

# REAL ESTATE RISK ASSESSMENT

# GOVERNMENT OF CANADA

## WHO

Real Property Services, Public Services and Procurement, Pacific Region

## WHAT

Collaborative risk assessment

## NEED

Demonstrate value of concept in real scenarios

## OUTCOME

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Successful usage and new capabilities

The Canadian Federal Government owns, manages and leases billions of dollars of real estate. It reconciles the accommodation needs of a variety of departments (long and short term) with taxpayer value for money. To manage risk and execute real estate decision-making with foresight and objectivity, the department of Public Works follows a highly structured and well documented process of risk factor identification, assessment, and risk-based cost adjustments of potential scenarios.

## APPROACH & RESULTS

# PROGRESSIVE LEARNING LED TO REAL PROJECT RESULTS

The current Investment Analysis process relies on the inputs of real estate experts inside and outside the department. This produces reliable results, but can take time where collaboration beyond the department is required.

Ethelo adapted its standard platform to improve the quality of collective intelligence applied to the risk analysis challenge. Expert influence levels, risk factor weighting and asynchronous engagement were just some of the innovations integrated into the testing.

Initially, Ethelo captured and aggregated assessments of both financial and non-financial risk factors for modelling a real investment scenario, using the standard configuration. The observations from this were used to inform the approach of a live project later on.

At the same time, Ethelo delivered a configuration that provided detailed risk assessment of a very large Vancouver project by a panel of real estate experts of both impacts and probabilities across a range of financial factors. Those inputs were further analyzed using the Monte Carlo algorithm, which was integrated into the Ethelo platform to predict risk-adjusted cost evaluations of different scenarios. The delivered proofs showed to be highly accurate.

Based on the successful results of Whitehorse and Vancouver, Ethelo performed an analysis for a Victoria-based real estate risk analysis. The team of Vancouver-based experts were able to quickly assess the weighted impact and probabilities of a 6-option project. Participation was 100% and the results were a critical element of the written risk assessment report delivered by the staffers.

Overall, Ethelo scored 80% for the risk assessments, which reflected a high level of initial learning and user-interface redesign. The risk team reported Ethelo was easy, and the value of increased participation was high. It was also noted that aside from results accuracy, the additional granularity had significant potential to address risk management and increase the quality of real estate decisions.

Scope was shown for the potential to reduce analysis time savings of 10%, which for large projects are a significant cost.