

LONG-RANGE FORECASTING

From Crystal Ball to Computer

J. SCOTT ARMSTRONG
Wharton School
University of Pennsylvania

Second Edition



A WILEY-INTERSCIENCE PUBLICATION

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Long-Range Forecasting, Second Edition, is the most practical, readable, and reliable book on forecasting in the social and management sciences. Like the first edition, which went into seven printings, it's based heavily on empirical studies, uses the same humorous style that won over so many readers, and shows you how to use the latest forecasting techniques to attain higher levels of accuracy. Research on forecasting has been growing rapidly, and this new edition incorporates it all. It's the best book to answer the questions: "Which forecasting method is best to use in a given situation?" and "What are the advantages and disadvantages for each method?"

Long-Range Forecasting, Second Edition, covers research in economics, sociology, psychology, transportation, education, and management, with references to medicine, weather, and technology. *Long-Range Forecasting* emphasizes the highly practical techniques, such as judgmental forecasting, that you use most often. It explains, in clear detail:

- How to structure a forecasting problem
- The strengths and weaknesses of the available forecasting methods
- How to evaluate forecasting systems
- How to get a new forecasting method accepted by your users
- How managers should use forecasts
- Ideas for future research—with suggestions on the kind of research that will have the biggest payoff.

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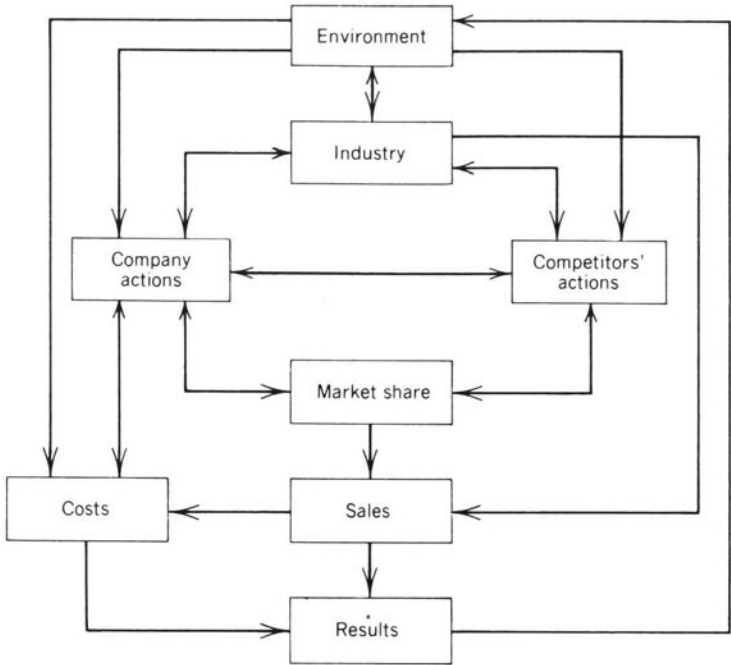
This revised and expanded edition combines the results from 350 new books and articles with 700 from the first edition. New selections include a discussion on the relationship between planning and forecasting, a synthesis of dramatic findings on the use of scenarios, a quantitative review of all empirical studies examining sophisticated approaches to extrapolation, some benchmarks for assessing forecast accuracy, and guidelines for auditing the forecasting process in an organization.

Long-Range Forecasting, Second Edition is easy and enjoyable to read, with aphorisms, poems, photos, and over 80 illustrations interspersed throughout the text. Researchers, managers, consultants, and students will appreciate author J. Scott Armstrong's guiding philosophy: "Who said scientific books had to be dull?"

About the author

J. Scott Armstrong is a Professor at the Wharton School, University of Pennsylvania. He is a founder of the International Institute of Forecasters, Editor of the *International Journal of Forecasting*, and a contributing editor to *Interfaces*. Dr. Armstrong, who received his PhD from the Sloan School of Management, has worked for Eastman Kodak, Polaroid, and Xerox. He has taught at the Stockholm School of Economics, the University of Hawaii, IMEDE (Switzerland), and Chulalongkorn University in Bangkok.

THE NEED FOR FORECASTS



Forecasting Audit Checklist

Topic Area	No	?	Yes
FORECASTING METHODS			
1. Forecast independent of top management?	—	—	—
2. Forecast used objective methods?	—	—	—
3. Structured techniques used to obtain judgments?	—	—	—
4. Least expensive experts used?	—	—	—
5. More than one method used to obtain forecasts?	—	—	—
6. Users understand the forecasting methods?	—	—	—
7. Forecasts free of judgmental revisions?	—	—	—
8. Separate documents prepared for plans and forecasts?	—	—	—
ASSUMPTIONS AND DATA			
9. Ample budget for analysis and presentation of data?	—	—	—
10. Central data bank exists?	—	—	—
11. Least expensive macroeconomic forecasts used?	—	—	—
UNCERTAINTY			
12. Upper and lower bounds provided?	—	—	—
13. Quantitative analysis of previous accuracy?	—	—	—
14. Forecasts prepared for alternative futures?	—	—	—
15. Arguments listed <i>against</i> each forecast?	—	—	—
COSTS			
16. Amount spent on forecasting reasonable?	—	—	—