Automated Workflow Engines Speed New Product Development Process

In the world of manufacturing, speed is of the essence. Consumer demands are quickly and constantly changing, and manufacturers can’t afford to take a year or two to bring new products to market. At the same time, they must contend with global competition and increasing regulations — all while managing the various puzzle pieces involved in design, development, production and distribution.

With all these forces at play, it’s no surprise that new product development (NPD) is hardly a streamlined process for most organizations. It consists of many time-consuming projects and tasks that must be assigned, tracked and reported on, as well as various employees, department heads and executives that must provide input and approval.

One way to keep the NPD process flowing with minimal delay is to implement digital tools that facilitate planning and collaboration across employees and other stakeholders. For example, cloud-based automated workflow engines like the ServiceNow Now® Platform can improve the convoluted and lengthy NPD process by providing much-needed visibility, shortening approval times and resolving issues quickly between siloed departments. At the same time, this tool enables cross-functional collaboration, helping you bring new products to market faster than ever before. The Now Platform even works with your existing tools and product lifecycle management (PLM) systems — no need to replace or overhaul them.

The result is seamless orchestration of your existing systems, enabling you to get a new product out the door quickly — from initial concept to final launch.

The Nature of NPD Gating Systems

Developing new products is a risky business. Organizations from many industries — from manufacturing to pharmaceutics — currently use gating systems to facilitate NPD and also minimize the risks associated with the process. These models typically consist of various steps, each one with its own criteria a new product must meet before passing on to the next step. As a product moves from gate to gate, it is allocated additional resources and investment from stakeholders, lessening the risk that it won’t make it to the production line successfully. For example, after the engineering department draws up the initial idea for a new product, that idea must be vetted across other parts of the organization and assessed in terms of technological feasibility, market opportunity and potential risk. Only after the idea passes these criteria can it move on to the development gate.

Encouraging New Ideas and Innovation

In addition to providing real-time visibility of the NPD process, the Now Platform encourages innovation by tapping into the creativity of your organization’s employees. It also enables you to vote on, vet and track these new ideas — all from a single location.

Part of ServiceNow’s IT Business Management package, the Innovation Management app measures new product interest by enabling users to vote ideas up or down. It also encourages collaboration through interactive comment boards and converts approved ideas to tasks to initiate further action. As a result of these capabilities, you’re not only inspiring innovation in your organization, but you’re also providing an easy-to-use interface that keeps everyone informed of the status of new ideas.

New Product Development Stages

A typical NPD gate system.
Generally speaking, each gate has its own approval processes, as well as departments that must be looped in, deadlines that must be met and deliverables that must be completed. Together, these moving pieces transition the new product from concept to design, and from prototype to production.

### Gating System Challenges

Although gating systems have their value, the NPD process is still by and large a manual, informal process, guided by spreadsheets, documents and lengthy email chains. At the same time, collaboration and communication between individuals can be easily disrupted — whether by the global status of many organizations, the remote nature of many employees, or both. Real-time visibility into the NPD process, including where a new product is and who needs to be looped in, is difficult to achieve. Any lapse in communication can cause the product to backtrack, resulting in lost time, extra costs and frustration for everyone involved. And in today’s world where time is money, you can’t afford these delays.

### The Power of Digital Workflow Engines

One of the key drivers behind a successful product launch is team collaboration — which is where automated workflow engines like the Now Platform come in. By digitizing workflows with native artificial intelligence (AI), this tool is well-positioned to create value for manufacturers by improving NPD team collaboration and reducing the time to market for new products. For example, you can generate workflows that automatically notify parties if the status of a product changes or if approval is required — all in real time. Thanks to this capability, the Now Platform provides visibility into the complex NPD process and also functions as a system of record for new products. And best of all, anyone can automate these workflows across the enterprise — little to no code development required.

In addition, the Now Platform complements your existing tools and PLM systems using simplified integration services that make it easy to import and export data, then quickly connect to your existing systems both on premises and in the cloud. This feature overcomes a pitfall inherent to many digital workflow solutions, which involve diverse apps, platforms and data. But thanks to the Now Platform’s Integration Hub, developers, IT generalists or process analysts can extend flows to third-party services, easily creating workflows.

By connecting your enterprise, automating workflows and delivering a seamless experience via real-time dashboards and notification services, the Now Platform promises to be an NPD game-changer. Here are some of the key steps of the NPD process, including the ways this digital workflow engine adds value:

- **Idea Capture.** The Now Platform provides an avenue for employees, customers and suppliers to submit ideas for new or improved products. Manufacturers can then quickly review, vet and select the best ideas to research and validate.

- **Validate and Approve.** The platform shortens the often-lengthy time it takes to validate and approve ideas, jumpstarting NPD between siloed departments in an organization. It also facilitates the process of applying to and receiving approvals from regulatory agencies, many of which can take several months to obtain.

- **Initiate.** The Now Platform lets users quickly create project plans and assign tasks to internal and external stakeholders, engaging them in the development process and making collaboration quick and easy.

- **Monitor and Manage.** The platform provides real-time visibility of all NPD programs, projects, tasks and issues. It also reduces the need for
time-consuming status meetings and speeds up communication between departments and stakeholders.

- **Launch Planning and Execution.**
  The platform ensures no one misses a step in the launch phase. It also allows those involved in the process to communicate effectively and coordinate tasks and approvals with marketing, legal and sales departments.

**Get Started**

Maybe aspects of your NPD process are still paper-based, or maybe you struggle with engaging marketing during your product’s launch phase. Once you find out where your pain-points are, it’s easy to set up ServiceNow digital workflows as part of a trial run for your organization.

To learn more about the **ServiceNow Now Platform**, please visit https://www.servicenow.com/solutions/industry/manufacturing.html.

The Now Platform enables organizations to efficiently manage NPD tasks and projects using dashboards that indicate trends, gate, status and other details. Any time a user makes a change or submits an approval, all relevant parties are notified via email or a mobile device.