale related cost disadvantages are other typical barriers to entry. Many plants in many markets probably have access to customers, or ability to execute certain types of work very well, or maybe even a unique access to lower cost lumber than anyone else, but truly I would guess that none of these barriers is particularly strong in a component manufacturer's case either. I've heard hundreds of anecdotes over the years about the truss plant down the road that is simply willing to work for less, and this "willingness" can usually overcome a lot.

As automation of manufacturing equipment progresses, the barrier of high capital investment is going up a little bit each year. As each of us goes through the process of automating more and more of our plant, the investment required to compete with existing truss plants goes up a little bit at a time, and that lowers the threat of new entrants. Conversely, our industry is like virtually all others in that the advance of software capability and information technology continually simplifies the technical part of our business—in our case, component design. This is good for existing plants in that it lowers the cost of training new staff, and of executing projects with ever-higher degrees of difficulty, but it also makes it easier for new entrants because much of the specialized knowledge that truss plant managers, owners and technicians used to have proprietary command of is now embedded in software that can be readily obtained and learned by new players.

The other major element governing the competitiveness of new entrants in an industry is called the "experience curve." Incumbent companies, by virtue of having conducted successful operations and transactions for a number of years enjoy the advantages of knowing things like when you are better off to stick-frame a part of a roof, what types of customers they serve best, or how to get new employees to stay longer or learn faster. Like many things in life, most of these lessons are learned the hard way, and in business that means added cost. Of all the barriers to entry that are present for component manufacturers, this one appears to be the most effective and prevalent.

The bottom line for a component manufacturer, with respect to threat of new entrants, is that we have a lot more to worry about in that respect than Intel or Motorola or even our lumber or plate suppliers. In entrepreneurial America, there are plenty of capitalists willing and able to take on the barriers to entry that exist for component manufacturers.

Bargaining Power of Customers & Suppliers

The threat of new entrants is present for component suppliers due to fairly low barriers to entry. Our suppliers and in large parts of the country, our customers, however, enjoy significant economies of scale and high capital requirements as barriers to entry in their respective industries. For most truss plants, it is probably pretty rare for accounts

Continued on page 10



Publisher

Truss Publications, Inc.

6300 Enterprise Lane, Suite 200 • Madison, WI 53719

Phone: 608/310-6706 • Fax: 608/271-7006

trusspubs@sbcsmag.info • www.sbcsmag.info

Editor

Kendall Hoyd

Idaho Truss & Component Co. • khoyd@sbcsmag.info

Art Director

Melinda Caldwell

608/310-6729 • mcaldwell@sbcsmag.info

Managing Editor & Circulation Director

Libby Walters

608/310-6724 • lwalters@sbcsmag.info

Advertising Manager & Editorial Review

Suzi Grundahl

608/310-6710 • sgrundahl@sbcsmag.info

Sales & Marketing

Peggy Pichette

608/310-6723 • ppichette@sbcsmag.info

Kirk Grundahl

608/274-2345 • kgrundahl@sbcsmag.info

Staff Writers for May

Molly E. Butz • Stephanie Lowe • Sean Shields

Rachel Smith • Anna L. Stamm • Richard Zimmermann

Web Site Designer

Lora Gilardi

608/310-6711 • lgilardi@sbcsmag.info

Accountant

Mike Younglove

608/310-6714 • myounglove@sbcsmag.info

Computer Systems Administrator

Jay Edgar

608/310-6712 • jedgar@sbcsmag.info

For advertising contact:

Peggy Pichette • Director of Sales

ppichette@sbcsmag.info • Phone: 608/310-6723

Send all ad materials, insertion orders,
contracts & payments to:

Truss Publications, Inc.

6300 Enterprise Lane • Suite 200

Madison, WI 53719

Phone: 608/310-6706 • Fax: 608/271-7006

trusspubs@sbcsmag.info • www.sbcsmag.info

The mission of *Structural Building Components Magazine (SBC)* is to increase the knowledge of and to promote the common interests of those engaged in manufacturing and distributing structural building components. Further, *SBC* strives to ensure growth, continuity and increased professionalism in our industry, and to be the information conduit by staying abreast of leading-edge issues. *SBC's* editorial focus is geared toward the entire structural building component industry, which includes the membership of the Wood Truss Council of America (WTCA), the Steel Truss and Component Association (STCA) and the Structural Component Distributors Association (SCDA). These associations make up an industry strategic planning committee called the Structural Building Components Council (SBCC). The opinions expressed in *SBC* are those of the authors and those quoted, and are not necessarily the opinions of the associations listed above.

Copyright ©2005 by Truss Publications, Inc. All rights reserved.

Editor's Message

Continued from page 8

payable to pay a lumber invoice issued by a company smaller than they are. The same goes for truss plate invoices, for that matter. Similarly, large publicly traded companies construct a large and increasing portion of the housing built in the United States, so for many manufacturers, the scale of their customers is far greater than their own.

The relative scale of the suppliers and customers determines the concentration of bargaining power. As a rule, component manufacturers are price takers and don't have much effect on the price of 2x4s, no matter how much they shop or negotiate. If any component manufacturer were in a position to buy, say 50 percent of a mill's production on a regular basis, that manufacturer might have different conversations indeed when it comes to the price of lumber. This is because the purchasers (component manufacturers) are fragmented and small in comparison to lumber producers, and the negotiating power is concentrated in favor of the sellers. Any single manufacturer doesn't have much influence because the transactions that manufacturer represents aren't very important in the overall fortunes of the lumber mills.

Similarly, when a component manufacturer deals with a national builder that will buy 25 or 30 percent of total production if the manufacturer agrees to their price, the tables have turned, and now the seller is disadvantaged in negotiations with respect to the buyer because of the exact same phenomenon in reverse. The buyer is large and has concentrated bargaining power with respect to the seller. The buyer's decision about where to buy can have a very material effect on the fortunes of the seller.

So far after evaluating the first three factors of Dr. Porter's analysis, we find that we are faced with fairly low barriers to entry, (and therefore a reasonable threat of new competitors), and most component manufacturers are very small in scale with respect to both suppliers and customers (creating transactional and bargaining disadvantages). Sounds great, huh?

Threat of Substitutes

Finally, some good news. As truss manufacturers, we enjoy protection in this area because the choice of substitutes for trusses in most light framing applications is very limited. It is another illustration of the extent of regionalization and fragmentation of our industry that there are still construction markets where stick-framed roofs compete directly with components and maintain a healthy market share, but for the most part, in most of the country, there is not much threat of some other framing product or technology displacing metal plate connected wood trusses as the predominant product. We really tend to worry only about competing with each other and not with the suppliers of extruded plastic trusses or cast-in-place concrete residential roof systems.

Industry Profitability

So how do we maintain a healthy, profitable industry in the face of these forces which mostly seem to be arranged against us? We do it by being the ones able to find the value propositions that meet the customers' demands in our respective markets. What is our value proposition? We don't own the software; most of us don't have any proprietary equipment designs or patented technologies or products, so how do we bring value to the customers? We bring value by being the ones able to assemble the software, the equipment, the flow of design information, and knowledge of the customers' requirements into a service/product bundle that gets buildings and homes built for less money and higher quality than they otherwise would.

In biological terms, we are the red blood cells. The lungs are big and important, and the muscles are big and important, physiologically. But if the red blood cells didn't interact with the air brought in by the lungs, pick out the oxygen, and transport it in just the perfect way to the muscles, muscles and lungs would be useless to the organism. We are located in the value chain of a construction project precisely where the rubber hits the road, and we continue to thrive, despite all the competitive forces, because we transform a wide variety of inputs into something that makes buildings better. **SBC**

Critical Issues Affecting the Industry

The Structural building components industry faces a multitude of challenges every day. We want to know which issues are most important to you as a component manufacturer. Visit the web site below to register your vote for the top issues facing the industry. Five lucky survey participants will win a stainless steel **SBC Magazine** travel mug!

Log on at:
www.sbcmag.info/survey.php

STRUCTURAL BUILDING COMPONENTS™

THE FUTURE OF FRAMING

www.sbcmag.info

Dear Reader:

Copyright © 2005 by Truss Publications, Inc. All rights reserved. For permission to reprint materials from SBC Magazine, call 608/310-6706 or email editor@sbcmag.info.

The mission of Structural Building Components Magazine (SBC) is to increase the knowledge of and to promote the common interests of those engaged in manufacturing and distributing of structural building components to ensure growth and continuity, and to be the information conduit by staying abreast of leading-edge issues. SBC will take a leadership role on behalf of the component industry in disseminating technical and marketplace information, and will maintain advisory committees consisting of the most knowledgeable professionals in the industry. The opinions expressed in SBC are those of the authors and those quoted solely, and are not necessarily the opinions of any of the affiliated associations (SBCC, WTCA, SCDA & STCA) .



6300 Enterprise Lane • Suite 200 • Madison, WI 53719
608/310-6706 phone • 608/271-7006 fax
www.sbcmag.info • admgr@sbcmag.info