

Post-Launch Reviews: Evaluating Your NPD Projects

NEW PRODUCT INNOVATION
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HOW WELL ARE YOU DOING IN NEW PRODUCT DEVELOPMENT?

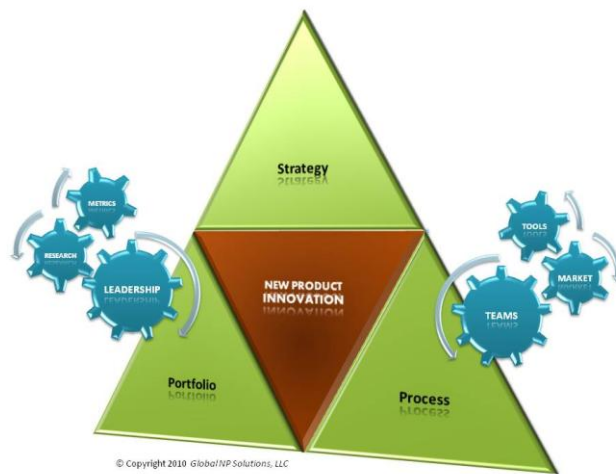
One of the most overlooked, but most valuable of reviews in New Product Development (NPD) is the Post-Launch Review. This audit of the NPD process and of the project itself will measure whether effective gate decisions have been taken and whether the new product is delivering sales and revenue as expected. Ultimately, implementing thorough Post-Launch Reviews (PLR) will help assess if your Innovation

Strategy is on target, or needs some adjustment to help you meet your business goals and objectives.

PLRs measure the NPD Process and NPD projects against the three key foundational principles of New Product Innovation.

- [Senior Leadership Team provides clear strategic direction](#) for the NPD team by defining the market, the technology, and the desired product.

- [Timely Portfolio Management reviews focus resources on the right projects](#) by evaluating match with business strategy, financial and economic models, and/or other scoring methods.
- [Efficient, stream-lined NPD Processes enable and empower the NPD team](#) by allowing effective and efficient research methods within those advantaged market and technology platforms.



Of course, built into these key focus areas are the [NPDP best practices](#) for **high-performing teams** using **tools and metrics** appropriate to gaining technological and **competitive advantages**.

At some point, the NPD project team must disband in order to focus on the next project bearing down the pipeline. The “new” product becomes a mainstream product, managed just as *another* product in the portfolio. But, this is also the optimum point in time at which the project and the product’s performance can be reviewed and assessed, especially before any institutional knowledge is lost during transition. A **critical discussion** of what went right, what went wrong, and what can be

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improved is conducted to provide [NPD Process](#) learnings. Latest data on revenues, costs, expenditures, profits, and timing are compared to expectations and plans, thus gauging acceptance in the marketplace. Post-Launch Reviews are therefore a *crucial* piece to the NPD puzzle ⁽¹⁾. In this paper, we answer the questions **Why, What, When, and How** to conduct the Post-Launch Reviews for a New Product Development project.

QUALITY OF EXECUTION

WHY?

In a benchmark study of over 100 businesses, *PLR was shown to have the greatest impact on NPD performance*, yet was one of the weakest overall areas. Less than a quarter of firms, just 22%, conduct a formal post-mortem project review ⁽²⁾. Yet, most businesses have already fully implemented a formal phased NPD review process – what’s happening to the last step in the process?

Note that *only 16.5% of companies* actually assess the value of the project to the business, while nearly a third (28%) **admit** to doing a poor job of determining project value, leading to the conclusion that business and marketing activities are performed far more poorly than the technical development. Finally, *just 30% of businesses* involved in the benchmark study

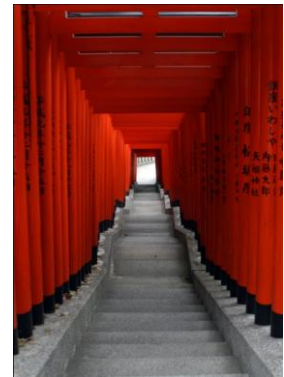
indicated they used **basic performance metrics** to evaluate NPD projects upon completion: Project Success, Sales Revenue, Profitability, NPV, ROI, and etc. In fact, only 20% of businesses are **proficient** in looking at the simplest of metrics – *customer price sensitivity* – for the new product launch ⁽²⁾.

Aside from measuring success of the individual NPD projects, *only 30% of companies* surveyed conducted any

process evaluation to

determine if effective gate decisions had been made in order to bring the new product

to commercialization. Air Products, an example of **one of the best performers for new product development**, uses quarterly reviews of NPD Process metrics in order to get a broad view of the system ⁽²⁾.



So, even though **PLR is a clearly demonstrated best practice**, *80% of businesses lack the discipline* to follow through with these crucial reviews. Most companies are **learning very little** from their experience in development projects ⁽³⁾.

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NOW THAT YOU UNDERSTAND WHY YOU NEED TO HAVE PLR, WHAT EXACTLY IS A POST-LAUNCH REVIEW?

WHAT?

The PLR instills **accountability for results** and fosters a culture of **continuous improvement**. Post-Launch Reviews are an especially

The ability to sustain significant improvements in development over long periods of time rests on the capability to learn from experience⁽⁹⁾.

Wheelwright & Clark

important aspect of **Open Innovation** for companies that sell or license-out technology. For these firms, the PLR allows the business to fully articulate the value proposition both internally and externally to potential customers and/or partners. Finally, PLRs provide key data when the firm revamps or updates an aging NPD Process, recommended every two to five years⁽¹⁾.

Wheelwright and Clark, authors of the classic NPD text *Revolutionizing Product Development*, define the PLR audit as a *procedure to systematically develop data on the project's characteristics and performance, as well as analyzing underlying causes of that performance*⁽³⁾. Regardless of whether your

firm uses a full-blown five-stage/five-gate New Product Development process, or a next generation, Stage-Gate Lite™ or Stage-Gate XPress™ process for smaller or less risky projects with fewer stages and fewer gates, each process clearly delineates the critical Post-Launch Review step⁽⁴⁾.

For example, Sainsbury (a UK retailer and supermarket chain) has implemented a five gate model for new product development. Stage 5, **Analyze Product and Project Performance**, is conducted roughly 12 weeks after a new food product has been in stores⁽⁵⁾. The reviews include development of the product, project management, and suppliers. Analysis on the NPD Process side includes: recording the learnings in a written report, assessing milestones, measuring whether targets were met, and assessing that the project delivered superior performance. On the product side of the equation, the analysis

NPD Process Metrics

- Project Cost vs. Benchmark
- Schedule (Product Launched on Time?)
- Proper Team Selection
- Tough Gate Decisions Made
- Timely Gate Decisions
- Market Research Conducted prior to Costly Development Efforts?
- Time to Market of New Product

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NPD Project Metrics

- Profit vs. Forecast
- Actual Sales vs. Estimates
- NPV Earned vs. Predicted
- Time-to-Volume
- Return on Investment (ROI)
- Service issues with New Product?
- Sales Volume vs. Historical Trends for Similar Products
- Profitability
- Market Acceptance

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includes: financial and quality data, manufacturing performance, quality measures (such as on-shelf checks), and determining whether targets were met.

While individuals may naturally “learn from doing”, the



organization needs to transfer learnings as a team process.

Cross-functional

team members (e.g. management, engineering, design, marketing, operations) bring different perspectives and different capabilities to look at the successes, and problems, and will add diversity to the cause and effect relationships. These learnings may be guided by structure, such as how communications were made during the NPD project, or they may be guided by principles, such as how did the organization make decisions ⁽³⁾. The latter point is especially relevant, when we consider that **poor and weak gate decisions** are responsible for a great number of failed new product launches ⁽¹⁾.

TIMING FOR THE POST-LAUNCH REVIEW VARIES WITH INDUSTRY

WHEN?

Generally, there is a small window of opportunity to evaluate the NPD project before resources are assigned to, and fully

engaged with, another project. However, this time interval is also generally too short to be able to effectively evaluate the product’s performance in the marketplace. *We recommend at least two, and sometimes three, different PLRs* so that relevant information is captured quickly and effectively while the learnings from the project are still at the forefront of the NPD team’s collective memories.

Remind the review team that the Post-Launch Review is conducted to capture *all learnings*, not just the things that have gone wrong with a project. For example, learnings from a rapid development – a project that took only 2 years to bring to market vs. a normal elapsed time of 4 years – should certainly be widely disseminated across the organization ⁽³⁾. Similarly, learnings from NPD projects that delivered high reliability or high customer satisfaction should be shared with all other NPD teams to duplicate the success.



PLR 1

As the team is preparing to disband and move to other projects or assignments, it is important to capture their ideas and opinions of what went right, what went wrong, and what could have been improved during the execution of the New Product Development

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efforts. Therefore, we **recommend that the PLR-1 review is completed within one month of the conclusion of the NPD project.**

Some companies or business units may involve the NPD team during early market launch activities to ensure expert technical service and to identify next generation product opportunities. Regardless of the rollover of



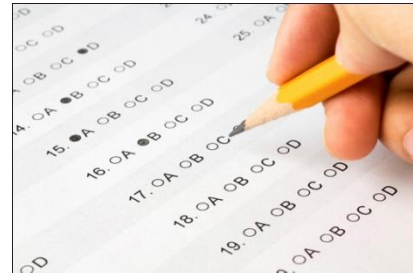
the NPD Team into early market launch activities, the PLR-1 is best conducted within a month of the new product commercialization.

PLR-1 is designed to collect learnings at the project execution level – once the product is fully commercialized, the NPD team discussion of what went right and what went wrong may become influenced by the degree of success of the new product in the marketplace. There is nothing like a raving commercial success to provide jubilant memories!

This is also a time to investigate missed or delayed milestones, actual vs. planned budget, and time-to-market for the specific NPD project, and as it compares to other similarly completed projects. Information on resource utilization is not only valuable to understand what decisions could have been made differently throughout the course of the NPD project development effort, but also to provide

valuable feedback to the NPD system for future project evaluations.

One example of completing the feedback loop is found in how financial metrics are determined for the NPD project. Often, the Internal Rate of Return (IRR) of each new project can be estimated at the Idea Generation Stage to determine if the project is worthy to be included in the Portfolio. Of course, these financial calculations involve resource expenditure throughout the life of the project, as well as sales estimates, etc. Labor expenses are usually fixed at specified number of hours and pre-determined rates for the IRR and Net Present Value (NPV) calculations, yielding a standardized labor resource cost.



As it turns out, for very early stage projects, this methodology is very good – allowing the Portfolio Management team to look at projects on an “apples-to-apples” basis. However, once the project is underway, actual resource expenditures are likely to vary from the standard benchmark estimates, and thus, change the profitability outlook for the new product as development efforts progress. Using the **actual data extracted during the**

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PLR-1 reviews from each completed project will provide a better average as well as expected ranges to standardize the resource utilization rates. The end result is a better cost and profitability estimate for *all future NPD projects*.

PLR-2

A second post-launch review can be conducted 3-6 months after the product launch. This review should already be included in the marketing plan for the new product and does not necessarily need to involve members of the original development team. However, *a key member of the Post-Launch Review team is the Marketing representative* who participated throughout the development effort.

Focusing the PLR-2 on the initial market launch allows timely and **rapid adjustments** in both the marketing and advertising plans, transfer of learnings to NPD teams working on derivatives, extensions, and enhancements of the new product, and implementation of any required manufacturing or supply chain improvements. In particular, this Post-Launch review should capture the following items ⁽⁵⁾.

1. *Where the product is performing well.*
2. *Clear signals for problem areas needing improvement.*

Depending on the industry and expected life cycle of the product, some firms may not conduct a full-blown PLR-2 review. For products with a market-life of 12-18 months, the activities of the PLR-2 may be replaced with those of PLR-3 (see below) but still completed within a **3-6 month time frame after commercialization**. In other industries, the sales cycle is significantly longer and there may not be sufficient data regarding marketplace acceptance after just 3-6 months of commercial sales to conduct a meaningful PLR-2 review. For the latter case, the organization should look at **historical records**



to determine a point in the product life cycle when an appropriate number of sales have occurred (10-15%) so that the PLR-2 can be completed to allow time for marketplace or manufacturing adjustments, as needed.

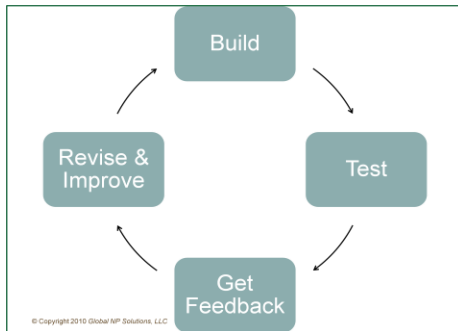
Another consideration for PLR-2 timing is that the measurement time should be at least three times as long as the time constant for the activity that is being measured ⁽⁵⁾. That is, *the measurement needs to be consistent with the time horizon of the event* being measured. So, in some cases, as discussed previously, the PLR-2 may not be appropriate, but in all cases, a full product performance review shall be completed during the PLR-3 as we discuss next.

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PLR-3

Regardless of whether the firm conducts an initial market impressions post-launch review as a PLR-2, the organization **must** complete the PLR-3 review, which involves a full product performance evaluation. Typically, PLR-3 is completed about one year after market launch. At this time, there is **a full set of financial metrics available for analysis** and the team can thoroughly evaluate the market acceptance and product performance.

For example, during project post-launch reviews, Emerson Electric *compares actual project results with promised results*, and identifies gaps between the reality of the marketplace and the targets predicted during



development (5). In this way, the company can analyze the cause of any gaps identified between actual vs. projected targets and take corrective actions. Note that Emerson specifically incorporated an effective Post-Launch Review process as part of their NPD Process revamp to bring their system into the "21st Century" (5).

SUGGESTED PLR METRICS

HOW?

In a unique study of 69 firms and 5 industries over a nine-year period (1997-2006), Sood and Tellis found that the U.S. stock market actually **rewards** firms, and **does not penalize** companies, for investment in innovation. These authors, thus conclude that the total returns on innovation are only relevant when *"all events of the innovation project are included in the analysis"*(7). As is the case for most business analyses, the PLR metrics should be:

- **Reliable,**
- **Valid, and**
- **Predictive.**

Of course, the organization will analyze different metrics at each different Post-Launch Review, and for different types of New Product Development efforts (e.g. New-to-the-World vs. Derivatives/Enhancements).

NPD PROCESS METRICS (PLR-1)

At Procter and Gamble, success criteria for each NPD project are defined and agreed to by the NPD team and management – then, *the PLR uses these same criteria*(7). Inherently, the

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feedback loop **and** project team accountability are accomplished in one step for more efficient future project development and continuous improvement for NPD.

NPD Process metrics may vary from firm to firm and across industries; however, you want to use the same feedback loop on your NPD process as you do in the actual development of the project.

Especially during PLR-1, **each step of the NPD effort is scrutinized:** Were the tough gate decisions administered well? Did the project deliver data on time, on budget, and on strategy (e.g. milestone hit rate)? Was the up-front market homework completed before extensive development efforts ensued? Who was on the NPD team and were all functions well represented? Was the NPD effort executed in a quality fashion (e.g. timeliness, planning quality, thoroughness of concept design)? What was the total project cost? Were key customers involved in focus studies during prototype development? How did this project development effort compare to the firm's standard benchmarks?

Again, answering these questions requires the *full participation of the NPD Team to provide*

learnings of what went right, what went wrong, and what can be improved next time. Some organizations find that the NPD Process Manager or Facilitator is uniquely skilled to lead the PLR-1 review session. As a general rule of thumb, the leader of the PLR-1 session should not be too closely tied to the success or failure of the particular project in order to glean the most open, honest, and impactful learnings for future NPD endeavors.

PRODUCT PERFORMANCE METRICS (PLR-2 AND PLR-3)

Literature sources reveal literally hundreds of potential product performance metrics. Some of the most common measures for new product performance are listed here.

- Time-to-Volume
- Earned Value
- Sales Volume vs. Target
- Revenue vs. Forecast
- Market Share
- Gross Margin
- Return on Investment (ROI)
- Sales Velocity
- Trade Acceptance
- Initial Product Quality

Of course, there are many other financial and market metrics that may be appropriate to your business. Selecting the success metrics during the NPD effort, perhaps during

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initiation of the Product Innovation Charter (PIC), will ensure ease of analysis to compare targets with actual, as well as holding the teams accountable for efficient NPD results.

Normally, the team conducting the PLR-2 and PLR-3 reviews will be more heavily influenced by the Marketing Department and Business Analysis functions than the PLR-1 review. Because of his or her familiarity with the profitability expectations for the new product or service, as well as participation throughout the development effort, the NPD team's marketing representative can provide key insights to adjustments or variations that may need to be made in either the marketing or manufacturing efforts for the new product and/or its derivatives yet under development.

Again, the PLR-2 is conducted a short time after product launch in order to quickly assess if there are any problems with commercialization. PLR-3 is typically conducted approximately 12-18 months after the product launch with the **full purpose of evaluating the financial performance** of the product.

CONCLUSION

Learning from NPD PLRs requires *focus, effort, attention to detail, and the ability to make tough choices*. Learnings cut across work groups, individuals, and functions, delivering

improved procedures, processes, and leadership skills for the cross-functional NPD team. New tools and methods can emerge from diligent PLRs, leading to **faster, more efficient, and higher quality NPD projects in the future**.

QUICK REFERENCE GLOSSARY

Check out our [website](#) for a quick and easy list of terms used in New Product Development. Some terms used in this article are shown here.

New Product Development (NPD) – The overall process of Strategy, Organization, Concept Generation, Product and Marketing Plan creating and evaluation, and Commercialization of a New Product.

New Product Development Process (NPD Process) – A disciplined and defined set of tasks and steps that describe the normal means by which a company repetitively converts embryonic ideas into salable products or services.

Product Innovation Charter – A critical strategic document, the Product Innovation Charter (PIC) is the heart of any organized effort to commercialize a new product.

Project Team (or NPD Team) – A multifunctional group of individuals chartered to plan and execute a New Product Development project.

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ABOUT THE AUTHOR



Teresa is President of Global NP Solutions, LLC, a strategic innovation provider. She is an accomplished visionary and results-oriented professional with extensive industry experience from creative research to effective portfolio management through stream-lined new product development processes.

Prior to founding Global NP Solutions, Dr. Jurgens-Kowal acquired over 12 years of experience in leadership and management positions with ExxonMobil Chemical Company and a total of 16 years as a practicing Chemical Engineer. Her corporate career encompassed various functions, including New Product Development, Portfolio Management, Licensing, Marketing, Logistics and Supply Chain, Manufacturing, Project Management and Research Technology.

Teresa has extensive experience leading successful teams, managing the product development life cycle, and defining the portfolio strategy. Her deep expertise in intellectual property management, product and process licensing, portfolio planning, customer service and various business processes make her an ideal teacher and trusted advisor who knows both the theory and practices of New Product Development.

Dr. Jurgens-Kowal earned a B.S. degree in Chemical Engineering from the University of Idaho in Moscow, Idaho and a Ph.D. in Chemical Engineering from the University of Washington in Seattle, Washington. She is a licensed Professional Engineer in the State of Louisiana since 1998. Teresa is a certified New Product Development Professional (NPDP) by the Product Development Management Association (PDMA) and Global NP Solutions, LLC, is a Registered Education Provider (REP) with PDMA.

Teresa holds chemical process and catalyst patents, and is published in the Journal of the American Chemical Society and Journal of Physical Chemistry.

Currently, Dr. Jurgens-Kowal is working on founding a Gulf Coast Chapter of the PDMA organization. She has an office in Houston, Texas.