ROV PEAT

OVERVIEW OF ROV ENTERPRISE RISK MANAGEMENT

ROV PEAT comes in 7 languages (English, Chinese Simplified, Chinese Traditional, Korean, Portuguese, Russian, and Spanish) and has several main modules briefly described below. A wealth of resources are available to get you started including Online Getting Started Videos, User Manuals, Case Studies, White Papers, Help Files, and Hands-on Exercises (these are installed with the software and available on the software DVD, as well on the website www.rovusa.com).

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. The main modules include:

- 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, Well-Type Curves)
- Project Management (Cost and Schedule Risk)
- Public Sector Analysis (Knowledge Value Added)
- ROV Compiled Models
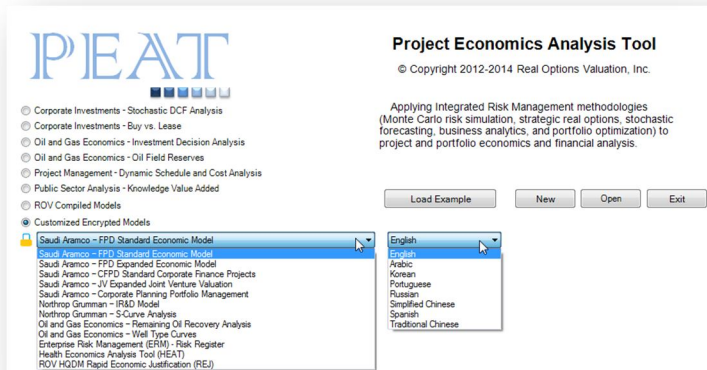
ROV PEAT takes all of our advanced risk and decision analytical methodologies and integrates them into a simple-to-use and step-by-step integrated software application suite. It simplifies the risk-based decision analysis process and empowers the decision maker with insights from powerful analytics. 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 extend 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.

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.

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 do, 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.

RISK ANALYTICS SECTIONS IN PEAT ERM

WEB Application: PEAT ERM is both a desktop software and online Web-based application. The desktop PEAT version is for internal risk department personnel to manage the results and dataset, keep the data encrypted and safe, run analyses like simulations, scenarios, tornado analysis, etc. Not everyone needs these advanced analytics. Therefore, in a large corporation, there can be multiple End Users who should have the ability to enter data, and a few Local Administrators with access to control everything including granting access to and creating end users, to setting up the risk profile of the company. End users can only enter in data and information (e.g., plant managers, supervisors, secretaries, etc.). These end users have limited access and limited knowledge, making training simple, and they enter in values pertaining to their areas of responsibilities. Local Administrators then has a database that rolls up to the corporate level and can see results, generate reports, perform more advanced quantitative risk analytics, etc.

Risk Settings: Setting up Key Risk Indicators (KRI), E-Alerts, and Data Imports. Global Settings allows users to set Risk Indicator Categories (1-5 or 1-10) with Customizable Color Coding of KRI (Key Risk Indicators) via a Risk Matrix.

Risk Groups: Setting up Risk Divisions, Risk GOPAD, Risk Category, Risk Managers. Multiple Divisions within a Company can be created, such that the company can manage multiple risk profiles for each division. Users can also create and assign various G.O.P.A.D. categories (geographic, operations, products, activity or process, and department) such that analysts can slice-and-dice the company's risk profile from multiple points of view, select from and create queries of specific G.O.P.A.D. to analyze, etc. Users can create customized Risk Categories or use our library of predefined risk categories and lists of persons in charge of certain risks and their contact information can be setup.

Risk Mapping: Setting up links among Risk Categories, Risk GOPAD, and Risk Division. Users can create and link multiple Risk Categories to one or more G.O.P.A.D.s and on to one or more Divisions. This allows the analyst the ability to view how a certain risk permeates through the organization as well as how a specific risk element may touch multiple departments, divisions, processes, and so forth.

Risk Register: Setting up, creating new, and saving multiple Risk Registers. Users can create multiple Risk Registers where each Risk Register has multiple Risk Elements consisting of Causes of Risk, Consequences of Risk, Risk Mitigation Response, Risk Manager Assignments, Risk Category, Risk Status, Likelihood, Impact, Key Risk Indicators, Risk Dates (Creation, Edit, and Due Dates), Total $ Risk Levels, Residual $ Risk Levels, Mitigation Cost, and so forth.

Risk Dashboard: Users can create the following customized Risk Dashboard views complete with reports, data grids, charts, and visuals, where analysts can select from a specific G.O.P.A.D., Division, Risk Category, or Risk Dates.

Risk Dashboard – Risk Elements: View KRIs and Pareto charts. That is, generate visual charts on KRI scores across different segments and division of the organization over time.

Risk Dashboard – Risk Maps: View Risk Heat Maps of KRI counts across various risk categories, divisions, and segments over time.
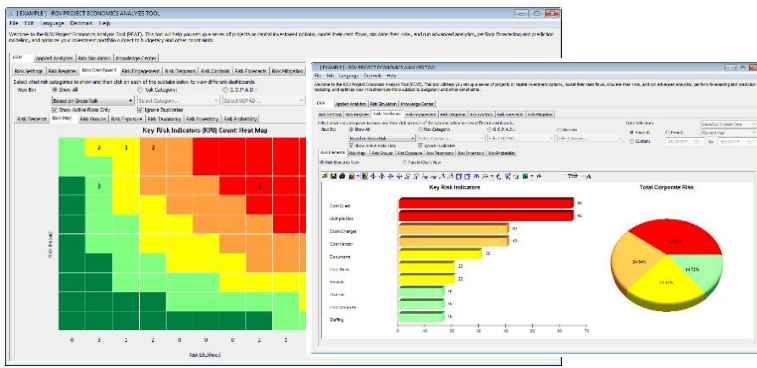
Risk Dashboard – Risk Groups: View Risk Accumulation by GOPAD.

Risk Dashboard – Risk Exposure: View risk dials and dashboards of the selected category versus the entire Company.

Risk Dashboard – Risk Taxonomy: View top-down and drill-down to see the structure of the corporation and its risk associations, versus a bottom-up view of how a specific risk permeates throughout the corporation.

Risk Dashboard – Risk Inventory: View results of SQL queries to obtain the customized risk profiles and risk reports by Division, GOPAD, Risk Category, Risk Dates, and so forth.

Risk Dashboard – Risk Probability: View PDF/CDF probability of a discrete risk event occurring or continuous risk amounts using historical experience.

Risk Engagement: Create multiple Risk Engagement projects where each of the following subsections has multiple Risk Elements: Pre-Engagement Risks, Engagement Risks, and Lessons Learned (Post-Engagement).

Risk Diagrams: Custom create Risk Diagrams with ready-made templates on Bowtie Hazard Diagrams, Cause and Effect Ishikawa Fishbone Diagrams, Drill-Down Diagrams, Influence Diagrams, Mind Maps, and Node Diagrams. Users can create multiple custom risk diagrams using this tool.

Risk Controls: Determine if a specific risk event is in-control or out-of-control… For instance, if the number of risk events such as a plant accident spikes within a certain time period, was that set of events considered expected under statistically normal circumstances or an outlier requiring more detailed analysis?

Risk Forecast: Use historical risk data and apply predictive modeling to forecast future states of risk, as well as Risk Tracking, Time Series Risk Forecasts, PDF/CDF Likelihood of Occurrence, Snapshots per period and over time. Using historical data or subject matter estimates, you can run forecast models on time-series or cross-sectional data by applying advanced forecast analytics such as ARIMA, Auto ARIMA, Auto Econometrics, Basic Econometrics, Cubic Splines, Fuzzy Logic, GARCH (8 variations), Exponential J Curves, Logistic S Curves, Markov Chains, Generalized Linear Models (Logit, Probit, and Tobit), Multivariate Regressions (Linear and Nonlinear), Neural Network, Stochastic Processes (Brownian Motion, Mean-Reversion, Jump-Diffusion), Time-Series Predictions, and Trendlines.
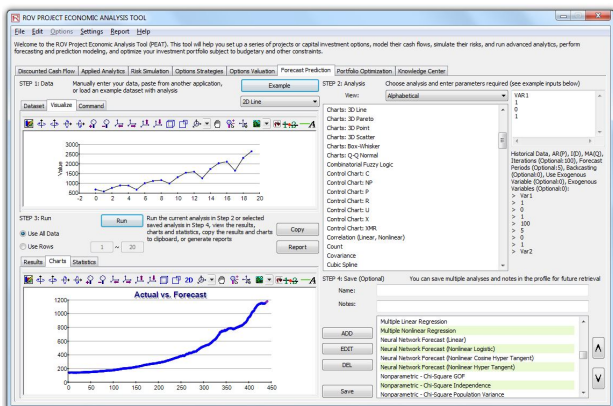

Risk Mitigation: Determine if a specific risk mitigation strategy or technique is working, at least statistically speaking… Collect data from before and after a risk mitigation strategy is implemented and determine if there is a statistically significant difference between the two.

Risk Applied Analytics: Run Tornado Analysis and Scenario Analysis. Tornado Analysis helps identify the critical success factors or which risk element contributes the most to the bottom line risk profile of the company (or risk segment) by statically perturbing each of the risk element's financial risk levels. Scenario Analysis helps create multiple risk scenarios of your current or total risk amounts of individual risk elements to determine the impact on the corporate risk profile and create scenario heat maps.

Methods include: 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.

Risk Simulation: Set Monte Carlo Risk Simulation Input Assumptions, Run and View Simulation Results, Compare and Overlay Simulation Results, Run Analysis of Alternatives, and Perform Dynamic Sensitivity. Methods include: Run simulations 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.

Knowledge Center: Quick Getting Started Guides and Videos. Knowledge Center has slides, training materials, and videos are all fully customizable.
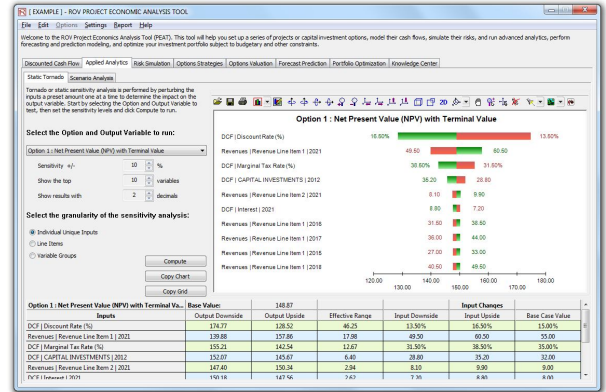
Risk Security: Data Encryption and Foreign System Support. The software comes with a 256-bit encryption protocols to encrypt your Risk Database and supports foreign decimal settings (e.g., USA settings for one thousand dollars and fifty cents is $1,000.50 versus a Latin American peso of P1.000,50 with interchangeable decimal and thousand separators).

Additional Advanced Modules: Multiple advanced analytical and decision analysis models accompany the PEAT software and complements the existing ERM module, including the Corporate Investment module, Project Management (Cost and Schedule Risk), and other relevant applications.