

Four Easy Steps to NPD Profit

NEW PRODUCT INNOVATION
No. 3 IN A SERIES OF PAPERS

Global NP Solutions, LLC

Reference Paper

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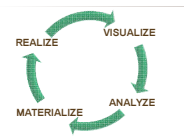
Four Easy Steps to NPD Profit

NEW PRODUCT DEVELOPMENT IS EASY!

A recent Google search on the term “New Product Development” returned nearly 200 Million hits! Results included mysterious terms, like *symbiosis models*, *discontinuous innovation*, and *calculated risk*. Does New Product Development (NPD) truly require a special dictionary and complicated series of activities in order to have a successful market launch delivering profit?

At Global NP Solutions, we don't think so. In this paper, we present [Four Easy Steps to NPD Profit](#). These four easy steps are fully incorporated into our [Guiding Principles](#) and will work for your company – “as is” or with minimal adaptation for your specific industry or your company's particular needs.

1. Visualize
2. Analyze
3. Materialize
4. Realize



STEP ONE – VISUALIZE!

Coming under the guise of fancy terms, like *New Product Ideation*, Step One of NPD is simply to **Visualize!** What does your new product, service, or program need to do in order to fill a market niche and deliver profit to your company's bottom line?

Some questions you should ask in order to frame the NPD effort may include some or all of the following.

- **What are your customers saying** about the products they currently use?
- What aspects of your product **simplify** job tasks for your customers?
- In which areas of product use do **customers suggest improvements?**

- What do customers say about your **competitors' products?**
- Does your sales staff note **complaints** about the product after customer visits?
- What **components** require the most technical service support?
- In practice, **how do your customers actually use your product?**

Listen to your customers! Probe your sales staff to fully understand your customers' needs and wants. Involve your customers in product testing and trials involving new product ideas. An NPD project that doesn't meet the needs of your customers cannot be successful. However, if you pay close attention to the *needs and wants of your customers*, as well as market trends, your NPD efforts have the highest probability of delivering enhanced profitability.



Brainstorming sessions also provide a wealth of new product ideas to help visualize the future. Be sure to include a wide mix of skill sets in the brainstorming session – Sales, Marketing, Research, Operations, and Distribution. Individuals in each of these departments have a unique touch point with the existing product lines and their participation in idea generation will ensure that a cross-section of ideas is shared.

The Idea Pipeline is another great source to investigate the next generation product, service, or program. Perhaps your company employs an electronic “*suggestion box*” for product improvement ideas. What ideas are already in result of the cycle roadmapping *strategic* the pipeline as a product line life management and activities? What *arenas* have been identified by senior leadership as growth areas? Be sure to give timely recognition for NPD contributions from both individuals and teams in order to keep the stream of new ideas flowing.



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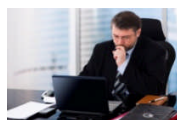
Learning from Failures is, unfortunately, a costly but too often neglected strategy for new product improvements and idea generation. *Post-Launch Reviews* can improve the product success ratio from 30% to 50%⁽¹⁾. Top learning organizations provide a safe culture, objective analysis, and effective tools to translate lessons learned into better new product strategies. Instead of spending money to resuscitate a failed project, why not invest in root cause analyses to eliminate errors in the next NPD effort? Toyota, for example, recognizes that acknowledging past mistakes is the first step to improvement.

Using caution to ensure that these learning discussions are never punitive, your company can visualize the New Product, Service, or Program through an Innovation Strategy designed to rapidly gain market share by **listening to the Voice of the Customer**, **brainstorming** new ideas, mining the **idea pipeline**, and by applying **learnings** from past mistakes.

STEP TWO - ANALYZE!

Most organizations do a great job of *collecting data*, but how many do a great job of analyzing all the data they've collected? An example from the corporate world comes to mind.

A major chemical manufacturer employed about a dozen technical service representatives ("Reps") in a single business unit. Reps would visit customers, troubleshoot difficulties customers had in processing their material, recommend equipment, etc. The corporation mandated a market segmentation effort that, worthy in its own right, was not timed well for this particular business unit. Following marching orders, the business unit manager and his



assistant developed a tracking system for each Rep to document, at least monthly, how many hours he or she expended in support of each customer, including phone calls, emails, and research. LOTS of data was collected as the customer list numbered over 700! Alas, the business unit manager and his assistant were transferred to different divisions just a few short months after the tracking system

was implemented. Years later, the business unit was still tracking dozens of Reps' hours for over 700 customers, but *no one in the business unit remembered why*. And worse yet, no one was analyzing the data!

Look at existing data and analyze it for patterns to better understand your NPD efforts. *Often, the data is already collected* in timesheet and expense reporting systems, as well as quarterly or annual budgeting exercises.



Finding out how much each phase of an NPD effort costs in time, money, people, and equipment is of vital importance to the resource balancing act.

Portfolio Management is one of the key tools in the NPD toolbox. Effectively using a project screening scorecard for early ideas allows the leadership team to determine which projects are in-line with the Innovation Strategy and are likely to deliver both technical and commercial success. *Timely reviews of projects in the Innovation Portfolio* provides the checks and balances to ensure a proper project mix is in place with higher risk, long-shot projects alongside steady growth, process improvement projects.

When looking at the portfolio data, ask whether the projects are quality driven. Do projects automatically "pass" to the next stage? Are sufficient resources assigned to each project? Are the objectives of each project clearly understood in the context of customer needs? At every regularly scheduled Portfolio

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Management review meeting, the leadership team should address these questions. Selected projects are then analyzed for match with the Business and Innovation Strategies, as well as understanding any resource limitations to meet the program goals.

Product Roadmapping is another key tool for establishing a profitable NPD effort. Roadmaps should tie together the market outlook,



competitive analysis for best time-to-market, timing and overlap of the next-generation product introductions, manufacturing and process improvements necessary to produce the new products, and integration of the distribution channels. Often, the market roadmap is not shared with the other divisions, missing a great opportunity to *stream-line the NPD efforts across the business unit functions*.

Data analysis for New Product Development may appear to be easier said than done. The senior leadership team must make a commitment to **looking at existing data** to model resource allocation, **conducting effective Portfolio Management reviews** to ensure project mix and balance matches the Innovation Strategy, and planning product introductions through **Roadmapping** activities. And though, analyzing the data may indeed be easier said than done, the benefits measured in faster time-to-market and higher portfolio profitability result in an undeniable pay-off.

STEP THREE – MATERIALIZE!

Does your company have an NPD Process in place? Nearly 70% of firms report using a formal, cross-functional process for their New Product Development, based upon the findings from the 2003 PDMA Best Practices Survey ⁽²⁾. Cooper's Stage-Gate™ system for NPD has proven successful in many companies and

should be a starting point for building the New Product Development process if none exists at your company ⁽³⁾. However, the only way to ensure that the Innovation Strategy is enacted in a *coordinated fashion with the Portfolio and Product Roadmaps* is to materialize it with a flexible, efficient NPD Process that empowers the teams for efficient research.

A Flexible NPD Process allows the NPD Teams to follow a consistent framework for new product, service, and program development but doesn't handcuff the teams into meaningless checklists for the sake of the system. A revealing exercise is to ask your NPD Teams how much time they are spending in meetings as opposed to spending time in the research lab or factory.



NPD Processes should, at a minimum, make sure that the critical research activities are conducted in a timely and orderly manner:

- Legal Reviews,
- Customer Testing Protocol,
- Regulatory Compliance, and
- Market Launch Planning.

Particular company or industry standards may impose additional required activities; however, the NPD Team should be empowered to complete their objectives without encountering functional or bureaucratic barriers.

Decision flows are also key to a implementing a quality NPD Process. Recalling that each project in the portfolio must align with the Innovation Strategy, a *go/no-go/recycle decision* should be made for each project based upon clear, concise guidelines. These specific guidelines are communicated throughout the organization, horizontally and vertically, to *ensure that each project meets the minimum "go" criteria* and will be privileged for resource allocation.

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Note that projects receiving “no-go” decisions are not necessarily failures, but simply may not be a match with the Business Strategy at that particular time. It is the *responsibility of Senior Management* to ensure that NPD teams presenting such projects are *appropriately rewarded* for their creative inputs and team members are quickly re-assigned to a project within the active Innovation Portfolio.



Re-evaluate Your NPD Process periodically to ensure that the right projects are getting done at the right time. Ideally, the Portfolio metrics and NPD project Post-Launch Reviews will highlight any process steps that are missing or are hampering the time-to-market delivery of new products, service, and programs. This is also a great time to document *lessons learned* for the next generation product development team as well as any *process improvements* that will stream-line future NPD efforts. Choose an evaluation team that actively involves members of Management, Research, Marketing, Process, and other development functions for the best results.

Many companies find that implementing the NPD framework for each individual business unit is an effective way to deliver a **flexible NPD process** that allows **effective decisions** in-line with the Business and Innovation Strategies. In this case, **re-evaluation of the NPD process** must integrate learning from several business units to ensure that New Product Development efforts provide consistent data for Portfolio analysis and efficient resource allocation among all active innovation projects.

STEP FOUR – REALIZE!

See, it's easy!

Having in place goals and objectives derived from a healthy new idea pipeline (**Visualize**), ensuring a good match between active projects

and the Innovation Strategy (**Analyze**), and empowering your NPD teams for efficient research (**Materialize**), results in a new product that is advantageously launched in the marketplace. First-to-market suppliers typically garner nearly 50% of the lifetime earnings⁽³⁾ of any new product!

So, why wait? You don't need fancy words or complex tools. Simply follow these **Four Easy Steps** today to **realize enhanced profitability** from your New Product, Service, and Program Developments.

QUICK REFERENCE GLOSSARY

Check out our website for a short list of terms used in New Product Development. Some terms used in this article are shown here for your reference.

Innovation Strategy – The firm's positioning for developing New Technologies and Products.

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. Sometimes referred to only as “Product Development.”

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.

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

Roadmapping – A graphical multi-step process to forecast future market and/or technology changes, and then plan the products to address these changes.

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Global NP Solutions, LLC

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.



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