

# Resourceful New Product Development

By Paul O'Connor, NPDP

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"How can an organization improve NPD when it runs as lean as we do", I am repeatedly asked. Sometimes the question is posed with different twists. Yet the underlying frustration is still the same. The need is clear and painfully obvious. My response, though, may require you to see past what normally meets the eye.

First, let's accept the growing premise that lean times are here to stay. We are not merely waiting for poor economic times to pass. If we are lucky, "do more with less" may slowly shift to "do more with a little bit more." Perhaps your organization is starting to hire new people and expand NPD capabilities. The bottom line, though, is that top management and shareholders alike will demand greater output from any increase in resources. Your

job is to deliver the output improvement.

The surprising thing to me is that the financial press continues to address our economic woes as a need for increased corporate profits. Well-run organizations can deliver profits, of course, through cost reductions and revenue growth. But the reality is that revenue growth has declined due to other companies' cost reductions, resulting in very poor business-to-business demand and, for some, excess production capacity.

Thank goodness for lowered interest rates and positive consumer demand.

If the current chokehold on the economy had lasted for a year or so, we in NPD would have simply grit our teeth and endured the pain. The trouble is that the economic doldrums are beyond

the two-year point, with some forecasting another year or two to go. This long duration is causing a gap between our product's underlying technologies and the needs and wants of our customers. The shorter the lifecycle of your products, the more painfully obvious this is. Without a meaningful increase in output of NPD to match the significantly changed customer needs, organizations will continue to seek to increase corporate profits from the unrelenting spiral down of cost cutting.

Those that have experienced a significant decline in the growth of their markets have learned this lesson in spades. Granted, customer needs are dominated by demand for lower costs. But satisfying only lower cost does little for increased revenue, increased profit, or

for that matter continued employment. New needs must be identified and satisfied. In other words, improved NPD with lean resources is critical and strategic to getting organizations moving forward again. For most organizations, improvement in NPD output cannot come from the increase in magnitude of work effort by individuals. The workload per each NPD professional is, I believe, already at an all-time high. Think for a moment. If the magnitude of effort cannot drive increased output then the work itself must change. It is the output of the organization as a whole that really matters, not the work effort and output of individuals. If all of the oars are in the water with everyone rowing as hard as they can and the boat is still not moving fast enough, what is really happening?

Let's consider the integration of work. Table 1 contains a list of six organizational components that, when integrated, will enable an organization to work smarter at new product development. Perhaps your organization can claim excellence in a few of the areas. This is valuable,

**Table 1: Fundamental Components of Smarter, Integrated NPD**

1. Rationalize your organization's mix of NPD projects. In portfolio management jargon, "get bigger better bubbles moving faster." Not all projects are created equal. Make sure you are focusing resources on good projects that will have notable strategic impact.
2. Revamp your 1990's NPD process to:
  - Shorten and speed up the stage-gate process;
  - Establish a defined and highly proactive front-end process;
  - Precede all NPD work with intelligent and methodical product line planning (including technology mapping and market mapping).These processes provide both the genesis and a pathway forward for projects. Make sure they are efficient and fast. But most importantly, make sure their design and integration is practical and intelligent.
3. Invest in meaningful Voice of the Customer to drive and influence concept generation during the front-end process. Do not allow concept development to be based only on serendipity. Please embrace the notion that the customer's needs and perceptions are key to success, and that new product failures can cause significant disruption to the proficiency of NPD work efforts.
4. Optimize the throughput of all your work efforts by establishing and adhering to sound project management practices, using a centralized and shared resource data. Follow this by learning, implementing and exploiting systems-supported critical chain buffer management. Almost every organization ( even though they do not know it) can increase NPD throughput by at least 50%. This is not an exaggeration. Just remember that execution is in the trenches.
5. Analyze in detail the full decision flow and the full workflow of your NPD efforts (from pre-concept to post launch and product retirement.) Then align the full decision flow of NPD with the full workflow of NPD. Misalignment of workflow and decision flow always results in significant inefficiencies.
6. Get individual contributors, team leaders and top management to understand the specific elements of risk for each project and for the full portfolio of projects. Understanding NPD risk can be complex. I believe Adept Group's software model of Bob Cooper's NewProd research is a sound, practical, easy-to-use, and inexpensive tool for both project and portfolio risk assessment. No matter what tools you use, though, make sure you bring the specifics of risk to the forefront of project execution and portfolio management.

but not sufficient. Organizations must execute and integrate all of them for notable NPD output improvement. With only cursory review, you will notice the synergistic quality of these six components.

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The challenge for organizations is not so much knowing what these six components are, but getting the organization to do something meaningful about all of them. While outstanding execution of a single NPD project is dependent on the skills and influence of the product development manager, the execution by the whole organization is highly dependent on the skills and influence of a notable NPD executive.

Many outstanding and charismatic executives who built their careers in the 'do-more-with-more' economy have been forced to make major adjustments, both intellectually and behaviorally, in the 'do-more-with-less' economy. They did so because it is

no longer about just speed to market. They did so because they needed greater efficiency and positive strategic impact. And they did so because fast market growth is no longer the elixir to less than efficient organizational work methods. The leadership challenge today is deeper in the trenches of NPD. It is with integrating and aligning all NPD work to yield greater overall output.

'More-with-less' will continue as an imperative. To do this, most organizations

will have to revamp the very work they carry out to succeed at new product development. The formula for doing so, though, is pretty straightforward. First, spot an accomplished and influential NPD executive

willing to get into the NPD trenches. Next, help this key executive under-

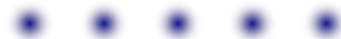
stand that improvement lies with the work processes and methods of the organization as a whole, not by demanding do more of individuals. Then add to the mix a deep understanding of the six components of improvement. This potent combination will deliver increased NPD output even when the organization is running lean.

**6 Integrated Components + Key NPD Executive = Increased NPD Output**



Paul O'Connor is an expert in the field of New Product Development Productivity. He consults on process implementations and improving NPD performance. His article in the Journal of Product Innovation Management entitle "Implementing a Stage-Gate Process: A Multi-

Company Perspective" has been cited by numerous authors and is used as a teaching aid in several MBA programs. He is also a contributing author on implementing product development process to The Handbook of New Product Development. Mr. O'Connor is a certified New Product Development Professional and is also a Past-President of PDMA.



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