

PRATT & WHITNEY CANADA
Effective and Optimized Technology Portfolio Management
EXECUTIVE SUMMARY

In order to maintain competitiveness, companies invest in technology and innovative projects strategically. There are a variety of tools and methods, which can be used to select the optimal set of technology projects. Pratt and Whitney Canada has a portfolio with a wide range of technology projects that requires a systematic approach to manage it. P&WC invests close to \$500 million per year in Research and Development aimed at developing technologies that not only perform better but also provide greater value to the company.

This report entails a proposed method of weighing different factors in order to optimize the decision based on several factors. Changes to be analyzed include funding changes, new ideas, and new strategies to meet new market needs alter business priorities the report will also look at technological benefits such as weight, cost and fuel efficiency. A spreadsheet of information was provided by PWC. Appended weights were then applied to each of the possible factors that would result in a metric to judge the different projects as shown in Appendix A. The formula for the deciding factor on the technology portfolio project selection takes potential benefit, probability of success, product applicability breadth as factors enhancing the decision in favor that choice of project, and cost, being in the denominator, as a factor deterring the decision towards that choice. Other qualitative factors were also weighed and provide supplementary weight towards the decision in favor of the choice.

It is recommended that values be assigned to these different technology themes. 10 years of data from the past can be used to assess based on the technology themes they address. Values would be assigned to each technology theme, such as SFC or cost, based on the eventual profitability of the project.