Practical Econometrics for Managerial Decision Making

INTRODUCTION

- This Practical Econometrics for Managerial Decision Making training seminar focuses on performing high-level multivariate econometric analysis using a range of business and economic data - with an emphasis on design, analysis, and drawing sound inferences to support strategic and operational decision-making. It's no longer specialty PhDs with $10,000 software packages doing high-end econometrics.
- This training course dispels all the myths and misconceptions about intuitive multivariate modeling and analysis, making it practical-accessible for all managers using inexpensive software applications that work within industry standard Excel spreadsheets.

This training seminar will highlight:

- Working with a range of multivariate models, variables, and statistical output
- Modeling and hypothesis design, variable-selection, and managing Big-Data
- Developing original research projects, relational hypotheses, and parameters for inferences
- Understanding benefits and costs of primary data vs. secondary data for research
- Use of cross-sectional, time-series, longitudinal, and pooled cross-sectional data sets
- Comparing original research output with published research results on various topics
- Critical review, analysis, and critique of research models, methods, and conclusions drawn

OBJECTIVES

At the end of this training seminar, you will learn to:

- Design-produce an original research study
- Collect and format various types of data
- Perform different models of multivariate econometric analyses
- Analyze detailed statistical output from econometric model-software
- Draw inferences to support high-level managerial decision-making
- Write a detailed, yet succinct, executive summary of research findings

TRAINING METHODOLOGY

- This training seminar will use an inductive reasoning approach for introducing new terms-concepts-models-methods, followed with highly interactive case-discussion, and small-group team case projects applied directly to the attendees' firms/organizations. The main focus is "hands-on" doing high level econometric modeling, analysis, and interpretation of statistical results.

ORGANISATIONAL IMPACT

- Attendees will have immediate Return-On-Investment (ROI) to their own firms / organizations by bringing those requisite skills, models, and research practices directly to their workplace and colleagues. The Return-On-Investment (ROI) is that attendees will be ready to demonstrate these tangible skills and competencies:
- Review, interpret, and critique existing/published econometric research studies
- Design and implement original econometric research for their firm, market, and industry
- Write high-level executive summaries with insights-inferences from econometric statistics
- Convert generic Big Data into actionable-intel that improves organizational performance

PERSONAL IMPACT

Attendees will further their own professional development by:

- Understanding key nuances, terminology, modeling of contemporary econometrics
- Gaining a new managerial mindset about "best practices" for applied business research
- Enhancing their use of formal and objective econometric models and statistical outputs
- Being able to objectively assess existing econometric studies' data, output, and conclusions
- Learning proactive forward-thinking approaches to managing Big Data toward research design
- Bringing practical common-sense econometrics to both in-house and client-facing projects

WHO SHOULD ATTEND?

This training course is suitable to a wide range of professionals but will greatly benefit:

- Research and Development / Product Development Teams looking for direct connections
- Business Development Staff looking to proactively open up new opportunities
- Financial Officers looking to design-execute original finance-accounting econometric research studies
- Revenue Officers looking to develop new forms and insights for marketing and competition research
- Board Members looking to fully monetize Big Data for the shareholders / stakeholders

Course Outline

Overview of Contemporary Econometrics and Decision Models

- Model Design, Hypotheses, Variables, Structure, Outcomes
- Quantitative and Qualitative Inputs
- Applications: From Wall Street to Marketing to Production to Consumer Behavior
- Software Options
- Linking Models and Confirmation Metrics

Understand Different Forms and Types of Research Data

- Cross Sectional Samples
- Time Series Sequences
- Longitudinal Tracking
- Pooled Cross Sectional Aggregation
- Primary Data Costs and Acquisition
- Secondary Data Costs and Acquisition
- Descriptive Outcomes vs. Predictive Outcomes
- Dummy Variables / Indicators / Surrogates

Model and Hypothesis Design as Keys to Managing Big Data

- Targeted Outcomes Determine Input Formations
- Single-Variable vs. Multi-Variable Descriptors and Predictors
- Punctuated Trending vs. Real-time Fluidity
- Static Formations vs. Dynamic-Changing-Active Learning Models
- Correlation and Association vs. Cause-And-Effect
- Building Real Models for Delegates' Firms, Industries, Markets

Designing Original Models for Your Firm, Competitive Market, and Industry

- Categorizing Decision Areas and Coordinating Data Availability
- Micro-economic vs. Macro-economic Decisions
- Indicators, Lagged Variables, Barometers / Bellwethers
- Running Several Rounds of Differing Regressions
- Managing Databases of Targeted Variables
- Problems of Multi-collinearity
- Problems of Auto-correlation

Presenting and Evaluating-Critiquing Original Econometric Findings

- Drawing Inferences Rather than Conclusions
- Caveats of Explaining Variance
- Individual and Team Presentations and Discussion-Interaction-Critique
- Confidence Intervals in Econometric Forecasts