

# J. Scott Armstrong

## ANNUAL SUMMARY OF ACTIVITIES

Jan. 1 to Dec. 31, 2005  
(Prepared on January 26, 2006)

The latest copy of my resume can be found at <http://jscottarmstrong.com>.

### 1. PUBLICATIONS AND RESEARCH REPORTS

(Copies are provided in full-text at <http://jscottarmstrong.com>)

#### a. Scholarly Refereed Journal Articles published in calendar year:

J. Scott Armstrong, Fred Collopy and J. Thomas Yokum, "Decomposition by Causal Forces: A Procedure for Forecasting Complex Time Series," *International Journal of Forecasting*, 21, 25-36.

J. Scott Armstrong, "The Forecasting Canon: Nine Generalizations to Improve Forecast Accuracy," *Foresight: The International Journal of Applied Forecasting*, 1 (1), June, 29-35.

Kesten C. Green & J. Scott Armstrong, "The War in Iraq: Should we have Expected Better Forecasts?" in *Foresight: The International Journal of Applied Forecasting*, 1 (October), 50-52.

#### b. Books

None

#### c. Other Articles published in calendar year

None

#### d. Manuscripts Under Review as of December 2005

"Incompatible Measures of "Statistical Significance: P's and  $\alpha$ 's,"  
(with Raymond Hubbard), *Journal of Marketing Education* (forthcoming)

"Competitor-oriented Objectives: The Myth of Market Share," (with Kesten Green), *International Journal of Business* (forthcoming).

"Index Methods for Forecasting: An Application to American Presidential Elections (with Alfred Cuzàn), *Foresight: The International Journal of Applied Forecasting* (forthcoming).

"Demand Forecasting: Evidence-based Methods," in *Strategic Marketing Management: A Business Process Approach*, edited by Luiz Moutinho and Geoff Southern (forthcoming)

"Replication Research in Marketing Revisited: A Note on a Disturbing Trend," (with Evanschitzky, Baumgarth & Hubbard).

"Value of Expertise for Forecasting Decisions in Conflicts" (with Kesten Green).

"Structured Analogies in Forecasting" (with Kesten Green).

"Significance Tests Harm Progress in Forecasting"

#### e. Working papers

"Findings from Evidence-based Forecasting: Methods for Reducing Forecast Error"

**f. Papers/Books in process**

"Making Progress in Forecasting" (with Robert Fildes)

"Combining Methods to Forecast Presidential Elections," (with Alfred Cuzàn and Randall Jones)

*Persuasive Advertising* (for Palgrave Macmillan; scheduled for 2007 if all goes quickly)

**2. ACADEMIC ACTIVITIES**

**a. Reviewing and editing:**

*Demography, Foresight The International Journal of Applied Forecasting, International Journal of Forecasting (3), Journal of the Academy of Marketing Science (3), Journal of Behavioral Decision Making, Journal of Marketing Research*

**b. Academic Presentations made in calendar year:**

Keynote Address: "Do we need more research on forecasting or do we need to use what we know?" National Business and Economic Society Annual Meeting, Key West, FL. March 10, 2005.

Keynote Address: "Progress in Forecasting: 1981 to 2005 and Beyond," International Symposium on Forecasting, San Antonio, June 13, 2005.

Keynote Address: "Evidence-based Methods for Predicting Decisions," at the Predictive Analysis Workshop, McLean, VA. December 2, 2005.

"Observations on Rule-based Forecasting," International Symposium on Forecasting, San Antonio, June 14, 2005

"The Pollyvote: The Combination Principle in Forecasting Applied to the 2004 Presidential Election," with Alfred Cuzàn & Randall Jones. International Symposium on Forecasting, San Antonio, June 15, 2005

"Findings from Evidence-based Forecasting," University of Otago, July 21, 2005.

"Persuasive Advertising: New! Hear About Astounding Research Findings!!!! (Adults Only)," University of Otago, July 22, 2005

"Persuasive Advertising," University of Auckland, July 26, 2005

"Improving Predictive Accuracy," Sherman Kent School (CIA), Maryland, September 20, 2005

"Evidence-based Skill Learning," College of Business and Economics, Ashland University, Ashland, OH, November 3, 2005.

**c. Service to the Department, School and Community:**

### **Forecasting Principles Web Site** (<http://forecastingprinciples.com>).

I maintain the forecasting principles site, which summarizes all useful knowledge in forecasting. The annual traffic was 87,000 visits, up 17% from the previous year. The site is listed #1 of 32 million sites generated under the Google search query "forecasting," as well as being first on most other search engines. Improvements were made to the site in 2005, in particular to the Forecasting Audit (which led to an increase in visits to this page from 1,300 in 2004 to 3,500 in 2005) and to the Forecasting Methodology and Selection Trees (each of which drew over 20,000 visits in 2005).

### **Marketing Department Homepage** (<http://jscottarmstrong.com>)

There were 13,000 visits to my homepage for 2005, up 21% from 2004.

### **ELMAR contributions**

I wrote 7 essays for ELMAR in 2005. They are provided in full text near the bottom of my homepage (<http://jscottarmstrong.com>). The most important essay was "Does Formal Strategic Planning Really Help?" on March 16.

### **Pro bono Consulting**

I spent a day on a project for the Center for Global Development in Washington, D.C. The focus was on procedures for forecasting the need for drugs in developing countries (a Bill Gates initiative).

### **Committees**

Served on Vice Provost's Library Select Faculty Advisory Committee.

### **Visiting Professor**

Visiting Distinguished Professor, University of Otago Business School, Dunedin, New Zealand, July 2005.

## **3. RESEARCH CONTENT**

### **Research Effort**

As in the previous four years, most of my effort has been devoted to my forthcoming book, now titled *Persuasive Advertising* (Palgrave-Macmillan). Work on this book will continue to be my major activity this coming year. Drafts are available upon request.

Much of my research effort goes into the [forecastingprinciples.com](http://forecastingprinciples.com) and [advertisingprinciples.com](http://advertisingprinciples.com) web sites.

### **Findings**

*Decomposition by causal forces:* In "Decomposition by Causal Forces: A Procedure for Forecasting Complex Time Series," I, along with Collopy and Yokum, proposed extrapolation by causal forces. We then tested 12 annual time series for automobile accidents, airline accidents, personal computer sales, airline revenues, and cigarette production. The length of these series ranged from 16 years for airline revenues to 56 years for highway safety data. We made forecasts for one to ten horizons, obtaining 800 forecasts through successive updating. For nine series in which the conditions were completely or partially

met, the Median Absolute Percentage Error was reduced by more than half. For three series in which the conditions were not met, decomposition by causal forces had little effect on accuracy.

## **Impact**

*Citations in journals:* The past year yielded a new high for my citations. Using all spellings of my name, with self-citations excluded, the *Science Citation Index* reported approximately 216 first-authored paper citations. This preliminary estimate, made January 23, represents an increase of about 4% over the citations at the same time last year (208).

*Citations in books:* A search on Amazon for “j scott armstrong” yielded 48 (cumulative) references to my research (self-references excluded) versus 35 in 2004, an increase of 37%.

### *Readership of books:*

- *Principles of Forecasting* continues to sell at a moderate rate
- *Long-Range Forecasting* (1985). Received royalties of \$5,700 for reprinting of chapters. There were 5,400 views of the full-text version at forecastingprinciples.com, representing an increase of 8% over 2004.

### *Web-site cites* (as of January 16, 2006):

- A Google analysis using “j scott armstrong” (with key words to omit cites not related to my research) turned up 421 unique sites and 21,500 total sites (a 4-fold increase in total sites since 2004). Focusing on research (by including “research” in the above search) yielded 385 web sites, and increase of 12% over last year.
- Google Scholar now lists 392 items relevant to my research. This is up from 178 at the start of 2005.
- RePEc: 243 of my publications are listed on RePEc; this puts me in 20<sup>th</sup> out of over 8,000 authors listed. In 2005, there were 10,300 abstract views and 3,700 downloads of my papers; these are each in the top 2% of the researchers listed on RePEc.
- My research was ranked first in 35 areas in Google searches (Exhibit 1).

### *Extension*

An extension of my Panalba study was conducted in Piquero, N.L., Tibbetts, S.G., Blankenship, M.B. (2005), “Examining the role of differential association and techniques of neutralization in explaining corporate crime,” *Deviant Behavior* 26 (2), 159-188.

### *Awards and recognition*

*Principles of Forecasting* was selected as the “Favorite book on forecasting” by academics and practitioners associated with the International Institute of Forecasters.

“Recognition for Forecasting Accuracy: politicalforecasting.com,” *Foresight: The International Journal of Applied Forecasting*, 1 (1), June, pp. 51-52.

**Media coverage of my research:**

*Manyworlds.com*, which is targeted to practitioners, has reviewed 21 of my research studies to date (up from 17 in 2004). They provide managerial summaries of research. As of January 26, I was ranked 7<sup>th</sup> out of 4,400 authors on their "Influence Index." The rankings vary through the year; my highest rank was 3<sup>rd</sup> on June 3, 2005.

The *Boston Globe* and other newspapers discussed my findings on peer review.

**4. TEACHING****Demonstrated learning**

I post samples of student projects on my websites. These provide evidence of learning.

**Advertising Principles Web Site (<http://advertisingprinciples.com>)**

I have maintained the AdPrin site for six years as a resource to students, practitioners, and researchers. Traffic for the year was 14,000, up about 8% from 2004. It is ranked first among 25 million sites using a Google search for "advertising" and "principles."

**Educational Materials**

As a service to students and faculty, I have been putting descriptions of techniques on my home page. My plan for the coming year is to put more of my teaching/learning materials online.

## Exhibit 1

### Top-Ranked Web Sites by categories (alphabetical order) (January 16, 2006)

This exhibit lists those categories were my research was ranked first in a Google Search.

<b>Ranked first</b>	<b>Total Sites</b>
advertising & principles	26,200,000
analogies & forecasting	74,700
“asymmetric errors” & forecasting	75
“business school” & prestige	267,000
“causal forces”	22,300
“combining forecasts”	13,600
“competitor orientation”	530
“competitor-oriented objectives“	90
conflict & forecasting	1,720,000
“consumer behavior” & prediction	78,400
“error measures” forecasting	13,000
“escalation bias”	220
expert systems & forecasting	247,000
extrapolation & forecasting	210,000
forecasting	32,400,000
“forecasting audit”	470
“forecasting dictionary”	350
“formal planning” & evaluation	56,000
intentions & forecasting	337,000
“intentions to purchase”	12,500
“judgmental adjustments” & forecasts	370
“judgmental decomposition”	70
“judgmental bootstrapping”	141
“learner responsibility”	970
“long-range forecasting”	50,100
“monetary incentives” & surveys	90,000
“multiple hypotheses” & management	16,000
“Relative Absolute Error” & forecasting	143
“return postage” & surveys	53,500
“role-playing” & forecasting	350,000
rule-based & forecasting	160,000
“social irresponsibility” & management	929
“simulated interaction” & forecasting	175
“structured analogies”	163