Innovations are essential for the long term success of a firm. Typically more ideas exist in a company, than an organisation can realise. Resources are scarce. Ideally the selection process has to consider the whole portfolio of projects simultaneously. The view of the portfolio can ensure a balanced R&D program. However, no best practice portfolio process for the selection of advanced projects under resource constraints appears to be currently available.

The method described in the dissertation assesses innovation projects with respect to their importance, urgency and effort. Rating criteria are systematically derived by using an influence matrix. A bubble diagram is created. Scarce engineering resources are focused on important and urgent projects. The result is a targeted and company specific portfolio process which prioritises innovation projects under resource constraints.

The method was implemented in a software tool and used at a major automotive supplier to select advanced development projects. The author assisted the process for more than two years. By using the experience gained, the method was continuously enhanced and refined. Results show that speed, performance and transparency of the R&D organisation have improved significantly.