

Collaborating for Improved Product Development

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More and more companies are collaborating on product development programs. The objective is to reduce production costs, make better use of skilled, specialist resources, and speed up the time to market. Tools like videoconferencing and the use of secure extranets have simplified collaboration.

What You Need to Know

Why is collaborative development better than product development within a single company?

Bringing new products to market faster has become a high priority for companies. Improved collaboration can speed up the development and release of new products, and better project management can help to reduce the overall costs. Collaboration brings together the knowledge, experience, and skills of multiple team members from different organizations. They can contribute to the development of a new product more effectively than individual team members in one company performing their own specialized tasks.

Do team members have to work in the same location to collaborate effectively?

Working together in the same location would be an ideal solution, but travel costs could prove prohibitive if the partner companies are far apart. However, secure communication systems and sophisticated collaboration tools mean that dispersed team members can work together effectively in a "virtual enterprise."

What to Do

Accelerate Competitive Advantage

Many companies are finding that to compete in the increasingly global marketplace, they need to involve specialists outside their own organization in the product development process. By collaborating and creating efficient joint teams, they can tackle key challenges in the product development process, reduce the time to market, improve the success rate of new products, and grow market share and revenues. By using collaborative technologies, they can share accurate,

up-to-date digital product information across different companies as well as across different functions like design, engineering, manufacturing, marketing sales, and purchasing. They can include suppliers, partners, and customers in an “extended enterprise” with the goal of creating higher-quality products, increasing innovation, and reducing development lead times.

Speed Up the Product Life Cycle

Many companies face the pressure of a shorter product life cycle, as customers increase demand for more and more innovative features and benefits. Competitive pressures are continuing to drive companies to reduce the time and effort involved in bringing products to market. Globalization and outsourcing trends have increased the access to low-cost labor markets and engineering hubs, and these trends push companies to outsource not only the production but also engineering and development of products.

Extend Skills and Resources

Collaboration can bring your company a number of important benefits:

- access to scarce skills not available in your own organization
- additional resources to tackle larger development projects or reduce lead times
- access to technologies, components or supplies that can enhance your own product
- opportunities to enter new markets where the partner has an established presence
- greater marketing resources
- access to partners’ distribution channels

Reduce the Time to Market

Collaborative product development can help you get a new product to market in the shortest possible time to gain competitive advantage. An increasing number of companies, particularly in the technology sector, make planned new product announcements that enable their customers to plan their own new product development programs in parallel. It is vital that companies integrate all product development activities within a common timeframe without increasing their own facilities or disrupting their day-to-day activities. In collaborative development, the program can be divided into smaller critical activities which are then handled by appropriate partners. As well as design and manufacturing processes, the manufacturer can also utilize external partnership services to handle market and customer research, distribution, marketing communications, and product launch. Although these services are normally bought in from specialists, the manufacturer has to spend time

educating the supplier about the market and the product. By establishing long-term partnerships with specialists, the manufacturer can reduce the learning period and ensure that every aspect of new product development and launch is handled quickly and efficiently.

Set Joint Development and Marketing Objectives

Although partners may have strong individual business and marketing objectives, it is essential that any collaborative development project work to a single objective agreed to by all the partners. The success of the project could be hurt if each partner insists on following its own development agenda. The result may be a compromise that does not fulfill the new product's full potential. When collaborating companies have an effective working relationship and can agree on a single strategy, the result should exceed what they could achieve individually.

This problem is likely to arise more frequently as projects get larger and the new products become more complex. Large development programs may be broken into smaller projects that are managed independently by external specialists. Although this allows each company to focus on its core competencies, some of the partners may feel that they are giving up control of key decisions on a significant portion of the development program.

Build Effective Teams

Collaborative working requires a culture that encourages teamwork, cooperation, and collaboration. That means each team member must have clearly-defined responsibilities within an agreed product development process based on sharing of information and collaboration. There are often conflicting goals in product development, so collaboration requires effective teamwork where team members trust and respect one another. There must be open communication and a willingness to accept input from others.

Share Information

For effective collaborative development, information must be shared more frequently, in a wider variety of ways among dispersed team members. With the right technology solution, you can create an "open network" that supports communication and collaboration among all the parties involved in a joint product development project. Team members can access knowledge that has typically been trapped in departmental systems, and the collective knowledge allows the team to develop and go to market as one integrated company, rather than a number of separate isolated groups.

Keep Team Information Up to Date

When team members are located in different sites or even different countries, it is essential to ensure that everyone is working with the same up-to-date information. When data is created at multiple sites, it can be difficult to track and maintain an up-to-date history of the communications and decisions relating to the development project. The process can slow down if essential data is missing, out of date, or incorrect. Secure access to current information gives the team confidence that, as changes occur, they are precisely tracked. If all team members are notified immediately when changes to designs or schedules occur, it means fewer development errors, less duplication of effort, and minimal project downtime.

Create a Productive Team-Working Environment

There are a variety of tools and technologies to support communication and collaboration across different sites. There are two forms of collaboration:

- in which all participants view information and/or meet at the same time;
- in which participants view information and provide feedback at different points in time.

The tools and technologies include:

- e-mail to exchange drawings, models and project information;
- meetings held by teleconferencing and videoconferencing;
- meetings held via the Internet;
- project Web sites to create a single source of project documentation, with e-mail alerts for updates;
- Web sites to enable team members to view and comment on project documents or drawings;
- tools for product data and product information management.

These tools help to create a “virtual project room” in which users can share digital product information for interactive design reviews, collaborative design sessions, or information sharing, regardless of location. This collaborative environment can be extended beyond the team members to outsourced design partners, manufacturers, and suppliers.

Reduce Development Costs

Creating this “virtual project room” can eliminate travel expenses and related overhead. It also ensures that teams can meet important project milestones and deliverables. Industry experience indicates that with the right collaboration tools, companies can accelerate time to market by 15%,

eliminate 70% of the cost of making physical prototypes, reduce their data management costs by about 30%, and make significant savings in travel expenses.

Synchronize Launch Activities

As well as reducing your development costs, collaboration can also provide financial benefits through joint marketing activities. Effective partnership marketing can make budgets work harder and increase sales when partners work together to provide solutions that meet customers' needs. A combination of collaborative development and cooperative marketing can deliver an impressive return on investment. Joint marketing activities can include:

- press releases;
- information on partners' own Web site;
- joint Web site;
- advertising;
- product guides;
- white papers;
- product launch.

It is essential to agree on a joint creative strategy that communicates effectively with the target audience and does not weaken the proposition through compromise.

What to Avoid

You Choose the Wrong Partners

When you are planning a collaborative project, it is important to choose the right partners. Your partners should add value to your own offer or provide other benefits such as access to scarce skills, faster time to market or reduced costs. As well as tangible benefits, it is important that your partners share your own business and marketing values—and recognize mutual benefit in working with you.

You Choose a Team That Cannot Work Effectively

Successful collaboration depends on effective teamwork. The team should include the right balance of skills to manage all aspects of product development and should have the tools to be able to

collaborate whether they are sitting in the same location or working remotely in a “virtual project room.”

Where to Learn More

Book:

Chesbrough, Henry W., *Open Business Models: How to Thrive in the New Innovation Landscape*. Harvard Business School Press, 2006.

Web Site:

New Product Development Solutions: www.npd-solutions.com/collaboration.html