



Solutions for Wood With Barbara Bell

Achieving Gold

Best Practices for Successful Product Development

Dynamic markets and competitive pressures are forcing wood product manufacturers to move to higher-value markets that re-

quire highly innovative products. The pros at Solutions for Wood talked to Guy Belletête, general manager of The Institute for

Product Development (IDP) in Montreal, a company who has specialized in product development and design issues for more than 25 years.



Guy Belletête

before you start developing a new product. There is more than one level of customer — your products need to satisfy both the dealer/buyer as well as the end-user.

2. Managing the project of product development

Project management is key to successfully implement the essential aspects of product development:

- Cost Management
- Quality Management
- Human Resources Management
- Communication Management
- Risk Management
- Content Management
- Time Management
- Integration Management

When you manage product development, you have to define the project first:

- What are the product needs for which market?
- What quantities do you need, what expertise, equipment, time, raw materials, and human resources capacity?
- Do you have the right distribution channel?
- What are the sales expectations in the first, second, third year?

3. Working as a multifunctional team

For successful product development, the point of view of the people involved on different levels is key. A multifunctional team consists of people of different company functions, including marketing, R&D, engineering, manufacturing, customer service, finance, and purchasing.

In the traditional model, your situation would be similar to this one: Your customer service people present a need resulting from customer feedback to the R&D people. The R&D person draws some models and then goes to the production person. The production person figures out a way to manufacture the product and then forwards it to the marketing department to market and launch it. The good idea was instantly turned into a project that may or may not become a sellable product.

In a multifunctional team approach, after getting a new idea from customer service, we would call a quick meeting with all departments and discuss the idea before making it a project. We've got the marketer that comes with the idea, we've got the R&D people and the manufacturing person, and they all converse about the facts and challenge one another. At the end of the meeting your conclusion might be that it was not a good idea. In the product development value chain, you have progressed from total uncertainty to more certainty. This method ensures that you don't put your resources into ideas

that, when looked at from all company perspectives, are not promising.

4. Product development process

This process is the road map that organizes the product development work from idea to realization and launch. The road map precisely defines the deliverables at every stage and the checkpoints from where an orientation committee decides on:

- Whether to pursue a project or not
- Modifications of the project if necessary
- The priority of the project compared to others in the company's product portfolio
- The allocation of available resources

At the beginning of the process you have a list of ideas that need to be measured against customer needs and company objectives. After evaluating their potential, you narrow the list down from maybe 60 to 10 ideas. Then you do some more research and analysis, phone customers and distributors, and evaluate the competition and whether the ideas offer enough product differentiation. After that, you come out with two to three projects and assign a project manager to develop a project business plan. A management committee then decides on doing the projects or not. Why is this process so important? Since resources are limited, you need to put them into the project with the most potential.

5. Managing the product portfolio

Usually a company always has more projects it wants to realize than resources it can allocate. Product portfolio management is a dynamic decision-making process that allows you to:

- Choose, from the start, the ideas that have the best potential for success
- Prioritize the product development processes by considering their strategic importance for the company
- Optimize the allocation of resources (human, financial, technological) that are necessary for each project
- Accelerate the development of existing projects
- Stop projects whose strategic importance has changed over time or that no longer meet the conditions for success

Managing the product portfolio is about balancing capacity and creativity in order to make money. Innovation means to have creative ideas that you translate into products that sell. **WW**

Barbara Bell is one of FPIInnovations' Solutions for Wood specialists. She focuses on product development and the incorporation of design principles into wood products. FPIInnovations is a company with more than 25 years of experience providing technical support to the wood products industry in Canada. She can be reached (604) 222-5666 or bell@van.forintek.ca.

Q Guy, can you tell us how your institute advances product development?

A IDP is an industrial association promoting the adoption of product development best practices. During the last 12 years, we have worked with about 1500 manufacturing businesses from a wide variety of industries in the area of product design and development technologies. In our product development improvement network, we have 150 people from 95 companies that meet in various groups five times a year to exchange product development improvement practices. The groups, depending on their level of product development expertise, share best practices and discuss challenges with implementing product development strategies.

Other groups that are more mature and advanced might have product development implementation well in place but still face the challenge of being in a continuous innovation mode. Developing a good product requires significant resources and success is not guaranteed. To reduce risk, it is critical for manufacturers to establish and practice sound product development processes. Over the years, we have witnessed some great successes with businesses that have increased their sales or profit margins through developing better products.

Q Can you share some product development practices with us?

A There are five best practices that correspond to five main problems in product development:

1. Meeting the needs of customers

Defining the needs of your customers is one of the best methods of differentiation. Manufacturers need to become astute at capturing customer desires and feedback in order to deliver added value and create a competitive advantage for the company. Analyze market trends and get to know the strengths and weaknesses of the competition

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