Time to market challenges, cost pressures, changing environmental and regulatory requirements, and ever-increasing customer expectations have companies wondering, “How can we continue to innovate while shrinking product development cycle times and reducing development costs?” Challenges like these are driving companies to reengineer their new product introduction (NPI) processes. While there are many methodologies to help companies formalize and improve this process, defining the process alone is not enough. Many companies still face the challenge of adoption of standard NPI practices across a global organization. Without a well defined process that is followed consistently, it is difficult to track metrics or find bottlenecks. Product development processes are too often overlooked or seen as a documentation afterthought, and hence, are not incorporated into the daily work stream.

Without a collaborative environment or access to real-time project data, project managers often resort to “firefighting” when it comes to resolving issues. This causes project teams to react to problems rather than proactively attacking project risks. Poor data synchronization and lack of communication directly impact the success of the project. In a global economy where engineering and manufacturing are typically separated by multiple time zones, these challenges are even greater.

So it is a reasonable question, “Is it possible to execute a global, cross-functional, business-focused New Product Introduction (NPI) process more efficiently and effectively without stifling innovation?”

The answer: Yes, it is. Pairing a software solution with your NPI process will help streamline work steps, promote collaboration, provide visibility to a single source of truth, expose bottlenecks, and drive repeatable project execution.

Kalypso has worked with clients in many industries to help them achieve product development cycle time improvements of over 40 percent. Our experience has demonstrated that Product Lifecycle Management (PLM) software like PTC Windchill, when used appropriately, can help companies improve their NPI process; collaborate across functional, time zone, and company boundaries; manage the pipeline; and design more efficiently.
Our PTC practice combines technical expertise with our NPI process and organizational effectiveness consulting capabilities to deliver successful solutions for PTC Windchill clients. Using out-of-the-box Windchill functionality, companies can quickly implement product development processes, utilizing a configurable NPI process template with a phase-gate methodology as its basis. This includes the ability to:

- Configure each phase as a Windchill lifecycle and each gate as Windchill object
- Use Windchill workflow to configure an approval process to utilize pre-defined teams and deliver gate reviews to the appropriate approvers
- Utilize PDMLink and ProjectLink to share NPI deliverables for collaboration and informal routing before submitting the deliverable for formal approval
- Track signatures and report metrics for the approval process

Figure 1: Sample NPI Process

An approach combining NPI process expertise and Windchill’s powerful capabilities helps companies automate processes, streamline project execution, increase reuse and remove location barriers enabling companies to drive repeatable new product introductions as a result.