



Product Process Matrix

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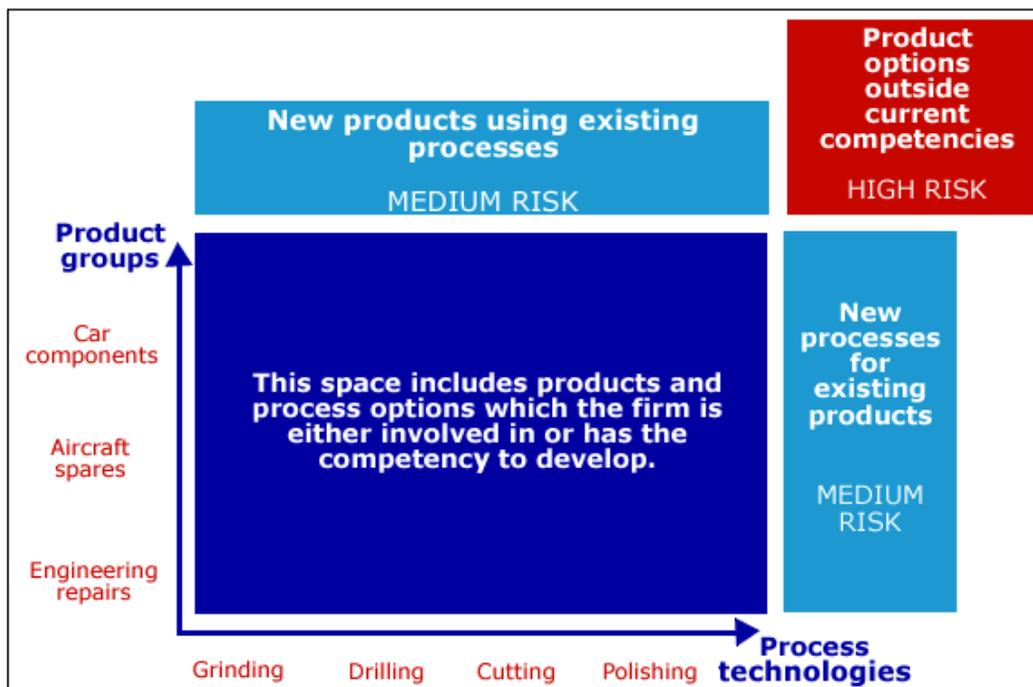
The product/process matrix (PPM)

The product/process matrix is a simple tool for mapping whether or not proposed strategic choices around your firm's product portfolio are in line with your overall manufacturing capability.

Step 1 involves plotting two axes, one for the product families that your firm currently makes and one for the processes that it uses. This effectively defines the area within which your firm is operating in terms of its technological competence.

Step 2 involves asking whether the new proposal fits somewhere within this space or lies outside it, in other words, somewhere that will require the acquisition of new competency.

If it lies within the core space, then the new development will require new combinations of existing knowledge and the challenge is one of internal learning. But if it lies outside current competency, then it will be necessary to think about how the gap will be closed, and whether this strategic option represents a high risk jump into completely new territory, or an incremental advance in your firm's knowledge base.



Much innovation involves progress along one axis, keeping the other constant. For example, developing a new product family using processes with which the firm is familiar is relatively low in risk. Similarly employing a new process to make a well-understood product is relatively low risk. Where the change involves both product and process, the risks are high.

Strengths and weaknesses

As with all tools of this kind, its main purpose is to focus thinking and discussion, to help firms 'look before they leap'. The usefulness of the tool depends on how well you have defined your product groups, and processes, as well as the depth of discussion arising from the use of the PPM.

Hints for using this tool

The basic principle can be applied in a number of ways. First the axes can be changed, for example, to explore the space around products and markets, or processes and materials. And the matrix can be extended to three, four or five dimensions, although by this time it becomes difficult to work with. But in each case the principle is the same, the axes represent 'knowledge space' within which the firm has experience and outside of which will involve higher risk learning of new competence.