

Global Case Writing Competition 2009 Corporate Sustainability Track

3rd place

Sustainability amidst Uncertainty: Columbia Forest Products' Pursuit of Sustainability in a Changing Market

Free Teaching Note

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Introduction

This case describes the issues and dilemmas facing a company in deciding to adopt a sustainability strategy. The company developed and promoted an innovative sustainable building product in a very traditional wood products industry. The case is designed to highlight decisions related to strategy, adverse industry reactions, public policy and health claims, etc. In addition, it provides an example of a product developed through biomimicry. The case can draw on the following frameworks: Porter's Five Forces Model, Resource Based Theory and Systems Dynamics.

Focus Areas:

- Innovation and Differentiation
- Strategic competitive advantage
- Industry structure and stakeholder relations

Level of Analysis for which the case has been written

This case has been written for advanced undergraduate courses and MBA courses in strategy, marketing or supply chain management. It is also suitable for use with business executives.

Suggested Study Questions

1. What are the challenges faced by Harry Demorest when introducing PureBond® into the current marketplace?
2. What advantages and disadvantages does the company have as an employee-owned company with its sustainability strategy versus a publicly-traded firm?
3. Should the other major wood products manufacturers -e.g. Weyerhaeuser, Abitibi Consolidated, Louisiana Pacific, etc. rush to offer non-formaldehyde wood products as part of their product lines?
4. In the current market situation, what strategic and/or tactical actions should CFP do to further its sustainability-related efforts? Please base your answer on a theoretical framework.

Suggested Supplementary Reading

- Benyus, Janine, *Biomimicry: Innovation Inspired by Nature*, (2002): Harper Collins: New York, New York.
- Camillus, John C., "Strategy as a Wicked Problem", *Harvard Business Review*, (May, 2008): Vol. 86 Issue 5, pp. 98-106.
- Kim, W. Chan, and Renee Mauborgne, *Blue Ocean Strategy: How to create uncontested market space and make the competition irrelevant*, (2005) Harvard Business School Press: Boston, MA.

- Marshall, Scott R., and Darrell Brown, "The Strategy of Sustainability: A Systems Perspective", *California Management Review*, (Fall, 2003): Vol. 46 Issue 1, pp. 101-126.

Teaching Plan and Analysis

Overview

This case can be used to highlight sustainable innovation in a strategy class but can also be used in a marketing class to cover new product development and market launch. For a supply chain class, the case could highlight the both the role of supply chain structure in the development of sustainable product lines and the industry retaliation to products promoting sustainability features.

It would be best to start by talking about the company as an employee-owned company and discuss the main objectives of these stakeholders. A starting point would be to ask what the assumptions are concerning the objectives of this company. Is the introduction of PureBond® purely a business decision? Who are the various stakeholders involved and what are their objectives?

1. Introduction (20 minutes)

The best way to start the class is to put up materials about formaldehyde and ask the class to discuss other examples of products with known health problems and how industry and government have chosen historically to address the issues. This discussion can be framed from an institutional perspective in terms of the importance of legitimacy and the difficulties in challenging accepted institutional practices. It can also be framed from a stakeholder perspective by discussing the roles of different stakeholders in influencing regulatory policy and corporate practice. A question such as "What is the typical path that health-related issues go through in media, industry, and government policy?" can help illuminate the obstacles to overcoming institutionalized beliefs and practices and/or the non-linear process of change brought on by stakeholder engagements. It would be useful to ask the students to describe the history and timeline of policy reactions to products such as tobacco, rBGH (recombinant bovine growth hormone) in milk, etc.

An analogous example would be the ongoing rBGH labeling for milk. Some reference articles are:

1. Schneider, Keith, '[F.D.A. Warns the Dairy Industry Not to Label Milk Hormone-Free.](#)' New York Times, February 8, 1994.
2. Rampton, Sheldon and Stauber, John. '[Monsanto and Fox: Partners in Censorship.](#)' PR Watch, Second Quarter 1998, Volume 5, No. 2.
3. Martin, Andrew. New York Times. 'Fighting on a Battlefield the Size of a Milk Label.' March 9, 2008.
4. McFarland, Janet. '[Wal-Mart move 'tipping point' for non-hormone milk.](#)' Toronto Globe & Mail, March 22, 2008

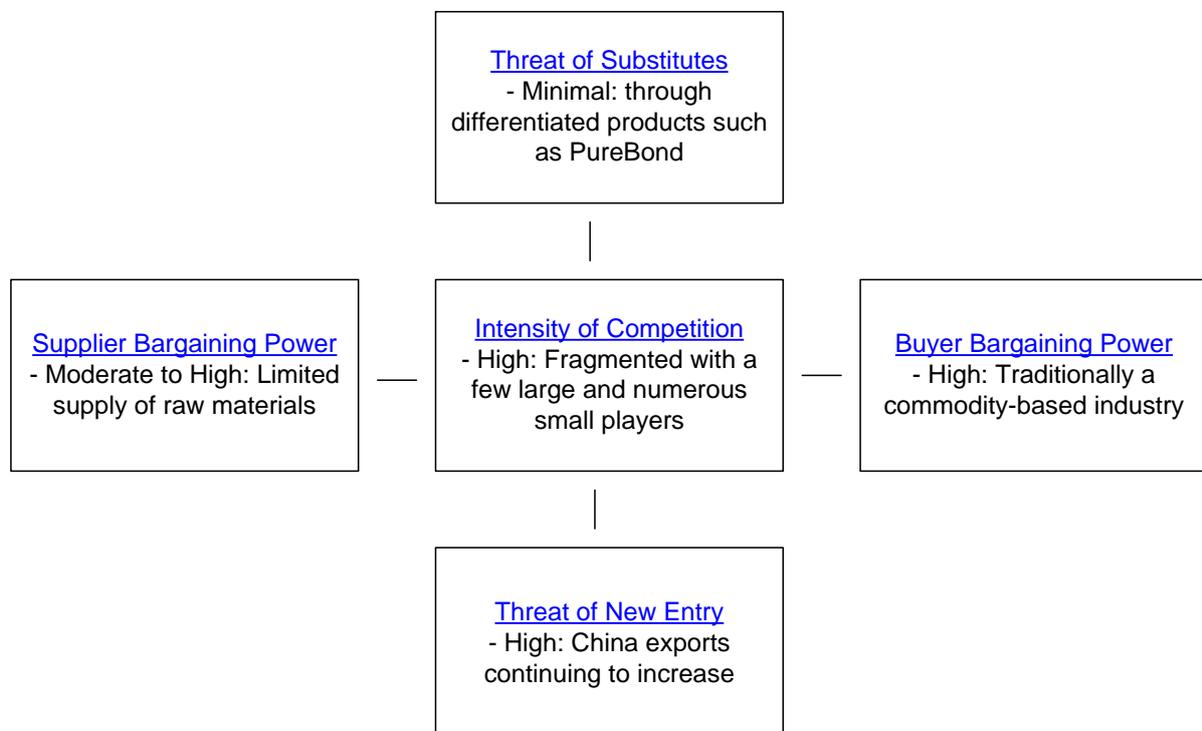
2. Columbia Forest Products and Sustainability as Strategy (40 Minutes)

This case may be best used to consider innovation and differentiation, strategic competitive advantage and industry structure/stakeholder relations. The discussion should begin by focusing on the context of the decisions to use FSC-certified materials and launch the PureBond® hardwood plywood. These decisions represent the company's proactive stance toward product development and sustainability. The discussion should include the structure of and typical competitive strategy in the plywood industry, opportunities for differentiating products, and the "customer" for these products.

Porter's Five Forces Model:

The discussion can utilize Porter's Five Forces Model to analyze the structure of the forest products industry. Figure 1 below provides a basic application of Porter's Five Forces Model to the hardwood plywood industry. Given the commodity-nature of the industry, what are the power distributions among suppliers, manufacturers, contractors, retailers, and final consumers? This question is important given Columbia's attempt to use FSC certification and PureBond® as points of differentiation in a traditionally commodity market. Such an analysis highlights the tenuous position of hardwood plywood manufacturers, explains reasons why competitors have been restructuring through vertical and horizontal integration and, the motivations for Columbia to seek differentiation through products and brands. This analysis should also be useful as students consider the options available to Columbia at the end of the case study.

Figure 1: Applying Porter's Five Forces Model to the Harwood Plywood Industry



Resource-Based Theory and VRIO:

A competitive advantage perspective can employ resource-based theory. This approach will permit the students to analyze the extent to which FSC certification, the PureBond® brand, employee ownership and other characteristics of Columbia Forest Products provides market positioning based on 'assets' that are (1) valuable, (2) rare (3) inimitable and (3) opportunity for exploitation (VRIO). An RBT approach will lead the students into the final portion of the case as they attempt to determine the best future direction for Columbia. Figure 2 provides one approach to a VRIO assessment of Columbia's competitive situation.

Figure 2: VRIO Analysis of Columbia Forest Products

	Valuable	Rare	Inimitable	Opportunity	Advantage?
Relationships with buyers	Yes	Yes	No	No	Parity
FSC-certified raw materials	Yes	Yes	Yes	Yes	Temporary
Leadership	Yes	Yes	Yes	Yes	Sustainable
R&D	Yes	Yes	No	No	Parity
PureBond©™	Yes	Yes	No	No	Parity
Employee-ownership	Yes	Yes	Yes	Yes	Sustainable
Manufacturing	Yes	Yes	No	No	Parity

The final ratings derived using the VRIO framework are subjective, thus different students will derive different assessments. The assessment above suggests that Columbia's sustainability-related initiatives (FSC-certified materials and PureBond) will only provide temporary advantages; the implications of this assessment are essential in determining how the temporary advantages are leveraged into longer term market position. Although subjective, this approach requires students to engage in critical thinking and analysis to formulate possible future alternatives. It requires students to systematically determine the relevance of key attributes of Columbia as it puzzles over its future.

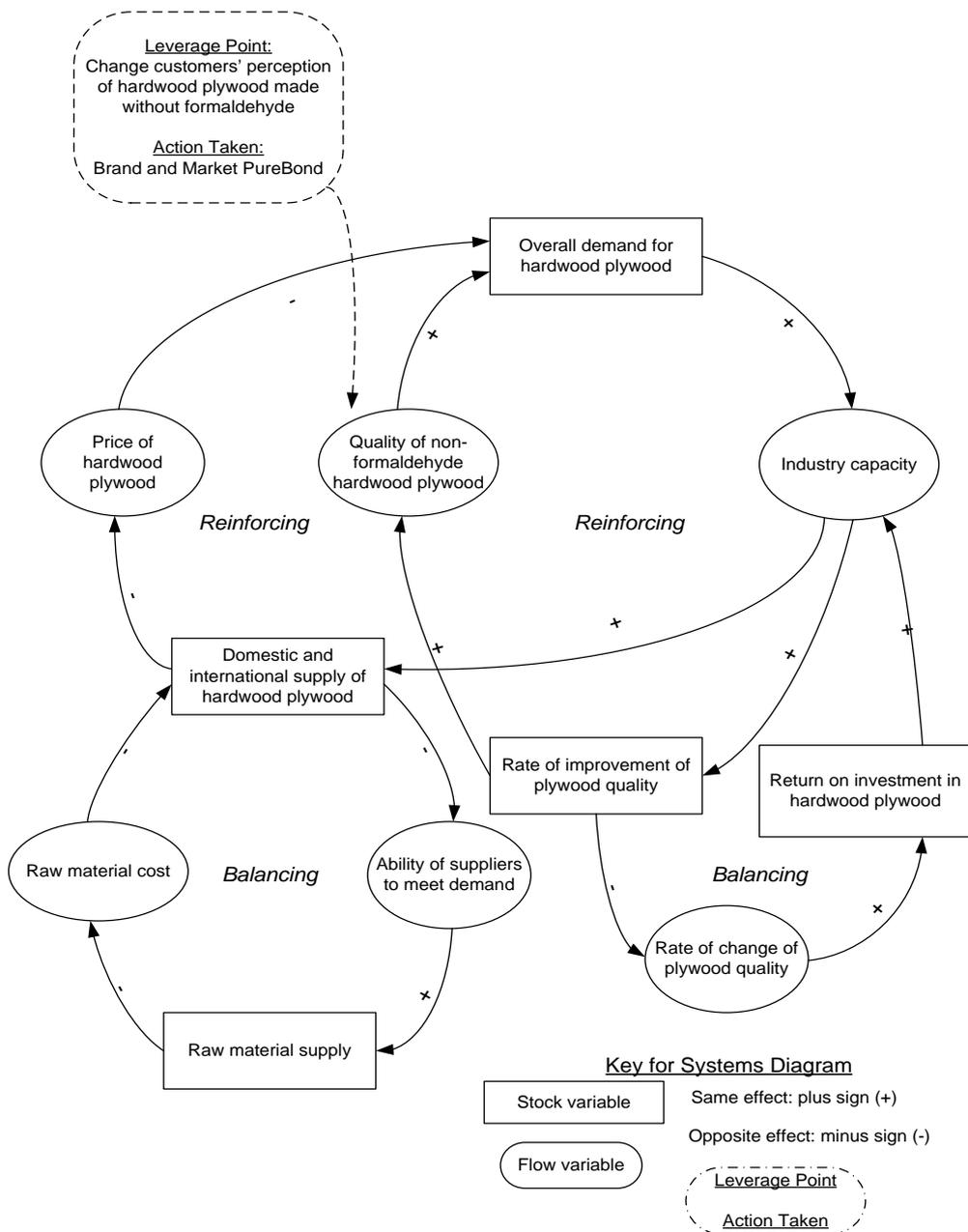
Systems Dynamics Perspective

A systems-thinking approach is useful to evaluate potential leverage points in the hardwood plywood industry and how Columbia may be able to influence the relationships through its introduction of PureBond®. How did the introduction of PureBond® alter Columbia's relationships in the industry – with suppliers, competitors and customers? Who is ultimately driving the market in this case? What are the roles of the downstream supply chain members?

Figure 3 provides the systems dynamics perspective on Columbia's introduction of PureBond® into the industry. This diagram suggests that a key leverage point in the system is customer perceptions of formaldehyde in cabinetry and other household furnishings. It also shows the interrelationships of supply and demand, quality (potential for differentiation), and capability of the industry to add/reduce capacity and quality. Students

can identify how the California indoor air quality policy is represented in this diagram and if it changed the systems dynamics? Furthermore, the down housing market is causing significant depression in demand. How does lower demand impact different relationships in the systems diagram?

Figure 3 Systems Dynamics Perspective on Columbia Forest Products' PureBond®



This diagram was adapted from: Marshall, Scott R., and Darrell Brown, "The Strategy of Sustainability: A Systems Perspective", **California Management Review**, (Fall, 2003): Vol. 46 Issue 1, pp. 101-126.

3. The future direction (20 minutes)

Each of the strategic frameworks above focuses the students' analyses on the competitive environment in the hardwood plywood industry and the potential for Columbia to differentiate itself in this environment and attempt to maintain strategic advantage. In examining the options for Columbia, it is interesting to consider the potential for a "Blue Ocean Strategy" in a traditional (and seemingly eternally) commodity-based market, particularly as it relates to the commercialization of environmentally-sound products. Kim and Mauborgne (2005) offer an insightful look at "Red Ocean" and "Blue Ocean" strategies. Competition in the hardwood plywood industry has been historically characterized by restructuring but not escaping Red Ocean strategies. Is it possible, through environmentally-sound technologies and products, to differentiate and pursue a Blue Ocean strategy?

Kim and Mauborgne¹ characterize the two strategies in the following manner (p. 18):

Red Ocean Strategy: compete in existing markets, beat the competition, exploit existing demand, make the value-cost trade-off, align the whole system of the firm's activities with its strategic choice of differentiation or low cost.

Blue Ocean Strategy: create uncontested markets, make the competition irrelevant, create and capture new demand, break the value-cost trade-off, align the whole system of a firm's activities in the pursuit of differentiation and low cost.

Given the options provided at the end of the case study is Columbia effectively positioned to pursue a Blue Ocean Strategy? Or, is it still bound by the traditional commodity-based Red Ocean approach? A simple table, as provided below, provides students an opportunity to examine each of the options independently and together to suggest whether or not Columbia can or should pursue a Blue Ocean approach. After completing this table, students can be asked to determine what options Columbia should (and should not) pursue, what advantages accrue from these approaches, and how long these options may provide Columbia with advantageous market position.

Option	Opportunities	Risks	Supports Blue or Red Ocean Strategy?
Develop new substrates to replace wood or expand into MDF			
Develop radically new product lines such as packaged glues			
Expand into cabinetry			

¹ Kim, W. Chan, and Renee Mauborgne, Blue Ocean Strategy: How to create uncontested market space and make the competition irrelevant, (2005) Harvard Business School Press: Boston, MA.

4. Discussion and wrap up (15 minutes)

The students can be asked to state the key learning points from the case and how a company can uphold its sustainability values and focus under ever changing market and economic conditions. Another key learning point includes powerful industry backlash against new products that implicitly or explicitly indicate that existing products have harmful attributes.

Whiteboard Plan

1. The top left should be for Supply Chain map
2. The top right should be used for stakeholder analysis (Public versus ESOP firms)
3. The bottom left should be used for industry structure and CFP fit with new product ideas
4. The bottom right should be used for the pros and cons of the new options

Supplementary Resources

A companion video to this case study is available at the Center for Global Leadership in Sustainability's website (<http://sba.pdx.edu/CGLS/sharing.php>). This companion video is just over 10 minutes long and includes interviews, facility footage and narrative.

The video focuses on the development and commercialization of PureBond®. In doing so, the video brings together many key aspects of the case, including:

- Leadership and corporate culture for sustainability-inspired strategy.
- Engagement with stakeholders in creating and commercializing innovative products.
- Challenges of industry transformation and entrenched competition.