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PDMA's quarterly magazine for Product Development professionals

Insights into Innovation™

How P&G achieves such stellar NPD results



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COVER PHOTO: In the past few years, Procter and Gamble (P&G) has jumped into the forefront of innovative Product Development techniques and success. Read how P&G has done this in the article starting on page 9.



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Implementing a gated Product Development process at Lexmark. Page 22

Cover Story

Succeeding at New Product Development the P&G way: A key element is using the “Innovation Diamond”

by Robert G. Cooper, President, Product Development Institute, Professor, McMaster University (robertcooper@cogeco.ca) and Michael S. Mills, Manager, Corporate New Initiative Delivery, The Procter & Gamble Company (mills.ms.1@pg.com)

New products are engines to growth and profitability for many companies, including Procter & Gamble (P&G). In this article, the authors explore the drivers of new product performance with a particular focus on P&G’s best practices. The “Innovation Diamond” is used as an integrative and guiding framework to help management focus on what’s important to success: innovation strategy, a solid idea-to-launch process, portfolio management, and the right climate and leadership.

Why are some companies so successful at New Product Development? And how do some businesses make it seem so easy—one new product winner after another? Consider Procter & Gamble (P&G): Total sales at P&G increased by \$8 billion in 2004, with new product winners playing an important role. Information Resources Inc. cites P&G as the clear winner in its annual *New Product Pacesetters* report: In the non-food category, five P&G new products were among the top best-sellers, with Prilosec OTC and Crest Whitestrips Premium in the Number One and Number Two positions.¹

Exceptional performance in Product Development in companies such as P&G is no accident. And the roots of success go much further and deeper than having a few spectacular winners in a single year. Rather, it’s the result of a disciplined, systematic approach based on best practices.

Dramatic example

P&G’s cosmetics business is a case in point where a dramatic turnaround was achieved via a disciplined, holistic approach to new product management. The story begins when P&G acquired the *Cover Girl* and *Clarion* cosmetics brands in 1989. Two years later *Max Factor* was acquired. P&G then applied its tried-and-true approach of leveraging scale and an innovation strategy with a few, big new products. But there was no real business strategy, and efforts were scattered and unfocused. And so, by 1994, management was forced to retreat and retrench. They dropped the Clarion line; and through much of the 90s, senior management at P&G wondered if they should be in the cosmetics business at all! A new line, under the Oil of Olay banner, was attempted but failed, and the entire cosmetics business continued to decline.

The turnaround of P&G’s Cosmetics business started in the late 90s when business unit management turned to P&G’s *Initiatives*

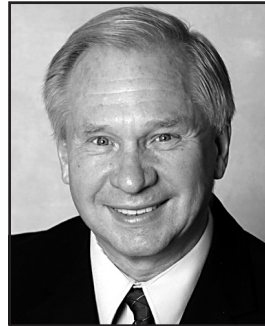
Diamond philosophy. Today, P&G’s Cosmetics business is a healthy, growing, and profitable enterprise. Performance results have significantly improved since the late 90s, and the business is seen as a key growth contributor for P&G.

How was this stunning reversal achieved? The turnaround did not happen by chance; and one key to success was *getting new products right*.

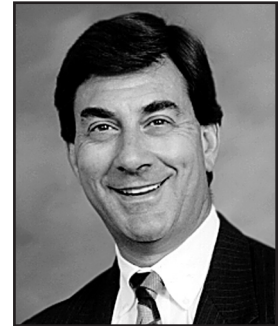
Authors’ note: We use the term “new products” to mean any change to the product visible to the consumer or customer; these include true new-to-world products as well as new items in an existing product line, significant modifications and improvements, and extensions.

The major factors that drive a business’s new project performance, illustrated in the Innovation Diamond in Exhibit 1² on this page, are:

- Having a product innovation and technology strategy in place for the business;
- Having an effective and efficient idea-to-launch process;
- Resource commitment, which focuses on the right projects—portfolio management; and
- People; that is, having the right climate and culture, effective cross-functional teams, and senior management commitment to New Product Development.



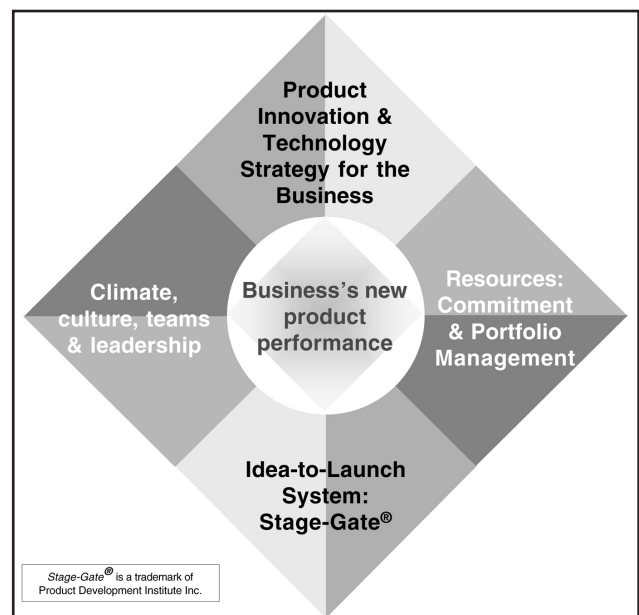
Robert G. Cooper
Product Development Institute



Michael S. Mills
The Procter & Gamble Company

Some background: The Innovation Diamond and these four driving factors or themes in Exhibit 1 were derived from a major study into new product performance and the practices that led to exceptional performance.³ The diamond actually began years earlier as a triangle—process, resources, and strategy—the result of a 1990s Cooper-Kleinschmidt study of innovation across a broad range of businesses.⁴ P&G’s management in the 1990s subsequently transformed the triangle into the *Initiatives Diamond*, shown in Exhibit 2.⁵ P&G’s major

Exhibit 1: The Innovation Diamond includes the four major drivers of NPD results



SOURCE: R.G. Cooper, *Product Leadership: Pathways to Profitable Innovation*, 2nd edition. Reading, MA: Perseus Books, 2005.

“aha” was that there is *no one key to success* in product innovation, and thus management stepped back from a focus on individual initiatives and looked at the broader picture. For example, having a great idea-to-launch process is not sufficient; it's not a stand alone driver of positive performance.

P&G's Initiatives Diamond serves as a guide for each business's product innovation effort, and helps to focus management's attention on what is important to success. According to Bob McDonald, P&G's Vice Chairman of Global Operations, “The Initiative Diamond played a significant role in improving the business results in P&G's Household Care global business unit. This work brought us a new discipline to manage our innovation programs and yielded a major increase in the in-market success of our initiatives. We aligned our organization on how to use Stage-Gate® success criteria, and portfolio and resource management to deliver better innovations for the consumers we serve.”⁶

Connecting selection to strategy

The top half of P&G's diamond in Exhibit 2 is strategic in nature, and captures the business's product innovation strategy: goals, the mix of new products required to meet those goals, and the required resources. Portfolio management (or project selection) is thus closely connected to strategy. The bottom half of the diamond is more operational and focuses on delivering specific new product projects or initiatives: what resources must be put in place for each project; and how

individual new product projects are managed so they succeed, using P&G's idea-to-launch SIMPL™ methodology.

Coincidentally, the two diamonds—P&G's Initiatives Diamond in Exhibit 2 on this page and the research-based Innovation Diamond in Exhibit 1—are almost the same. Each one or both can be used to guide your business's new product efforts. Here is a quick look at the four drivers of performance and how they work at P&G.

“The turnaround of P&G's Cosmetics business started in the late 90s when business unit management turned to P&G's Initiatives Diamond philosophy.”

Driver #1—A product innovation and technology strategy for the business

Best performing businesses put a product innovation and technology strategy in place, driven by the business leadership team and a strategic vision of the business. This product innovation strategy guides the business's New Product Development direction and helps to steer resource allocation and project selection. In the mid-1990s, P&G's Cosmetics business lacked a business and product innovation strategy, the result being that Product Development efforts were scattered; many different initiatives were launched in many different product categories and segments in a futile attempt to win. There was no focus.

The first element of the diamond is a *product innovation strategy*. Indeed, the real breakthrough occurred in the Cosmetics business turnaround when the business leadership team began a rigorous business planning process leading to clearly defined objectives, goals, strategies, and measures. A much more *concentrated innovation strategy* was elected, focusing on lips, face and eyes, rather than the entire body. The battlefields had been decided!

A second facet of strategy meant getting the supply chain under control: *end-to-end supply network management*. Management streamlined the supply network so that production and shipments were tied to market demand. As a result, they were able to reduce the time in the supply network, thereby eliminating much of the product obsolescence generated with each

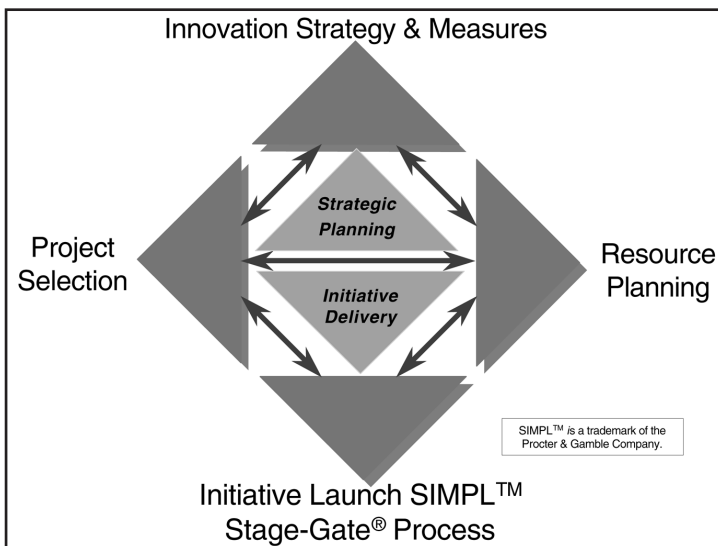
new product launch. By focusing first on an innovation strategy for the business, the stage was set for effective Product Development.

The message is that if your business lacks a product innovation and technology strategy, you are missing a key element of successful product innovation. This strategy should include the goals for the business's product innovation effort and how these goals tie into the broader business goals. This strategy is more than just a list of this year's development projects. It has a much longer-term commitment. The innovation strategy also includes defining strategic arenas or areas of focus, much like the Cosmetics business did. That is, you need to define the product, market, and technology areas in which the business will focus its Product Development efforts. The key here is focus.

Driver #2—An effective and efficient idea-to-launch system

Studies show that an effective new product process, such as Stage-Gate®, exists in top performing businesses, a system that drives new product projects from the idea phase through to launch and beyond.² In P&G's Cosmetics business, developing an innovation strategy was a solid first step, but the means of implementing strategy must be in place too. So management turned to a second element of the diamond, namely P&G's SIMPL™—the Successful Initiative Management and Product Launch model. SIMPL™ is a stage-and-gate new product process, a methodology for driving new product projects from the idea phase through to launch and into post-launch. (See Exhibit 3 on page 12.)

Exhibit 2: P&G's Initiatives Management Diamond guides each business's New Product efforts



SOURCE: M. Mills, “Implementing a Stage-Gate™ process at Procter & Gamble,” Association for Manufacturing Excellence International Conference, “Competing on the Global Stage,” Cincinnati, Ohio, October 2004.

The SIMPL™ model forced project teams to do their homework early in the project. For example, much consumer research work was undertaken, and consumer insights gained led to winning new product concepts. One big success is Outlast™ by Cover-Girl. This ten-hour lipstick—a kiss-proof, long-lasting lipstick—uses a unique two-part application system (first a color and then a gloss) to produce an enduring lip color and gloss. A second winner—Lipfinity™ by Max Factor—was also introduced, again using the SIMPL™ model. Both new products have been huge successes not only in the U.S., but around the world. The turnaround of the cosmetics business was underway!

Most companies *claim* to have a new product process or stage-and-gate system in place, according to a recent PDMA study.⁷ Further investigation reveals, however, that most firms' processes are deficient. They are poorly designed, they miss the mark when it comes to best practices, and they are badly implemented.^{2,3}

P&G is an exception. Their idea-to-launch process, SIMPL™, is a rigorous process that uses stage-and-gate decision-making complete with clear go/kill criteria and timing requirements. The SIMPL™ model, shown in Exhibit 3 on page 12, consists of four main stages, with each stage building in a set of *current best practices* in the form of key activities, and also clearly defined *expectations* for project team in the form of *end-points*. There are also four gates or go/kill decision-points in the model; each gate is comprised of a *team recommendation* and a *management decision*.

The SIMPL™ Model

P&G's approach is different from that of most firms', however. Instead of focusing on the process per se (like so many companies do), management stepped back and identified the *basic principles* that the model is founded on. These principles are constants across many and varied businesses and geographies. But the *constancy of these principles* has helped the company adapt the model to many different types of businesses and different types of projects leading to a standardized and globally applied Stage-Gate® process. The principles which underlie the SIMPL™ model are shown in the box on this page and explained here in more detail:

Winning in the marketplace is the goal. In many firms, too much emphasis is on getting through the process; that is, getting one's project approved or preparing deliverables for the next gate. In the past, P&G was no different. By contrast, this principle emphasizes *winning in the marketplace* as the

goal, not merely going through the process. Specific success criteria for each project are defined and agreed to by the project team and management at the gates; these success criteria are then used to evaluate the project at the post-launch review. And the project team is held accountable for achieving re-

The Main Principles Behind P&G's SIMPL™ Process

- Remember that winning in the marketplace is the goal.
- Use criteria for making Go/Kill decisions.
- Balance risk and rigor.
- Use a common language.
- Keep in mind that SIMPL™ is not stand alone.
- Practice effective implementation.

sults when measured against these success criteria. (By contrast, the great majority of businesses still do not conduct post-launch reviews on projects; and even fewer hold their project teams accountable for achieving agreed-to project results).³

Use criteria for making Go/Kill decisions. Not shown in Exhibit 3 on page 12 are the go/kill criteria applied at each gate. Specific success criteria for each gate relevant to that stage are defined for each project. Examples include: expected profitability, launch date, expected sales, and even interim metrics, such as test results expected in a subsequent stage. These criteria, and targets to be achieved in them, are agreed to by the project team and management at each gate. These success criteria are then used to evaluate the project at successive gates.

Risk and rigor must be balanced. Project teams employ appropriate rigor in learning, planning, and decision-making in order to mitigate risk. They build in a strong consumer focus and rely heavily on voice-

of-customer research; they front end-load their projects, undertaking appropriate, often extensive up-front homework prior to development; and they focus on developing differentiated, superior products that meet customer needs better than competitors. Note that SIMPL™ is also scalable and is tailored for specific projects based on level of risk and size of investment. Not every project requires the same degree of rigor, front-end work, and market research.

Use a common language. Throughout the 1990s, each P&G business unit had developed its own version of a stage-and-gate new product process. Integration, cooperation, and measurement across businesses thus proved difficult with each business using a different system and different terminology.

A global process

The current SIMPL™ process is a corporate global process—the same stages, gates, principles and measures—and is universal across geographies and business units. Each business, however, is free to adjust and adapt the process to suit its own business requirements.

SIMPL™ is not stand alone. The idea-to-launch process is only one ingredient of

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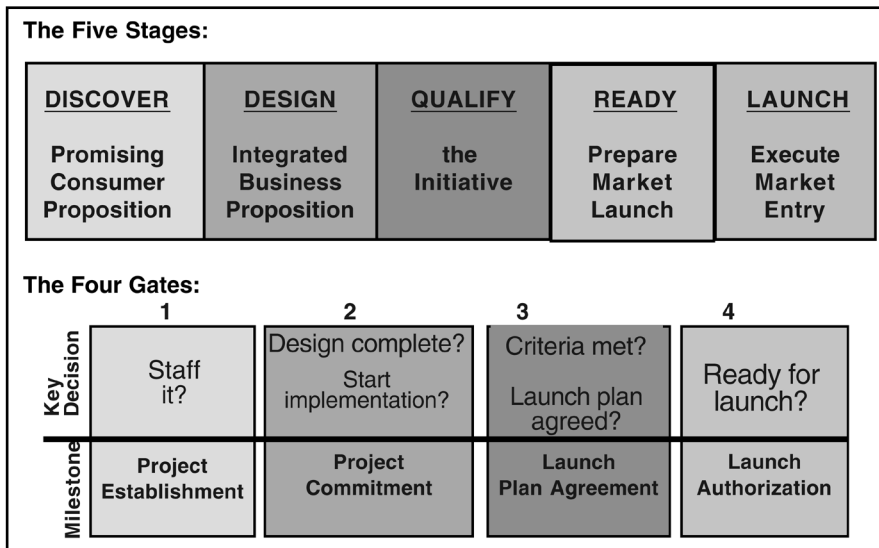
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Exhibit 3: P&G's SIMPL™ Process—An Idea-to-Launch Stage-Gate® Model



SOURCE: M. Mills, "Implementing a Stage-Gate™ process at Procter & Gamble," Association for Manufacturing Excellence International Conference, "Competing on the Global Stage," Cincinnati, Ohio, October 2004.

successful innovation, a single element of a much larger whole, the Diamond. Individual projects cannot be managed independently of other projects, their priorities, resource constraints, and changing business conditions. Thus the Diamond represents the relationship between these elements: innovation strategy, resource planning, project selection, and the SIMPL™ new product process.

Effective implementation is another area where most companies falter. Not so at P&G. Because they see the value of SIMPL™, everyone uses it—every business unit, every manager, and every initiative team. When A.G. Lafley, Chairman of the Board, President and Chief Executive, headed P&G Beauty, he sponsored the early work on stage-gating. He was a believer; he saw it build the business when he was in Japan. Lafley expects rigor and uses the SIMPL™ terminology. The other company leaders also value the process, so SIMPL™ has become part of the business culture at all levels. Having a strong sponsor at the highest level was one key to successful implementation. Perhaps it is no coincidence that the earliest proponent of the stage-and-gate process is now P&G's chief executive.

Driver #3—Resource commitment, focusing on the right projects and portfolio management

In P&G's Cosmetics business, portfolio management, a third element of the Initiatives Diamond, was next employed to enable management to look at its entire portfolio of

new product initiatives, and secure the right balance and mix. Through portfolio management, the business built a pipeline of new and improved products that established the needed initiative rhythm for each product line (face, lips, eyes). New products and upgrades in each product line created news and excitement in the market. This "launch and sustain" portfolio approach was a key part of winning in the marketplace.

Best performers like P&G have an efficient portfolio management system that helps the

“ If your business lacks a product innovation and technology strategy, you are missing a key element of successful product innovation. ”

business leadership team effectively allocate resources to the right areas and projects.² P&G splits this resource commitment facet of the diamond into two parts: project selection and resource planning. The company relies primarily on success criteria as part of the SIMPL™ process to help make better go/kill decisions on projects, as noted above. In addition, a number of P&G businesses have developed screening tools using *scorecard methods* for early decisions and for the selection of ideas to enter the SIMPL™ process.

When it comes to resource planning for projects in the portfolio, P&G's methods vary depending on the nature of the business. Many P&G businesses utilize a *resource*

profiling approach to resource planning. The resource profiling method helps to assess future project resource needs based on learning from past projects, and it anticipates peak resource periods of time. This approach enables businesses, such as Fabric Care, to improve the overall portfolio decision process by allocating scarce resources to the highest priority projects globally. The most technically complex, resource-intensive businesses use purchased resource management software. These software tools look at people available versus requirements for specific tasks on individual projects to focus on near-term resource constraints.

P&G's deliberate approach to portfolio management and resource planning (the resource facet of the diamond) has had a strong positive impact, according to Martin Riant, President of P&G Global Baby and Adult Care and formerly President of P&G's Global Feminine Care and Antiperspirants/Deodorants business. "Using the diamond has had a remarkable effect on our business results. It has forced a much higher level of discipline in how we allocate our resources, how and when we make investment decisions and in accountability of projects to deliver what they promise," he says.

Driver #4—A positive climate and environment for innovation

People, culture, and leadership make up the fourth driver of performance of the diamond (Exhibit 1). First, senior management must lead the innovation effort and be strongly committed to New Product Development.^{2,3} This senior commitment is most evident at P&G where Chairman, President, and Chief Executive A.G.. Lafley, makes it clear, "Innovation is a prerequisite for sustained growth. No other path to profitable growth can be sustained over time. Without continual innovation, markets stagnate, products become commodities, and margins shrink," he explains.

A positive climate and culture for innovation and entrepreneurship, combined with effective cross-functional teams backed by strong management support and empowerment are fundamental to success.³ P&G has focused much effort here in recent years, which has helped it generate a step level improvement in results. The entire innovation effort, together with the Initiatives Diamond and SIMPL™ process, is sponsored and owned by both the commercial (sales and marketing) and technical (R&D and engineering) communities. An important step was the creation of Initiative

Success Managers who report to each of the company's business unit presidents. These *Initiative Success Managers* make the diamond and SIMPL™ work. Their jobs include facilitating strategy development sessions, managing gate meetings, leading resource planning sessions, ensuring appropriate capability, and training. And horizontal networks—communities of excellence—have been established across business units, so that experts can share leanings.

Next, strong metrics are in place. P&G tracks business results from new products annually or semi-annually. Senior management reviews these results and places heavy emphasis on them. They are key performance indicators in the business unit.

Effective cross-functional teams are vital to driving new products to market. P&G has developed a common model to structure teams, with a focus on developing cross-functional team leaders, who can be from any functional area (marketing, R&D, engineering, etc). These leaders are evaluated and rewarded based on how they deliver in the market against their project success criteria.

Winning at product innovation

There is no magic to winning at product innovation. Indeed, studies have identified the success drivers that lead to superlative performance; and these have been integrated into a simple, visible framework: the Innovation Diamond.³ The diamond works, so *work the diamond!* It impacts many facets of New Product Development. For example, P&G's Baby Care business "... has leveraged the business management diamond to look at our portfolio much more holistically.... the diamond has served to align our leadership team and to enable organizational capabilities to deliver our plan," says Jane Wildman, Vice President of P&G's Baby Care business.

The real challenge is making the Innovation Diamond and its drivers work in your business. And here is where P&G excels. Product innovation is embedded in the very fabric and nature of the company, so much so that it is central to P&G's fundamental statement of purpose: "We will provide products and services of superior quality and value that improve the lives of the world's consumers. As a result, consumers will reward us with leadership sales, profit, and value creation, allowing our people, our shareholders, and the

communities in which we live and work to prosper." A simple statement perhaps, but one with profound implications to action. To achieve its purpose, P&G relies on the four themes—innovation strategy, a solid idea-to-launch process, portfolio management, and climate and leadership—that constitute the Innovation Diamond. They can provide a sound framework for guiding your business's product innovation efforts, as they have at P&G. ♦

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Best performers like P&G have an efficient portfolio management system that helps the business leadership team effectively allocate resources to the right areas and projects.
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Robert G. Cooper is the President of the Product Development Institute, a Professor, McMaster University, and the creator of Stage-Gate®. Michael S. Mills, as Manager of Corporate New Initiative Delivery at The Procter & Gamble Company, is in charge of implementing P&G's SIMPL stage-and-gate new product process, as well as other NPD best practices.

es Top Performers, Product Development Institute, 2003 (www.prod-dev.com).

⁴ R.G. Cooper & E.J. Kleinschmidt, "Benchmarking firms' new product performance and practices," *Engineering Management Review*, 23,3, Fall 1995, 112-120.

⁵ As outlined in: M. Mills, "Implementing a Stage-Gate™ process at Procter & Gamble," Association for Manufacturing Excellence International Conference, "Competing on the Global Stage," Cincinnati, Ohio, October 2004.

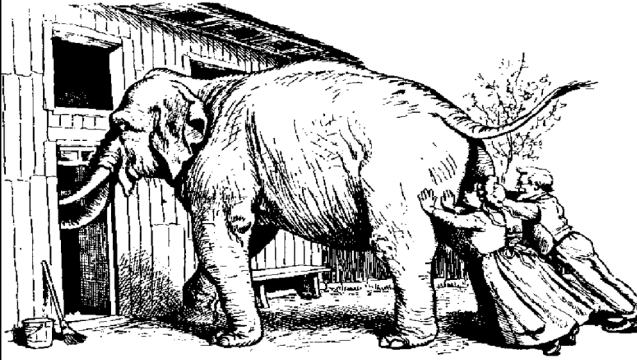
⁶ Stage-Gate® is a registered trademark of the Product Development Institute Inc., and is described in: R.G. Cooper, *Winning at New Products: Accelerating the Process from Idea to Launch*, 3rd edition. Reading, Mass: Perseus Books, 2001.

⁷ PDMA studies: The most recent PDMA study shows 79% of firms have a formal new product process. M. Adams & D. Boike, "PDMA foundation CPAS study reveals new trends," *Visions*, XXVIII, No. 3, July 2004, 26-29; and: *The PDMA Foundation's 2004 Comparative Performance Assessment Study (CPAS)*.

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- ³ The APQC benchmarking studies identified many best practices that lead to higher productivity NPD. See: R.G. Cooper, S.J. Edgett & E.J. Kleinschmidt, *Best Practices in Product Innovation: What Distinguish-*


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