

J. Scott Armstrong

ANNUAL SUMMARY OF ACTIVITIES

Jan. 1 to Dec. 31, 2004

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:

"Damped Seasonality Factors: Introduction," *International Journal of Forecasting*, 20, 2004, 525-527. This was the "Introduction" to a Special Section that I organized for the IJF. It reports on a significant advance in forecasting by Miller and Williams. It consists also of a main paper, five commentaries (two with additional analyses) by eight authors, and a response by Miller and Williams.

"Does an Academic Research Paper Contain Useful Knowledge? No ($p < .05$)," *Australian Marketing Journal*, 12 (2), 2004, 62-63.

"Forecasting and Planning," (with Robert Fildes) in Adam Kuper and Jessica Kuper (eds), *The Social Science Encyclopedia*, Routledge: London and New York.

b. Books

c. Other Articles published in calendar year

"Answers to Frequently Asked Questions (FAQ) in Forecasting," with Fred Collopy and Kesten C. Green – substantially revised and published on the Internet at forecastingprinciples.com. This is one of my most frequently read papers. The article has attracted 26,000 readers to date.

"Are MBAs Really Learning How to Do Things?" Letter to the Editor, *Wall Street Journal*, Oct 11, 2004. I received many letters and email, almost all of which thanked me for writing this letter.

"Improving Learning at Universities: Who is Responsible?" *University of Pennsylvania Almanac*, Vol. 51, No. 15, p. 12, December 14, 2004. This was an invited article on how to solve the problem discussed in my *Wall Street Journal* letter.

d. Manuscripts Under Review as of December 2004

"Decomposition by Causal Forces: A Procedure for Forecasting Complex Time Series," (with Fred Collopy and J. Thomas Yokum) forthcoming in the *International Journal of Forecasting*.

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

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

“Incompatible Measures of “Statistical Significance”: P’s and α ’s,”
(with Raymond Hubbard).

2. ACADEMIC ACTIVITIES

a. Reviewing and editing:

Interfaces (1)
International Journal of Forecasting (3)
Journal of the Academy of Marketing Science (2)
Journal of Behavioral Decision Making (1)
Journal of Economic Education (1)
Journal of Forecasting (1)
Journal of Marketing Research (1)
Marketing Science (1)

b. Academic Presentations made in calendar year:

1. “Long-term Economic Forecasting: A Causal Model” (with Dennis Ahlburg),
Symposium on Global Income Growth, Stockholm, January 8.
2. “Important Findings about Advertising and Why they are Ignored – So Far,”
Manchester Business School, May 12.
3. “Structured Analogies for Forecasting, Manchester Business School, May 25.
4. “Structured Analogies for Forecasting: A Test Using Conflict Situations,” Murcia,
Spain, European Marketing Association, May 19.
5. “How to Use Experts to Forecast in the War on Terrorism,” International Symposium
on Forecasting, Sydney, Australia, July 5.
6. “Long-term Economic Forecasting: A Causal Model” (with Dennis Ahlburg),
Sydney, Australia, July 6.
7. “It’s All About Principles: The Design of advertisingprinciples.com” Presented at the
MERLOT International Conference, in Costa Mesa, California (In full text at
advertisingprinciples.com), August 4.
8. “How to Use Experts to Forecast Decisions in Organizational Conflicts,” Keynote
Talk at the Second international Conference on Organizational Foresight, Glasgow,
Scotland, August 26.
9. “How to Forecast Decisions in Conflicts,” Sherman Kent School for Intelligence
Analysis, Washington, D.C. (September 17).
10. “How to Make Sense of Intelligence About People Who Don’t Seem to Make
Sense,” CIA, Langley, Virginia (September 17).

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

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

I maintain the forecasting principles site, which summarizes all useful knowledge in forecasting. The annual traffic in the calendar year 2004 was 74,000 visits, up 32% from 2003. (This does not count the Special interest groups which had traffic well over 100,000 thanks especially to pollyvote.com.) The site is ranked #1 of 6,020,000 sites generated under the search query “forecasting” on Google. It is also first on most other search engines. The following improvements were made to the site in 2004:

1. Improved versions of the Delphi Software,
2. Improved versions of the Forecasting Audit,
3. Developed Interactive "Methodology Tree,"
4. Developed Interactive "Selection Trees,"
5. Updated Forecasting FAQ, with Kesten Green,
6. Added Neural Nets Special Interest Group with Sven Crone, and the
7. Helped to create the Political Forecasting Special Interest Group (a.k.a. Pollyvote.com) with Alfred Cuzán and Randy Jones. This site was designed to demonstrate the value of combining forecasts by forecasting the 2004 presidential election. The “pollyvote” proved to be more accurate than any other method, missing by only 0.2% for the actual outcome. The site, launched in April 2004, attracted 91,000 visits.

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

There were 10,700 visits to my homepage in 2004, up 4% from the previous year.

ELMAR contributions

I wrote 13 essays for ELMAR in 2004. My essays are provided in full text near the bottom of my homepage (<http://jscottarmstrong.com>). The most important essay was “How to improve service quality and satisfaction.”

Committees

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

Visiting Professor

Simon Honorary Visiting Professor, Manchester Business School, May 2004.

3. RESEARCH CONTENT

Research Effort

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

Much of my research effort goes into my web sites, forecastingprinciples.com and advertisingprinciples.com

Findings

I was the editor of a Special Section on the use of “Damped Seasonal Factors.” In my judgment, this research by Miller and Williams represents a major advance in forecasting. Damped seasonal factors reduced forecast errors by about four percent.

Impact

Citations in journals: Last year was my best year for citations according to the *Science Citation Index*. Using all spellings of my name, with self-citations excluded, I had 208 first-authored paper citations. (This is a preliminary estimate, as the ISI counts are not completed until later in the year. Updated full-year counts are usually about 10% higher.)

Citations in books: Amazon publishes full-text searches for many recently published books. A search for “j scott armstrong” yielded 35 (cumulative) references to my research (self-references excluded) versus 17 in the previous year.

Readership of books

- *Principles of Forecasting* is selling at a reasonable pace despite its outrageous price of \$250 for the hardback.
- *Long-Range Forecasting* (1985). Received royalties of \$4,000 for reprinting of chapters. There were 5,000 views of the full-text version at forecastingprinciples.com, a 43% increase over the previous year.

Reviews of my research

Highly favorable reviews of my *Principles of Forecasting* book were published in

- the *Journal of Forecasting*, 23 (2004), 233-235, and online at
- Manywords.com on February 15, 2004.

(These was the 28th and 29th reviews of that book).

Our *Interfaces* paper “Reaping the Benefits from Management Research” got an excellent review in the *International Journal of Forecasting*, 20 (2004), 740-741.

Extensions of my research

- “Repairing Tom Swift’s Electric Factor Analysis Machine,” *Understanding Statistics*, 2 (1), 13-43. This paper attempts to resolve issues with exploratory factor analysis that were raised in my 1967 Tom Swift paper.”

Web-site cites: (as of February 1, 2004)

- A Google analysis using “j scott armstrong” (with key words to omit cites not related to my research) turned up 431 unique sites (out of 5,120 total), an increase of 16% over a year earlier (and a 3-fold increase in total sites). Focusing on my research contributions (by including “research” in the search) produced 343 unique sites.
- I conducted Google searches for my research areas (Exhibit 1). My research was ranked first in 38 areas (up from 21 from last year).
- Reaping Benefits from Management Research: Lessons from the Forecasting Principles Project" was named a July 2004 "New Hot Paper" on the *ISI Essential Science Indicators* web site. Every two months, *ISI Essential Science Indicators* lists what it calls "hot papers in science." The papers are among the top one-tenth of one percent (0.1%) for citations in a recent bimonthly period. Papers are selected in each of 22 fields of science and must have been published within the last two years.

Award

International Journal of Forecasting Outstanding Paper Award 2004: Armstrong, Morwitz and Kumar (2001) was named as one of four outstanding papers published in the *International Journal of Forecasting* during the period 2000-2001.

Media coverage of my research:

Manyworld.com has reviewed 17 of my research studies to date. They provide managerial summaries of research. For example, they posted my “Don’t Do SWOT” on their homepage for about two months. They list me as one of their “Thought Leaders.” At one point I was third on their list of about 3,800 authors. I am currently ranked 9th on their “Influence Index.”

My work or scientific baffle gab was mentioned in the *Wichita Eagle* (Oct 21), *Akron Beacon* (Nov 16), and in a Florida paper.

Our work on the Pollyvote during the 2004 U.S. Presidential election received media coverage (e.g., *Financial Times* of Germany, *Philadelphia Inquirer*, and a number of smaller media.

4. TEACHING

I continue to improve my teaching materials, and to make them more easily accessible to my students and others. I receive thank-you messages from faculty members for making these materials available to them.

Demonstrated learning

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

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

I have maintained this AdPrin site for five years as a resource to my advertising students and to others. One of the objectives is to organize research on persuasion in order to aid further research. Traffic for the year was 12,900, down about 4% from the previous year. A Spanish translation was made available on May 1.

The AdPrin site received the MERLOT award as the best online learning resource in the area of business and management for 2004. It ranks second among 5.4 million sites using a Google search for “advertising” and “principles.”

Educational Materials

As a service to students, I have put descriptions of techniques on my home page (See “Educational Materials at <http://jscottarmstrong.com>). This page had about 4,000 visits during the year, which was slightly above the previous year.

February 3, 2005

Exhibit 1

Categories Where Armstrong has the Top-Ranked Web Site (as of February 1, 2005)

This exhibit lists those categories where my research was ranked first in a Google Search. The total number of sites is approximate, with no adjustments for repeats. The shaded areas are ones where my co-authors and I have coined the terms.

<u>Ranked first</u>	<u>Total Sites</u>
<i>Forecasting</i>	
analogies & forecasting	17,300
answers to forecasting questions	291,000
asymmetric errors	850
bootstrapping & forecasting	15,700
“causal forces”	7,400
“combining forecasts”	4,300
conflict & forecasting	370,000
“consumer behavior” & prediction	21,900
decomposition & forecasting	113,000
“error measures” forecasting	3,860
expert systems & forecasting	61,300
extrapolation & forecasting	5,200
forecasting	5,970,000
“forecasting audit”	210
“forecasting dictionary”	540
“game theory” & forecasting	62,000
intentions & forecasting	90,000
“intentions to purchase”	3,700
“judgmental adjustments” & forecasts	260
“judgmental decomposition”	5,500
“judgmental bootstrapping”	120
“long-range forecasting”	16,200
political forecasting”	980
“Relative Absolute Error” & forecasting	108
“role-playing” & forecasting	15,300
rule-based & forecasting	30,800
“simulated interaction” & forecasting”	70
“structured analogies”	120
“terrorism forecasting”	250
<i>Planning</i>	
“competitor orientation”	670
“competitor-oriented objectives”	26
“escalation bias”	150
“formal planning” & evaluation	8,700
<i>Other</i>	
“learner responsibility”	890
“multiple hypotheses” & management	5,100
“peer review” & marketing	427,000
“return postage” & surveys	6,200
“writing management reports”	240

