

Wood Science & Engineering

Oregon State University

Wood Products Sector: Achieving Competitive Advantage in the 21st Century

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Description: A comparison of customer (architects) needs with company competitive advantages, in order to identify those advantages that best fit customer needs.

Methods: In person interviews, mail survey *Data Source*: 400+ architects, 43 wood industry top executives, in US and Chile

Key Findings:

- 1. Environmental advertising is effective should emphasize both technical and environmental quality attributes (at the same time).
- 2. Companies should emphasize both *Product* and *Business innovation*, and not only *Process innovation*.
- 3. US companies should become more global as this allows a better customer focus, and an improved competitive position.

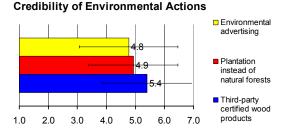
US wood products companies are facing a new competitive environment. Overseas companies, fierce substitute products, powerful big box retailers, and organized environmental groups are some of the challenges that are impacting the profitability of the wood products industry. In fact, all of corporate America is seeing similar pressures that impact profits. Indeed, the advent of the 21st century sees deflation affecting real prices of a wide variety of products and services. As an example, today a New York-London three-minute phone call costs a few cents, whereas the same phone call cost about \$300 in 1930!ⁱ

Pundits assert that working harder is no longer a way to maintain competitiveness, but working differently and focusing on both the customer and the competitor. This sort of dual focus is often referred to as "market orientation". A customer focus allows identification of changes in customer wants and needs, and resulting modifications in customer behavior. Behavior shifts help explain product substitution, a very current issue for wood products since 2.5% market share, or \$270 million in annual revenue, was lost to steel and concrete between 1997 and 2000^{II}.

A customer-focused company would, for example, systematically measure customer satisfaction or actively implement after-sales service. These matters are perhaps less difficult to accomplish than

answering the question: Who are my key customer groups? In that regard, customer groups relevant for one company may not be relevant for another. For today's wood products industry, architects are an important customer group, because of their influence in the material specification process for medium- and large-sized construction projects. Results of our research suggest that architects consider the environmental sustainability of a wood product as an inherent part of the overall quality of a material. Therefore, advertising targeting architects should not only concentrate on the environmental attributes of the material, something common in many magazine advertisements, but also emphasize technical quality attributes of the material.

Investments in environmental advertising are often questioned because it is not clear whether Our results customers see them as credible. suggest that architects are receptive to environmental messages from the wood products industry. Although third-party environmental certification is the "green" action by wood products companies that makes an environmental claim most believable, both environmental advertising and the use of lumber from plantations instead of natural forests were seen favorably (see figure, where 1 means no credibility, and 7 means high credibility)ⁱⁱⁱ.



A competitor focus means, for example, responding quickly and efficiently to competitor actions or regularly discussing competitor strengths and weaknesses. We interviewed top executives from 32 US wood products companies in order to determine the specific competitive advantages that each company nurtures. The development of a sustainable competitive advantage is the main objective in modern views of corporate strategy, defined as "the basis on which customers will choose your product over the competitors"^{IV}. We found that US companies in the structural (dimension lumber, structural plywood, OSB) and

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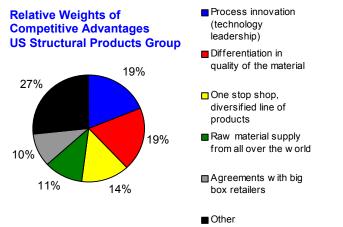
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engineered wood products groups focus on issues like *Own forestland* or *Process innovation*. *Own forestland* is seen as an appropriate competitive advantage in both good and bad economic times. During good times, it provides a buffer against high log costs, and during bad times, it provides an excellent cash source.

Regardless of product type, US companies see *Process innovation* as a crucial competitive advantage. In contrast, Chilean wood products companies, recognized as the global low-cost producers of whitewood lumber^v, do not focus as much on *Process innovation*. Instead, their focus is on *Export orientation*, an advantage rarely identified by US companies.

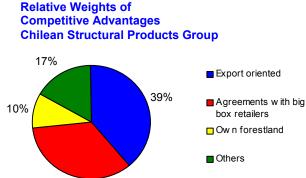
Our first major recommendation for US companies is to emphasize both *Business* and *Product innovation*^{vi}, especially as companies face diminishing returns on their *Process innovation* investments. Many wood products companies have largely succeeded in gaining the major efficiencies offered through process and quality control and more sophisticated technology. Additional gains



from *Process innovation* will be smaller and come at higher costs.

The main purpose of our study was the development of a method that uses the wants and needs of a key customer group (in our case, architects) for determining the importance of competitive advantages showing which advantages best meet customer needs. The pie charts below show the most important competitive advantages for both Chilean and US companies in the structural product group.

The charts show the overwhelming importance of *Export orientation* for Chilean companies. *Process innovation* leads the US structural product group. *Export orientation* and *Raw material supply from all over the world* are advantages typical of multinational companies. This result constitutes the basis of our second major recommendation for US wood products companies: to become more global, as this characteristic allows a better customer focus and an improved competitive position.



Please contact the authors for additional information.

34%

ⁱⁱ Wood Promotion Update, November 6, 2001, http://www.wpnupdate.com/Nov/, (accessed October 19 2002)

^{III} Mean and standard deviation bars shown. Results come from a random sample of 1200 architect offices across the US. Third-party environmental certification is significantly higher than the two other categories. The difference between the two other categories is not statistically significant.

^v Wood Markets: The monthly international solid wood report, 6 (11): February 2002, R.E Taylor & Associates Ltd, published by International Wood Markets Research Inc, Vancouver, British Columbia, Canada

^{vi} Process innovation refers to all the operational improvements that lower operational costs, reduce delivery time, and/or increase flexibility. Business innovation refers to improvements in customer-focused activities and/or Total Quality Management (TQM). Finally, Product innovation refers to improvements of existing products or developing totally new products: Boer, H., & During, W.E. 2001. Innovation, what innovation? A comparison between product, process and organizational innovation. *International Journal of Technology Management*, 22 (1/2/3): 83-107

¹ Expressed in 1996\$. Data from Ungson, Gerardo R., and Trudel, John D., High Prosperity Management: Templates for the Information Age, Internal paper Lundquist College of Business, University of Oregon (2001)

^{iv} Winer R. S. Marketing Management. Prentice Hall, Upper Saddle River, New Yersey 551 pp (1999)