Becoming a Product Juggernaut

Jean-Philippe Deschamps and P. Ranganath Nayak

„Juggernaut" is an English adaptation of „Jagannath," a traditional Indian divinity associated with the notion of irresistible or unstoppable force; and a product juggernaut is simply a company that keeps winning over its competitors through the sheer superiority of its product offering. At Arthur D. Little, we have been privileged to work side-by-side with actual and aspiring product juggernauts throughout the world, helping them mobilize their organizations to generate steady streams of market winners. Through this experience, we have defined some best practices in the increasingly ferocious product battle. In this article[1] we highlight the main characteristics of product juggernauts and focus on their unique capability: a very effective process for imagining, conceiving, developing, and launching new product offerings. We also outline ways to build such a capability within your own organization.

How Product Juggernauts Work

All product juggernauts share a very strong, quasi-obsessive new product culture that extends from top management to the shop floor. They recognize that they can best create lasting value for their stakeholders through persistent product superiority. While companies also create value through other means, such as financial engineering, mergers, acquisitions, restructuring, and downsizing, that value cannot last long unless the company also establishes market leadership – and market leadership depends on product superiority.

Another characteristic of product juggernauts is that they can compete on multiple fronts simultaneously. They surprise their competitors by excelling at many things. They know how to proliferate their product lines to occupy all segments, including niches. They focus on value by offering high quality at affordable prices. They offer superb design, continuous innovation, and impeccable service – all with fast response and execution. Canon, in the field of 3 5mm Single Lens Reflex cameras, as well as in home copiers, is an excellent example of a company that does not depend on a single dimension of competitiveness.

In contrast, companies that depend on only one advantage – a favorable cost position or a strong technology – will find their product superiority short-lived. Indeed, now that the key competitive characteristic is the ability to change quickly, management should remove any blinders that reduce its view of the world of competition to an „either/or" proposition. (Achieve cost leadership *or* quality/performance leadership. Play on the „commodity" *or* on the „specialty" side of the business.)

The ability to compete on multiple fronts cannot be improvised. It requires visionary strategy and planning and a world-class product creation process. Product juggernauts devise bold, long-term game plans to define and target customer value. And, unlike most competitors who think in terms of one product generation at a time, juggernauts think and plan ahead. They build a vision of how they intend to dominate their industry and then implement it steadily, product generation after product generation, combining incremental and radical improvements. Aspiring juggernauts take product and technology cycle-planning very seriously. Most automotive companies, for example, plan their products at least 10 years into the future. Intel and Microsoft are working on products two generations beyond the product that they are about to launch. Chrysler has managed quite well to combine incremental improvement with radical changes in styling and the cost-effectiveness of technology.

Of course, having a game plan is one thing; making it a winning plan is something else. That's where the world-class product creation process comes in. For most companies, product creation is a very complex and mysterious process. One of our clients equates it to the process of mating elephants. He says, „It creates a lot of dust, trumpeting, and tree crashing – and you have to wait years to see the results!"

Our experience shows that even if it always remains a bit chaotic, as most creative activities do, product creation can be organized and managed effectively. To do so, senior managers must first be able to comprehend it in its totality, to understand its various parts and the way they are interrelated. You need a high-level map.

A World-Class Product Creation Process

Product creation – or product innovation – extends both upstream and downstream, far beyond the management of new product projects. Upstream, it begins with the collection of intelligence on and insights into the market, customers, competitors, and technology. Juggernauts such as 3M, Hewlett-Packard, Procter & Gamble, and Toyota spend a lot of effort in what they call „uncovering unarticulated customer needs." Aspiring juggernauts also try to formalize their vision and to manage ideas. Ideas are intellectual assets that need to be collected, generated, screened, enriched, evaluated, and, finally, ranked for funding and programming. This process can be managed. Many companies in many industries – among them Gillette, Philips, Toshiba, and Hewlett-Packard – now have well-documented processes for doing all this, and go further to provide training to teams and their coaches on how to perform the necessary activities to a high standard of excellence.

The innovation and product creation process also extends downstream to product launch and support, in what we call „product life-cycle" management. Getting the product to market is probably one of the trickiest and most critical parts of product creation or innovation. Some industries – such as personal computers and telecommunications – have established completely new standards and benchmarks on speed of product launch and product life-cycle management, notably the highly delicate process of phasing products in and out. When you introduce a new product generation every nine months, as in the personal computer industry or some segments of the software industry, product life-cycle management becomes absolutely critical. Old products are phased out and new ones phased in with perfect synchronization, so that there is neither confusion in the marketplace nor cannibalization of one product by the other. Rubbermaid is a master of this.
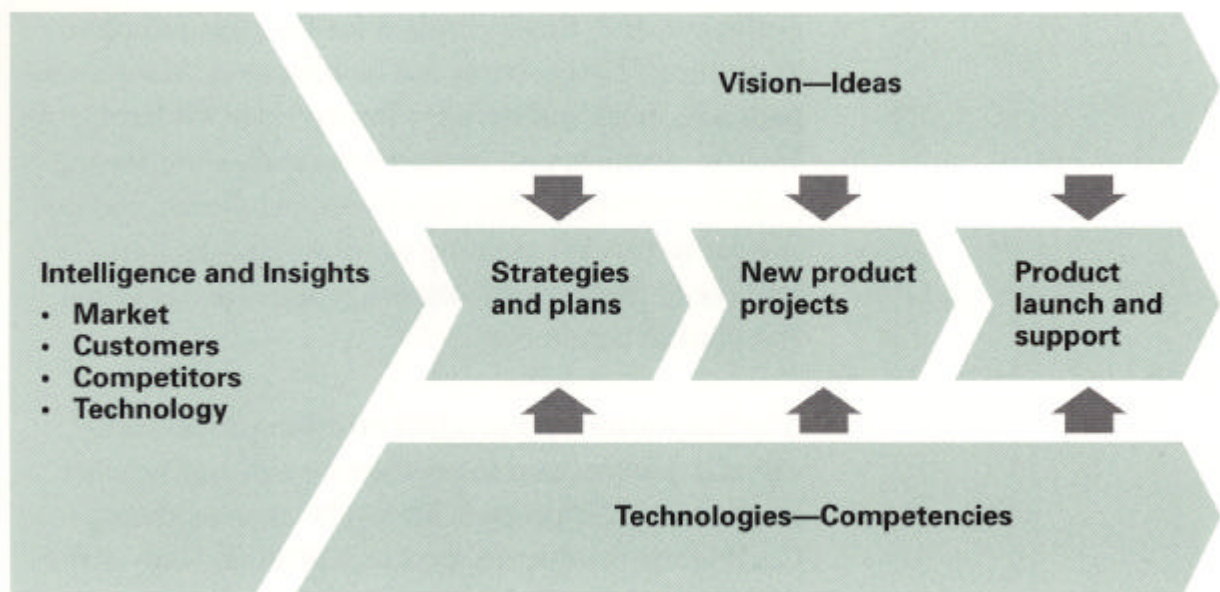
Key Success Factors

A world-class product creation process has many facets. Five success factors play a determinant role across almost all industries:

• Process management mechanisms

• Empowered program managers

• Committed teams

• Superb resources

• Speed in execution

Of these factors, two are particularly critical: empowered program managers and committed teams.

Exhibit 1

Managing Innovation as a Process

Empowered Program Managers. The first critical success factor is empowerment of heavyweight project leaders or rather – to define their scope more broadly – program managers. Program management, which started in the aerospace and defense industries, has been rapidly adopted in such high-tech sectors as information and communication technology. The auto industry has used it widely, and other industrial sectors are following suit.

Program management has evolved from functional project management, which was designed to deliver higher-quality products effectively and fast. Functional project management did generally improve perfomance, but as long as the functional managers insisted on calling the shots in their own fields, the improvements were limited. This approach is often referred to as „lightweight" program management. The project leader, who is often very junior in the hierarchy, becomes frustrated by his or her lack of power to make decisions, and the project may loiter in the hallways of functional politics. Managing a complex product creation project in the traditional functional way is about as effective as asking an orchestra to play a symphony while letting each instrument group leader direct his or her own part of the score.

In contrast, under empowered program management, a single executive has full responsibility for a product program (often a product family) from start to finish. While program implementation still requires the participation and expertise of functional departments, the program manager has delegated authority to steer and manage the program – as a conductor has delegated authority over all instrument groups for the duration of the concert.

Implementing this delegation – without demotivating the functional organization – is not easy, particularly in strongly vertically managed, functional organizations. But, when the challenge is lean and speedy innovation, there are no alternatives. Chrysler's management attributes the company's highly successful recent series of new products in large part to the creation of empowered program managers.

Committed Teams. The second key success factor – which goes hand in hand with program management – is the ability to work in integrated, multifunctional teams fro m start to finish. By „integrated" we mean including the participation of all internal functions, as well as suppliers, partners, and vendors.

Today, in traditional companies, the product creation process remains a sort of relay race among the various functions. In this paradigm, management tries to improve and speed up the process by organizing an „orderly" transfer of responsibility at project handover. As in a relay race, it is at the transfer of the baton that time is gained or lost.

Product juggernauts play a different game altogether. They build their teams to be multifunctional from the start. They move with the project as a cohesive and „committed" team, even though the role of each function is clearly recognized and some members join and leave the team at specific points. This model is now recognized as the *only* model that leads to product integrity, lower investments, and shorter lead times in complex manufacturing industries such as automotive, computers, appliances – and increasingly also in pharmaceuticals, specialty chemicals, and even consumer goods. This kind of teamwork is not only effective, it's highly enjoyable. A member of the team that helped Fred Smith create the service of overnight package delivery at Federal Express recalled years later that he felt like „the last knight on a white horse."

Making It Work

How do you build this world-class capability in your organization? Let's be realistic – we are not talking about a small change. Becoming a product juggernaut often requires a fundamental transformation. In some companies this may mean, in effect, a cultural revolution. And, of course, this change must come about while you continue to run the business to meet short-term performance targets. A client of ours equates this challenge to that of converting a propeller plane into a jet plane while in the air. Not a menial task! But is there any other choice if the company wants to establish sustained market leadership?

The first task for management is organizational. We don't mean that you need to reorganize in the classical sense of the term – in most cases, the organization does not need to be changed. Rather, we are suggesting that you build a second dimension, the horizontal process dimension, next to the vertical, functional organization. Many of our organizations, indeed, often look like towering functional organizations, a bit isolated from each other, each with different cultures and ways of working. Effective product creation cannot be achieved under such conditions.

We're not advocating flattening the functional towers. This would be detrimental to functional excellence, on which success depends. Instead, you need to break the silo mentality by organizing and managing cross-functional processes as effective bridges across these towers. Product juggernauts are companies that have achieved this dual, informal, horizontal way of working – or networking – within the functional organization.

The effect of this change in operating can be nothing short of revolutionary. Suddenly, the role of the functions becomes primarily to build and deploy topnotch resources to support the various processes. How do you convey this message effectively within the organization to make functional heads realign their efforts? This is *the* key challenge in most companies. One measure that helps focus the organization on processes is to define very clearly the roles and responsibilities of the two sides of the matrix in a sort of „process management charter."

To make this change happen, companies need to mobilize the top management team by creating and steering process management mechanisms, such as task forces, boards, and councils – each mechanism dedicated to a specific process management task. Most of the actual and aspiring juggernauts with whom we are working are prolific users of such mechanisms.

And, as with most transformation efforts, an organization must root the change program in a vision shared by the whole management team. Skeptics can kill a change effort. Managers must recognize the need to target specific improvements for the short term while building the necessary infrastructure of change for the long term through training and coaching.

The most important aspect of such a radical change process may be continuous improvement and learning. There are very few true product juggernauts around, but there are many aspiring ones. What characterizes aspiring product juggernauts is their persistence in launching improvement efforts and carrying them out, as well as their steady rate of learning at three levels: individual learning, team learning, and organizational learning. Only through such systematic learning and continuous improvement can companies achieve more intense customer obsession, bolder game plans, and more effective, world-class product creation capabilities.

This article is based on the book Product Juggernauts*, by Jean-Philippe Deschamps and P Ranganath Nayak, published by the Harvard Business School Press, 1995.*

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