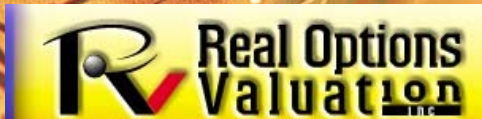# ROV PEAT

Project Economics Analysis Tool (PEAT) software was developed to perform a comprehensive Integrated Risk Management analysis on capital investments, discounted cash flow, cost and schedule risk project management, oil and gas applications, healthcare analytics, and enterprise risk management. This tool will help you to set up a series of projects or capital investment options, model their cash flows, simulate their risks, run advanced risk simulations, perform business intelligence analytics, run forecasting and prediction modeling, optimize your investment portfolio subject to budgetary and other resource and qualitative constraints, and generate automated reports and charts, all within a single easy-to-use integrated software suite.

- **Corporate Investments (Dynamic Discounted Cash Flow)**
- **Corporate Investments (Lease versus Buy)**
- **Enterprise Risk Management**
- **Goals Analytics (Sales Force Automation)**
- **Healthcare Economics (HEAT and REJ)**
- **Oil and Gas (Oil Field Reserves, Oil Recovery Analysis, Type Curves)**
- **Project Management (Cost and Schedule Risk)**
- **Public Sector Analysis (Knowledge Value Added)**
- **ROV Compiled Models**

ROV PEAT takes all of our advanced risk and decision analytical methodologies and integrates them into a simple-to-use and step-by-step integrated software application suite. It simplifies the risk-based decision analysis process and empowers the decision maker with insights from powerful analytics.

WHY PEAT? If you already perform discounted cash flow modeling or enterprise risk management in Excel, why do you still need PEAT? Because PEAT's integrated advanced analytical techniques extends the analysis you have already performed, and do so in a simple-to-use, simple-to-understand, and automated format, thus generating valuable insights that would be impossible without such advanced methods. PEAT allows you to scale and replicate your analysis, archive and encrypt your models and data, create automated reports, and customize your own PEAT modules.

MODULES

Corporate Investments (Dynamic Discounted Cash Flow): With a few simple assumptions, auto-generate cash flow statements of multiple projects, obtain key performance indicators and financial metrics (NPV, IRR, MIRR, PP, DPP, ROI), run risk simulations on uncertainty inputs, generate static Tornado sensitivity analysis, run dynamic sensitivities, simultaneously compare multiple projects within a portfolio, perform forecasts of future revenues and cash flow, draw multiple strategic investment pathways and options, model and value these strategic paths, compute and optimize the best projects within a portfolio subject to multiple constraints and restrictions, view results in management dashboards, encrypt your model and data, and auto-generate analysis reports.

Corporate Investments (Lease versus Buy): Run a lease versus buy analysis, compare capital and operating leases with interest payments and tax advantage, value the lease contract from the point of view of the lessee and lessor, and generate the complete cash flow analysis to obtain the net advantage to leasing.

Enterprise Risk Management (ERM): Perform traditional qualitative ERM with Risk Registers but also enhance the analysis with more quantitative analysis. This ERM module comes with an online Web version as well as a module within PEAT, where users can enter and save multiple Risk Registers to generate Key Risk Indicators (KRI) by Risk Divisions and Risk Taxonomy (Geographic, Operations, Products, Activity or Process, and Department), assign risk items to different Risk Managers by performing Risk Mapping of Risk Categories to different Risk Divisions, create Risk Dashboards of the results, enter Risk Elements within multiple customizable Risk Engagements, draw Risk Diagrams, perform and run Risk Controls on KRIs to see if certain risks are within control or out of control, perform Risk Forecasts, check if certain Risk Mitigation projects indeed work or are statistically ineffective, perform Risk Sensitivity on KRIs, perform Risk Scenarios on quantitative risk metrics, run Risk Simulations on risk metrics, generate Risk Reports, and encrypt your data and files for the purposes of Risk Security.

Goals Analytics (Sales Force Automation): Develop and maintain corporate sales goals. As a Web-based SaaS and desktop-based PEAT module, it focuses on the creation and use of goals that help make goal-setting more accurate and sustainable by any company seeking to improve its sales performance (sales goal forecasting, probability of hitting corporate revenues, sales pipeline analysis, and other sales-based metrics analysis).

Healthcare Economics (HEAT and REJ): Run the economics of various options' available under the U.S. Affordable Care Act (Obamacare) for corporations providing employer-sponsored healthcare, by loading employee-census data (healthcare economics analysis tool, HEAT), or perform rapid economic justification (REJ) of each option by simulating its high-level inputs.

Oil and Gas (Oil Field Reserves, Oil Recovery, Well-Type Curves): Perform oil and gas industry models on analyzing the economics of oil field reserves and available oil recovery based on uncertainty and risks, as well as generate oil-well-specific type curves and economics.

Project Management (Cost and Schedule Risk): Draw your own project pathways (simple linear project tasks versus complex parallel and recombining projects), then click a button to auto-generate the model. Enter the cost and schedule estimates as well as their spreads, then run a risk simulation on the model to determine the probability of cost-schedule overruns, cost-schedule buffers at various probabilities of completion, critical path identification, and sensitivity analysis.

Public Sector Analysis (Knowledge Value Added): Model government and nonprofit organizations' value, value to society, or intangible via Knowledge Value Added by utilizing market comparables to identify and monetize such projects and assets.

ROV Compiled Models: With the compiler software, users can compile their existing Excel models into license-controlled executable EXE files. ROV's patented methods can be used to compile these Excel models to encrypt and lock up the intellectual property and mathematical algorithms of the model, and issue hardware-controlled and timed licenses to the purchaser's own users or customers.

PEAT CUSTOMIZATION, TRAINING, AND CONSULTING

Companies such as Northrop Grumman, Saudi Aramco, ARCO, Paychex, and others have their own tried-and-true models that have been incorporated into PEAT and customized to their specific needs, encrypted for their proprietary use only, and updated as required over time. We also perform customized and generalized training on PEAT modules, as well as provide consulting services for the purposes of getting our clients started quickly with their customized modules.

ADVANCED ANALYTICS INCLUDED

Customizable Models: Run Problem-Specific Modules (Discounted Cash Flow, Project Cost and Schedule Risk, Oil and Gas, Healthcare, and Goals Analytics, with the ability to add new customized problem-specific modules).

Risk Simulation: Run Monte Carlo Risk Simulation on 50 Probability Distributions, Confidence and Percentiles of Simulated Results, Probabilities of Success and Failures, Value at Risk, Risk-Adjusted Returns, Probabilistic Overlay and Comparison of Multiple Options and Investment Strategies, and Dynamic Sensitivity of Results.

Business Intelligence and Analytics: Run Tornado Analysis, Dynamic Sensitivity Analysis, Comprehensive Reports, Distributional Probabilities (PDF, CDF, ICDF), Hypothesis Testing, Overlay Charts, Pareto Analysis, Sensitivity Analysis, Scenario Analysis, Statistical Analytics, Tornado Analysis, Seasonality Test, Detrending, ROV Decision Trees (Bayes' Analysis, Risk Simulation on Dynamic Decision Trees, Sensitivity and Scenario Analysis, Utility Functions), ROV Strategic Trees, Applied Business Statistics, Risk Analytics, Hypothesis Tests, and over 160 models with easy-to-use detailed reports with superfast computations.

Predictive Modeling and Forecasting: Box-Jenkins ARIMA, Auto ARIMA, Basic Econometrics, Auto Econometrics, Cubic Spline, Custom Distributions, GARCH, J Curve, S Curve, Markov Chain, Maximum Likelihood, Limited Dependent Variables (Logit, Probit, Tobit), Multiple Regression, Nonlinear Extrapolation, Stochastic Processes, Time-Series Decomposition, and Multivariate Trendlines.

Portfolio Optimization: Static, Dynamic, and Stochastic Optimization with Continuous, Discrete and Integer Decision Variables; Efficient Frontier; Project Portfolio Selection; Linear and Nonlinear Optimization; and Project Selection and Portfolio Optimization subject to Budgetary, Schedule, and Other Resource and Subjective Constraints.

Strategic Real Options: Solve customized American, Bermudan, and European Options on Abandonment, Contraction, Expansion, and Multiple Phased Complex Sequential Compound Options coupled with Monte Carlo Risk Simulation and Dynamic Sensitivities.