Successful Product Development

What is Product Development and why is it so important? What does it mean to be successful in Product Development?

Product Development, also called Research and Development ("R & D") and Engineering, is the department in which your engineers and your design teams create ways to bring value to your customers. In product companies, this is the department that designs and tests your new products. In service companies, this is the function of developing new capabilities, creating the methodologies and processes that you use to deliver your services, and developing research materials you sell, directly or indirectly, to your customers. In both cases, the Product Development department creates intellectual property and shareholder value.

In some companies, there does not seem to be a Product Development function. But even labor-based businesses (such as painters, landscapers, construction workers, attorneys, physicians, etc.) have to keep up with advancements in their field. New materials and techniques are constantly being developed, and everyone has to stay informed of these advancements. Learning about new medicines, materials and tools, and learning when and how to use them, is a form of Product Development.

In all cases, there has to be a close integration between Marketing and Product Development. In the best companies, it is the Marketing function that must control the Product Development function. They are kept separate primarily because it is very difficult for them to exist in the same chain of command. Many companies have design engineers as part of their Product Management teams who are responsible for the coordination between the functions.

There also has to be a great relationship between the Product Development and Manufacturing / Operations areas, because it is not enough to design products that take advantage of market opportunities – they must also be able to be created with great quality, and within the budgets required to make the projected profits.

The functions of Product Development include:

- Designing and Developing Products and Capabilities,

- Preparing Products for Manufacturing,

- Managing the Product Lifecycle,

- Improving Design Time, and

- Keeping Abreast of Technology.

Designing and Developing Products and Capabilities

The Product Development team's primary function is to develop new products. They typically have the responsibility of working with the Marketing department to develop the ideas for new products, projecting

product development budgets and timeframes, and developing the products according to those plans. They have to create prototypes, usually several of them, and test product quality.

In service companies, Product Development often involves developing new capabilities, and is closely related to professional development. Even "common" laborers need to continue to develop their capabilities to use new materials and tools. Studying marketing materials and the manuals that come with new tools enhances the capability of the company to provide services, and is a form of Product Development.

(Note: For service companies, it may be helpful when reading the rest of this article to think of Capability Development instead of Product Development.)

Preparing Products for Manufacturing or Delivery

In companies where products are manufactured, the Product Development department works with the Manufacturing department to prepare the plans with which the products are manufactured. They have positions entitled "Manufacturing Engineers" who are responsible for taking designs and creating the step-by-step plans by which the products are manufactured and assembled. This includes the development of the Bills of Material and Routings, which are the step-by-step plans for taking raw materials and sub-assemblies and creating products ready for shipment.

At service companies, this function consists of "productizing" methodologies and processes by creating the training programs for those who would deliver them and the forms, templates, workbooks, and curriculum used during the delivery.

Managing the Product Lifecycle

The Product Development department not only has to design the original products, but also design and develop the enhancements to the products over time. The initial design almost always includes the plans for additional product releases. It is customary, and a best practice, to develop a product architecture that allows for expansion and modification. For example, a website developer will, within the initial design, provide a framework with which new web pages may be inexpensively added to the initial site.

Even processes for delivering services (e.g. consulting engagements) must be continuously updated and improved over time, until they are replaced with newly architected, better processes.

Improving Design Time

In our fast paced society, the Product Development teams must steadily increase the pace at which new products are conceived, designed, developed, brought to market, and retired. Where it use to take the automobile industry four years to bring a new model to market, it now takes less than 18 months. Similar pace increases are evident in other industries as well. Even consultants, attorneys, and physicians have to continually implement advancements in technology into their offerings to avoid being left behind.

Keeping Abreast of Technology

It is normally the responsibility of the Product Development team to keep abreast of technology. They then need to advise the company, and especially the Marketing department, of potential new product opportunities. When attending conferences and working with suppliers, they hear of advances in the industry, and learn who is developing new products with them. They are often the eyes of ears of the company, and contribute heavily to market intelligence with their "technology intelligence".

The engineers have to keep current, or your company will fall behind and struggle to maintain market share. This is especially true of companies whose competitive advantage is in the product leadership. If they seek to have the latest technology or the best products, they must pay a heavy price to keep their leadership position.

How are you performing in Product Development? Do you need training or coaching? Do you have successful Product Development processes in place? Are you creating innovative products and services according to your plans?

If we can help you be successful in Product Development, or any other aspect of your business growth, please give us a call or email!

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