

The Propel Process

What is Propel?

The Propel process follows the principles of the [Stage-Gate](#) process and has been customized to meet PERC's specific needs. The Stage-Gate process was developed based on extensive research of how successful companies were structuring their new product development (NPD) processes. The process divides NPD into a series of required activities (stages) and decision points (gates) to improve effectiveness and efficiency by integrating discipline into a process often described as ad hoc and seriously deficient in many firms.

Why Propel?

There are many benefits to using Propel. The greatest benefit is choosing projects based on a clear business case, allowing staff to focus time and attention on those projects that are going to prove to be more successful for PERC. The process provides a structure that enables prioritization and focus throughout the development process.

Risk Management

The Propel process manages business risk by separating resource commitments into a sequence of work, or stages. Each stage is progressively more costly and emphasizes the collection of additional information to reduce uncertainty. The gates separate each stage and are the mechanism used to evaluate a project and make a go/no-go decision based on six criteria.

Flexibility

Propel is flexible and has been tailored to fit the unique needs of every project. Sensible shortcuts are possible but should be taken with full awareness of the risks involved.

For example, product improvement ideas and lower risk projects (for which there is significant supporting organizational knowledge or experience) may be routed through the three stage Propel XPress process to enable increased speed to market.

Empowerment

Propel gives people the authority and accountability they need to complete the required tasks. The process empowers the project team by providing them with a roadmap, clear decisions, priorities, and deliverables at each gate.

Speed to Market

Propel is designed for speed. Clearly defined gates with predetermined deliverables result in faster decision making.

How Does the Propel Process Work?

The process begins with an idea and ends with a successful launch of a new product, service, or technology. The steps in between require inputs from many functional areas. Propel divides this process into a series of activities (stages) and decision points (gates).

Stages

- Stages are where the action occurs. The project team completes key activities to advance the project to the next gate.
- Stages are cross-functional, and activities are undertaken in parallel to accelerate speed and to ensure that the end user is considered throughout development.
- Stages are where risk is managed. Vital information is gathered — technical, market, financial, operations — to manage risk.
- Stages are incremental. Each stage costs more than the preceding one, resulting in incremental commitments. As uncertainties decrease, expenditures are allowed to rise and risk is managed.



Stages have a common structure and consist of three main elements: activities, integrated analysis, and deliverables. Activities consist mainly of information gathering by the project team to reduce key project uncertainties and risks. An integrated analysis of the results of the activities is undertaken by the project team. Deliverables of stages are the results of integrated analysis that are then used as input for the next gate.

Gates

- Gates are where the go/no-go and prioritization decisions are made.
- Gates are where mediocre projects are culled and resources are allocated to the best projects.
- Gates are focused on three key issues: quality of execution, business rationale, and the quality of the action plan.
- Gates are where scorecards and criteria are used to evaluate the project's potential for success.



Gates are governed by gatekeepers who evaluate the project at each gate based on six decision-making criteria:

- Strategic fit and importance.
- Product and competitive advantage.
- Market attractiveness.
- Synergies.
- Technical feasibility
- Impact and business risk.

In Propel, the keepers of gates 1 and 2 are the advisory committee liaisons, and the keepers of gates 3 through 5 are the members of the executive management team. The gatekeepers' decision is ultimately confirmed or denied by the chief executive officer or the Council, depending on the project funding amount requested.

The Decision

At each gate meeting, the gatekeepers' final decisions are as follows:

- Determine whether to go, kill, hold, or recycle each project under consideration.
 - A hold decision is made when a project has value but is not deemed a priority when assessed among the other projects in the portfolio.
 - A recycle decision is made when the gatekeepers do not feel that they have been provided with adequate information to make a decision, or feel that an activity from the previous stage of work needs to be redone.
- Approve the project plan for the next stage of work and the proposed timelines.
- Approve the resources required to complete this work.
- Approve the date for the next gate meeting.

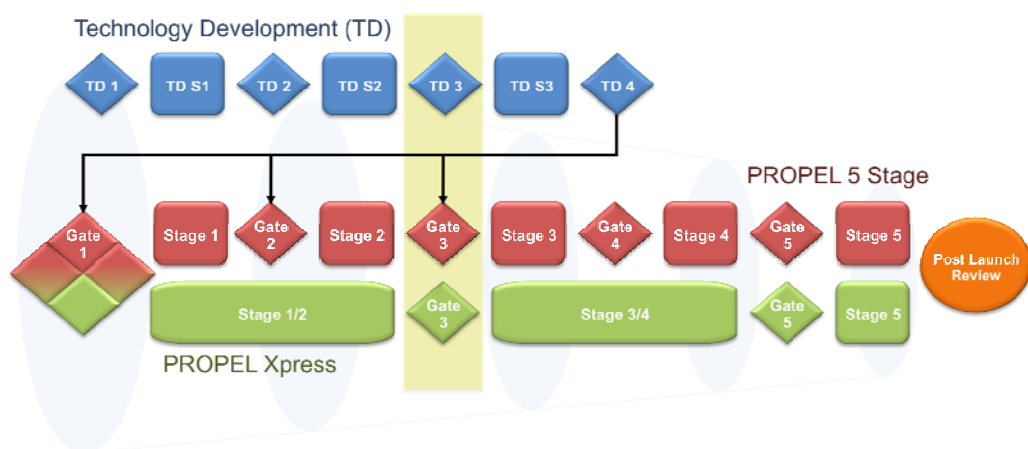
The gatekeepers determine whether the team is proposing the most effective and efficient path forward. Since resources are approved at gate meetings, gatekeepers should arrive with an understanding of how a go decision might affect resources overall.

Propel Processes — Five-Stage, Xpress, and Technology Development

The Propel process uses risk assessment criteria to route all projects through a level of process rigor that matches the value and risk of the project. While there is one common process to move ideas from inception through to commercialization, three processes have been created to account for PERC's different types of projects.

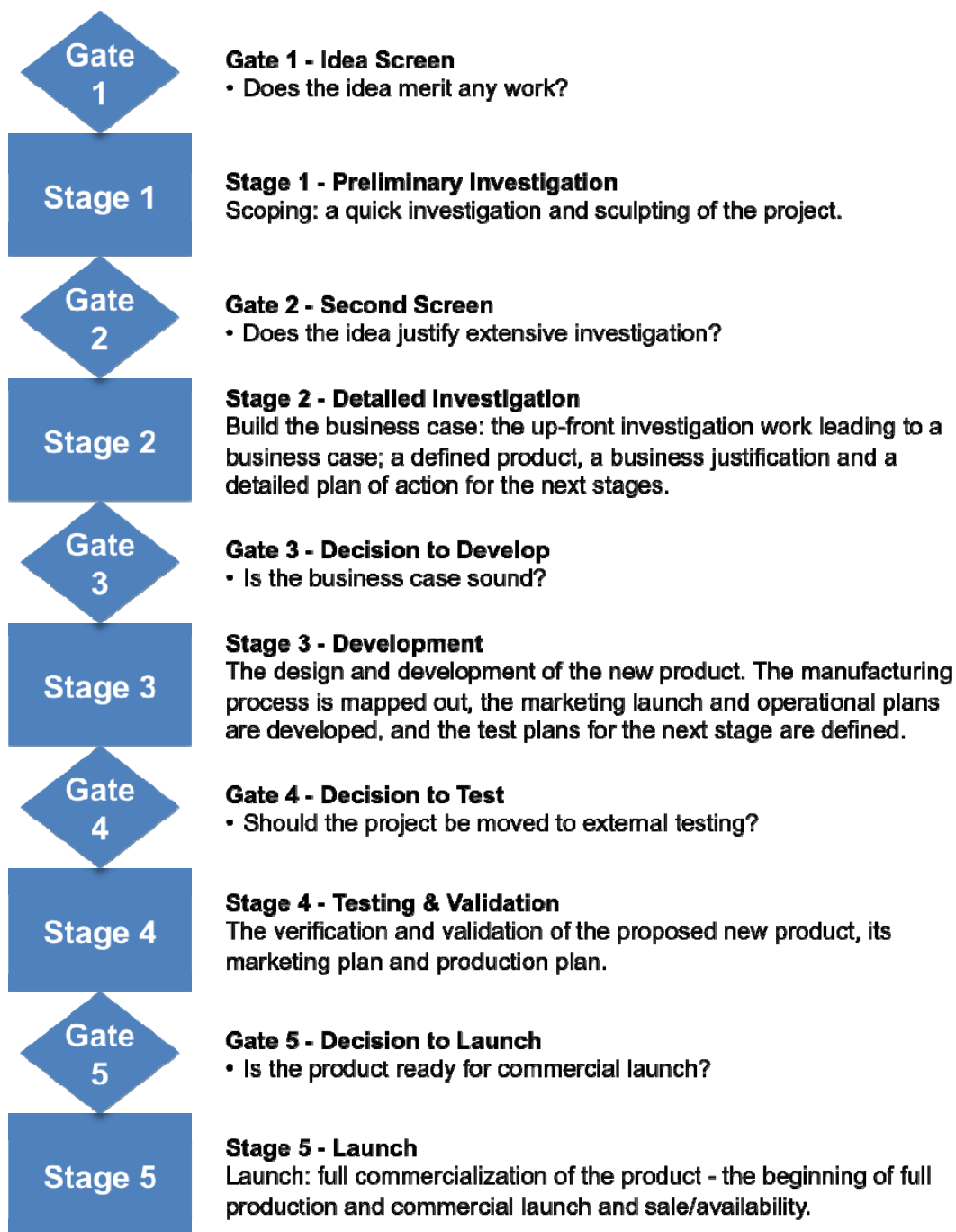
The five-stage process is used for the development of new technologies, technologies for new markets, and higher-risk projects. The Xpress three-stage process is used for product line extensions on existing technologies, projects where PERC has extensive experience in the market, and lower-risk projects. The technology development (TD) process is used for fundamental research projects, those that may or may not ultimately result in a new technology.

The diagram below illustrates the three variations of the Propel processes at PERC. Gate 3 is highlighted, since this is the last gate before the often expensive development stage. It is often referred to as the money gate.



Shown here is a five-stage, five-gate process typically used for major new projects. To enhance speed to market, activities are undertaken in parallel with others. As work progresses, each stage typically costs more than the preceding one, resulting in increased commitments but also in a reduced number of unknowns and uncertainties so that risk is effectively managed. The following provides a brief summary of the activities and spirit of each stage and gate.

Propel 5-Stage Process Overview



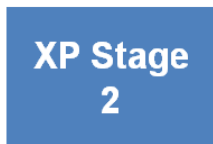
The XPress is the three-stage process for low-risk product innovation projects (such as product line extensions and product improvements). This three-stage process provides a fast-track alternative to the five stage process that does not compromise quality of execution.

PROPEL Xpress Process Overview



Gate 1 - Idea Screen

- Does the idea merit any work?



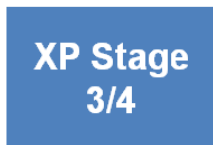
XP Stage 2 - Build the Business Case

Use existing marketing, technical and manufacturing/operations information and expertise to build the business case. Determine the impact of the proposed changes to the product prior to moving to Development and Testing.



Gate 3 - Decision to Develop

- Is the business case sound?
- Does the Development and Testing Plan provide sufficient direction to proceed to XP Stage 3/4?



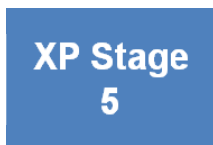
XP Stage 3/4 - Development and Testing

Create the modified product, and validate the commercial product prior to launch. The finalized launch plans are developed. Customer input is sought throughout this stage, and the market is monitored for change.



Gate 5 - Decision to Launch

- Is the commercial product in line with what was outlined in the XP Stage 2 Integrated Product Definition (IPD)?
- Has the commercial product met the testing performance criteria?
- Are the Launch Plans in place?

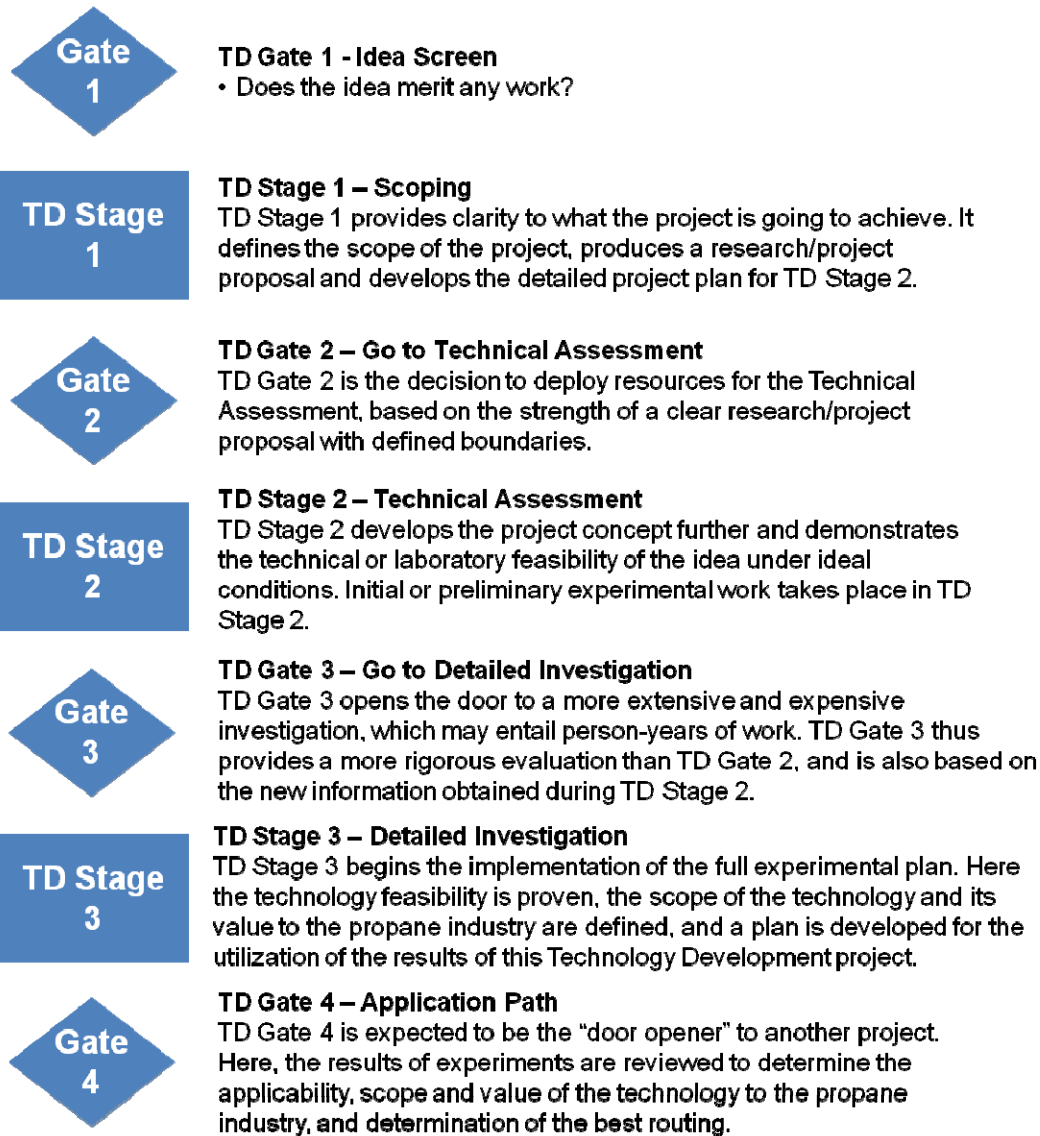


Stage 5 - Launch

Launch: full commercialization of the product . The beginning of full production and commercial launch and sale/availability.

The TD process is used for fundamental research, platform developments, or other projects where the desired deliverable is new knowledge or new capability. The TD process consists of three stages and four gates and integrates with the standard new product development process.

PROPEL TD Process Overview



Post Launch Review

Regardless of which process a project goes through, upon completion or launch of the project, a post launch review is conducted. The post launch review assesses the success and failures of a project, evaluates the Propel process and how well the process worked for the project by identifying areas of improvement or change, and appraises the project team’s ability to meet key project goals, timelines, milestones, deliverables, and level of execution. Once the identified business metrics are available, generally 12-16 months after a project is launched, a post launch review meeting is held analyze the results and determine what adjustments should be made going forward.

References

Stage-Gate International: <http://stage-gate.com/>

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Contacts

Steve Wayne, Chief Commercial Officer, steve.wayne@propane.com, 202-452-8975.

Grace Willis, Process Manager, grace.willis@propane.com, 202-452-8975.