



EMERGING ROLES FOR MANAGEMENT SCIENCE TOPICS IN STRATEGIC PLANNING

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OVERVIEW

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MAKING APPLICATION
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BACKGROUND

- ◆ Years of Teaching and Applying Management Science
- ◆ Recent Years of Teaching Strategy
- ◆ Strategy Texts Cover Finance, Marketing, Management, Some Operations, Some Information Technology, but No Overt Coverage of Management Science Topics

INTRODUCTION

- ◆ Looked for a Place for Management Science or Similar Topics that Could Aid in Strategic Planning
- ◆ Found the Balanced Scorecard was Suited for and Used in Strategic Planning
- ◆ The Balanced Scorecard was Devised by Robert Kaplan and David Norton and Described in the Harvard Business Review in Jan.-Feb. 1992

MANAGEMENT SCIENCE ROLE IN STRATEGIC ANALYSIS

- ◆ Assessment of Quantitative Impacts of Alternative Strategies
- ◆ Assessment of Interactions Among Performance Measures
- ◆ Assistance in Selection Among Alternative Strategies
- ◆ Resembles Multicriteria Decision Analysis

BALANCED SCORECARD

- ◆ Shows How Results are Achieved
- ◆ Uses Multiple Performance Measures such as:
 - Customer Satisfaction
 - Financial Impacts
 - Internal Operational Impacts
 - Innovation and Learning

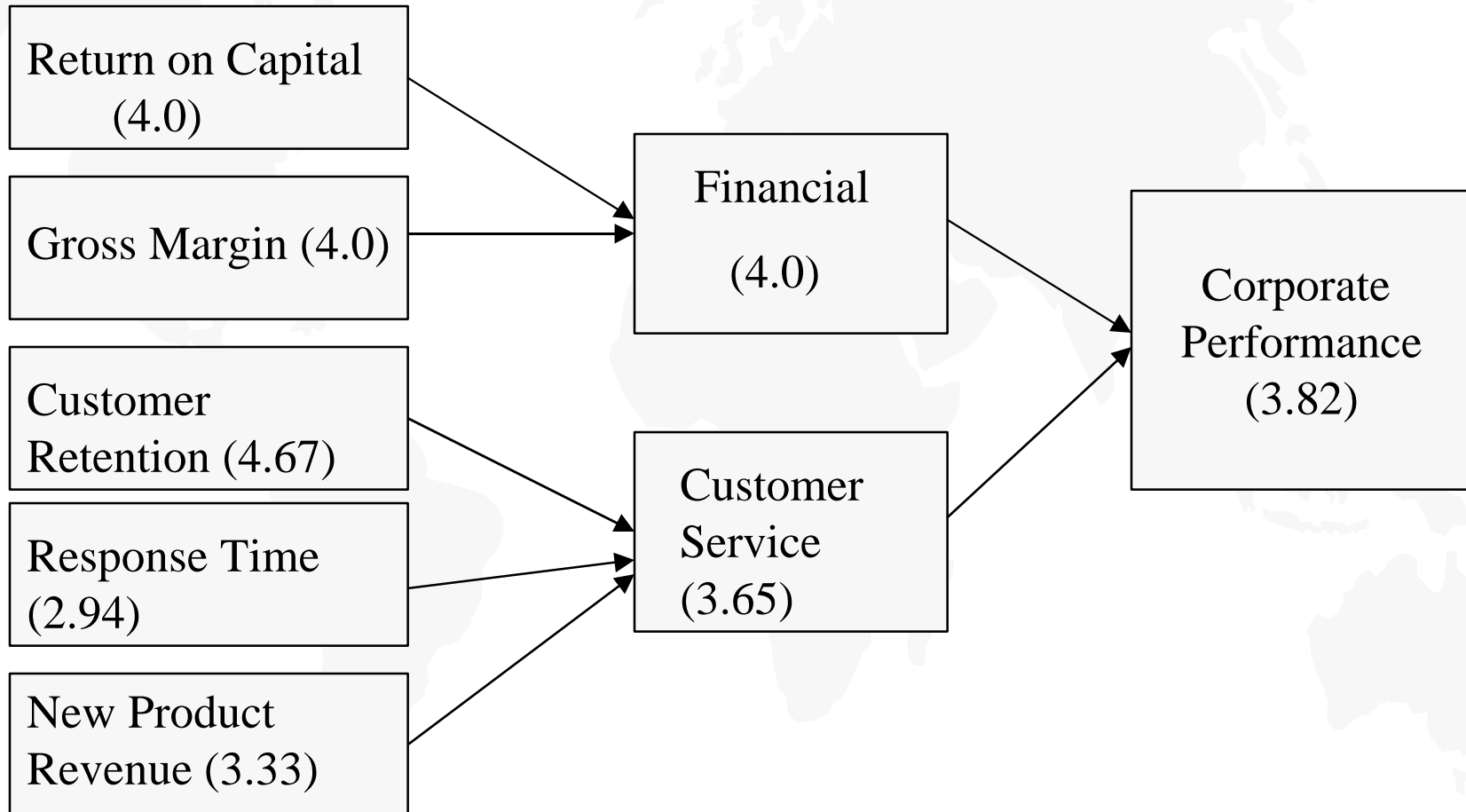
BALANCED SCORECARD AS A MULTICRITERIA DECISION MAKING APPLICATION

- ◆ A Hierarchy of Criteria are Constructed
- ◆ Performance Scales for Each Criterion are Determined
- ◆ At Each Level of the Hierarchy, Weights are Assessed for the Criteria
- ◆ Strategies are Evaluated and Compared

SOFTWARE FOR THE BALANCED SCORECARD

- ◆ Several Packages are Available
- ◆ CorVu's Balanced Scorecard was Provided by the Company for Research and Testing
- ◆ The Package Runs on a PC under Windows
- ◆ The CorVu Balanced Scorecard Can be Linked via Corvu's Servers and their Gateway Knowledge Library to Large Databases

APPLICATION EXAMPLE



FUTURE POTENTIAL



- ◆ Apply Multicriteria Decision Analysis Techniques within the Balanced Scorecard
 - Utility Function Evaluation
 - Use of Multiple Models
 - Risk Assessment
 - Tradeoff Evaluation