



September 2008

Coming OWIC events:

September 22-23 : Lumber Quality & Process Control, Corvallis

September 24-25 : Lumber Quality Leadership, Corvallis

October 22-23: NE Utility Pole Conference, Binghamton, NY

December 8-11: How to Dry Lumber for Quality and Profit Corvallis, OR

Inside this Issue:

- Managing for innovation 1
- Ask the expert 2

Managing for Innovation: Points to Ponder

Increased competitiveness through innovation is all the rage these days, but how to move from theory to practice? From our research with forest industry companies around the world we have found that much of what is needed is cultural transition and a desire to change structures and systems to make innovation something that is truly managed for and not only talked about.

been quite successful in cost reductions via process innovations. Still, recent years have seen companies moving away from a production orientation toward a greater focus on customers. Creation of a market-facing organization that can develop new products and implement new approaches to management and marketing requires a shift in culture.

in focus to customers and the market, many companies still operate with a culture where production holds much of the decision-making power.

There is a lot of truth to the old saying "tell me how you are going to measure me and I'll tell you how I'm going to behave." Company personnel will concentrate on the performance metrics for which they are

rewarded. Accordingly, implementing innovation management requires a new mindset that is open

"Innovativeness is one of the factors over which the management has considerable control"¹

The forestry industry has a reputation for being

mature, production oriented, and resistant to change. In this setting, firms often attempt to compete pursuing the same strategy (i.e., through low costs). As we stated in the May issue of the newsletter, managers in the forest industry have often focused on processing innovations and the accompanying metrics that emphasize cost reduction and fiber recovery. Forest industry companies have

In our research we most often hear about cultural aspects of companies that create impediments to innovation. Managerial attitude toward risk and change has long been identified as influencing firm innovation. Imagine the change in the power base that must occur when shifting from a production focus to a customer focus. Innovation involves a disturbance of the status quo. Despite a shift

to change and a willingness to establish and integrate new metrics into the workplace.

In our research we have found that when questioned about innovative activities managers often fail to mention innovative activities within their firms that we know of independently. While this could be due to a number of reasons, one pos-

Continued on Pg. 2

Ask the Expert



Have questions related to wood? The faculty of the Wood Science and Engineering Department at OSU can handle almost any question about wood. Simply submit your question using the Ask the Expert form (<http://owic.oregon-state.edu/askexpert.php>). In order to assure that your question is answered correctly, please be as specific as possible when submitting your questions.

The following is an example of a recent 'Ask the Expert' question:

Question: I was wondering if there is an easy way to get the preferred sort specifications that mills have in place? I know I could call individual mills, but do you know of any resource that will give me an array of mills specific preferred lengths and diameters that they have set?

Answer: Our online [Oregon Forest Industry Directory](http://www.orforestdirectory.com/) (<http://www.orforestdirectory.com/>) has log buying specifications for many

of the mills. If you go to the home page and click on 'log buyers' in the center column (you can also narrow by species and region), you will see the list of mills. The detailed listing for each firm has a section on species as well as minimum, maximum, and preferred log length and diameter. According to the bat manufacturer, bats professional players use have about 6 to 14 rings per inch. That translates to growth rings that are between 1.8 and 4.2 mm wide.

Managing for Innovation Cont. from pg 1

sibility is that innovation or innovativeness has not been defined by their companies. As a result, innovation may be perceived differently even among members of the top management team. Any attempt to develop innovation management within a firm should start by defining innovation and then moving towards a plan for managing that innovation, including a strong set of metrics. An example of a definition is, "Innovation is creation and/or adoption of new processes, products/services, or business systems intended to increase value to our customers and thereby improve our performance." A common metric is the number of new products introduced or the percentage of sales from products introduced in the past three to five years.

To be innovative, companies need to

foster creativity within the workforce. Research suggests that managers in a mature industry tend to move around within that industry, reinforcing existing thinking rather than fostering an atmosphere of creativity. A greater variety of specialists as well as variety of industry backgrounds increases the knowledge base and sharing of ideas. Anecdotally, efforts of diversifying management in forest industry companies have often failed as managers with experience in other industry sectors (and therefore, who were seen as "outsiders") attempted to implement changes that the corporate culture would not bear. Attempting to implement change beyond the assimilation capacity of firm culture is clearly counter productive. All employees need to feel comfortable expressing ideas and practicing their own creativity for the good of the company.

Learning and knowledge management are strongly associated with successful innovation. Research on the forest sector from Australia shows that flexible management is important for successful commercialization of innovations and that a company culture supportive of collective learning is an important core competency. Research from Finland suggests two ways of developing learning and knowledge resources. Exploration includes activities such as experimentation, trial, and free discovery. Success in this area is built upon acquiring new knowledge and creating new capabilities. For a firm to be successful in exploration, management must not only tolerate, but reward risk-taking. Exploitation is associated with efficiency, implementation, and focused attention.

Continued on Pg. 3

Managing for Innovation Cont. from pg 2

Successful exploitation is built upon sharing and utilization of knowledge that already exists to entrench existing capabilities. Acquiring, sharing, and effectively utilizing knowledge across the firm is closely tied to communication and networking.

As the business environment and knowledge bases increase in complexity, the ability to network and interact with the outside world in order to enhance innovation is increasing in importance. In our research we have found that forest industry companies rely extensively on customers and suppliers such as machinery manufacturers for innovative

ideas. In larger firms we saw a lack of networking even across business units. For example, we found nearly no consistent, planned interaction between R&D operations on the solid wood and pulp and paper sides of large, integrated companies.

Given the complex and contingent nature of innovation, these are but a few points to consider when managing for innovation.

In upcoming newsletters we will explore how you can improve your organization through:

- 1) enhanced creativity
- 2) improved metrics

- 3) the value of networking
- 4) customer focus – in particular through your organization's existing quality management system
- 5) learning and knowledge management
- 6) developing a culture of innovation.

1 Hurley, R.F., T.M. Hult, and G.A. Knight. 2004. Innovativeness and capacity to innovate in a complexity of firm-level relationships: A response to Woodside. *Industrial Marketing Management*. 34(3): 281-283.

Are you an employer looking to hire qualified students?

Post a position on our jobs board: <http://owic.oregonstate.edu/jobs/form.php>

To subscribe to this newsletter send an email to Chris Knowles with "subscribe to newsletter" in the subject line.

Contact us:

Oregon Wood Innovation Center
<http://owic.oregonstate.edu>
 119 Richardson Hall
 Corvallis, OR 97331-5751
 Fax: 541-737-3385

Scott Leavengood

Scott.Leavengood@oregonstate.edu

541-737-4212

Chris Knowles

Chris.Knowles@oregonstate.edu

541-737-1438

David Smith

David.Smith@oregonstate.edu

541-737-8506

Previous issues of the OWIC newsletter are available at <http://owic.oregonstate.edu/newsletter/>



Oregon State UNIVERSITY **OSU** College of Forestry

The Oregon Wood Innovation Center

Connecting people, ideas, resources