



eValuBuild: optimising investment decisions for commercial buildings >>

By **Dr Keith Hampson**, CEO for the Cooperative Research Centre for *Construction Innovation*

Commercial properties: what returns will they achieve? Is

refurbishment viable? What is the best time to sell? It's complicated, it's risky and it's a moving target.

Ownership and management decision-making associated with improving the operational, investment and environmental performance of a commercial building asset or portfolio is a complex process and can be critical in determining investment performance and returns. A newly developed evaluation tool helps clarify investment options and reduce risk.

Market research by one of our project teams in the Cooperative Research Centre (CRC) for *Construction Innovation*, identified a gap in the commercial property industry. The industry lacked a user-guided assessment tool that combined capabilities in cash flow analysis, risk assessment, outgoings and market-based forecasting. With the support of five of the CRC's research, government and industry partners we've developed *eValuBuild*.

eValuBuild is a software evaluation tool that factors in an extensive range of building performance aspects, ensuring the building owner or manager has a sound basis for decision-making. It generates market value and return measures throughout a property's lifecycle and incorporates research-based projections of rent income, operating expenses and capital expenditure. It provides guidance on market rent forecasting with a user-driven forecast model. Environmental and social performance indicators are also included. In this way, *eValuBuild* provides the user with a decision support mechanism to assist in optimising income and capital returns from an investment property or portfolio by clarifying the potential outcomes of selecting different courses of action.

According to Project Leader Professor Terry Boyd, Queensland University of Technology, "The research is unique in that it focuses on the accuracy of the input variables required for the model. *eValuBuild* also incorporates probability-based risk analysis techniques that are structured on market-based assessments. These techniques identify a range of uncertainties in the

valuation/return measures produced. This simulation process provides a way of explicitly dealing with market and property specific risks."

The *eValuBuild* software will assist the user select input data, construct schedules and assess variables to allow the automated generation of cash flow analyses and the output of value and return measures. Significant graphical outputs are also produced showing the building's projected performance based on the selected assumptions.

Demonstrations of *eValuBuild* have generated significant industry interest with strong attendances at two seminars run by the project partners. Further support is evident from the Queensland Department of Public Works with Stuart Grierson, Acting Director of the Portfolio and Housing Unit stating that "the department is keen to progress the *eValuBuild* project further through testing of the software in the management of a sample public office building portfolio." **BA**

For further information on *eValuBuild* please contact the Project Leader, Professor Terry Boyd, on 07 3864 1482 or t.boyd@qut.edu.au.