



### Managing Risk: The Role of Strategic Gateways (Stage Gate Models)

#### Why and When Is It Used?

Developing new products is about creating something new – and with it comes risk. Clearly incremental improvement of an existing idea will be a much safer bet than development of a radically new product, but in all cases there will be uncertainty and the chance of something going wrong. For this reason a key principle in successful product innovation management is to try to manage the risk, and the value of a process model is that it provides milestones along the journey where these risks can be assessed.

#### How Does It Work?

Robert Cooper, one of the foremost writers on product innovation, introduced the concept of 'stage gates' at these milestones – essentially points at which strategic assessment can be made and where progress, passing through the gate, only takes place when key technical and market questions can be answered (Cooper, 2000).

The issue is not one of implementing a standard set of stage gates, because the number and position of these will vary with the kind of business, but rather one of managing the inevitable uncertainty in the process. It moves product innovation from being a gamble to a managed set of risks.

By separating the key stages in the process, the management aspects can be more easily understood. At the end of each stage, considerable activity will have occurred to ensure that the proposed design can be resourced within the business plan and implemented. Marketing, production, purchasing and corporate planning all need to feed into the product innovation process to assess its viability at each stage and you should be prepared to abort the project if it does not meet business objectives.

Stage gate approaches can also be used in process innovation projects – the same principles of checking progress and emerging information apply but the 'market' data is much more associated with internal potential users of the new process.

#### Further Information

##### Website

<http://www.prod-dev.com/stage-gate.shtml>

##### Reading

R. Cooper, *Product Leadership* (New York: Perseus Press, 2000).

##### Case study

ABC Electronics case study

