Never Put Profit At Risk

Analysis of ROI for Pharmaceutical Promotion: Executive Summary

A Study Conducted by Dick R. Wittink, PhD

Analysis of Return on investment (ROI) for Pharmaceutical Promotion (ARPP) was an independent study conducted by Dr. Dick Wittink (General George Rogers Clark Professor of Management and Marketing, Yale School of Management). The study was conducted under an unrestricted educational grant from the Association of Medical Publications (AMP). The results were presented to pharmaceutical industry marketing, advertising, media, and publishing executives on Sept. 18, 2002.

Dr. Wittink is an expert in customer-focused marketing strategies, customer satisfaction, and loyalty and model-building for marketing decisions. Guidance and direction for the study was provided by a steering committee that included representatives from four major pharmaceutical companies: Wyeth, GlaxoSmithKline, Novartis, and Bayer. These steering committee members were also officers of either the Pharmaceutical Marketing Research Group or the Pharmaceutical Management Science Association, the two leading pharmaceutical industry research groups.

The data used for the study was provided directly to Dr. Wittink by Scott-Levin, now Verispan, (detailing, direct-to consumer, *etc*) and PERQ/HCI (Journal Advertising). The AMP did not have possession of, nor access to, the data supplied to Dr. Wittink.

What were the study objectives?

The objectives of ARPP were to follow up on an earlier study conducted by Dr. Scott Neslin (Amos Tuck School of Business, Dartmouth College). Dr. Neslin's study measured the ROI of four major industry promotional tactics: advertising in medical publications, detailing, DTC, and physician meetings and events for the period 1995 to 1999. The ARPP study modified the earlier study by including:

- Data for 2000, providing additional observations for analysis.
- Revised brand revenue categories to $25 to $100 million, $100 to $500 million, and $500 million plus to more closely reflect market realities.
- Measurements of the average marginal ROIs for three therapeutic categories: arthritis, asthma, and hypertension.

Table 1

Journal advertising ROIs for the average brand in each revenue/launch year cell

Revenue level (in million)	**Year of launch**		
	< 1994	**1994-1997**	**1998-2000**
$25-100	$6.2	$6.7	$7.2
$100-500	$2.3	$3.1	$4.2
$500 +	$3.1	$6.2	$12.2

Data from ARPP Study.

Table 2

Detailing ROIs for average brand in each revenue/launch year cell

Revenue level (million)	**Year of launch**		
	< 1994	**1994-1997**	**1998-2000**
$25-100	$0.9	$1.0	$1.0
$100-500	$1.2	$1.6	$2.1
$500 +	$3.1	$5.9	$11.6

Data from ARPP Study.

Table 3

DTC advertising ROIs for the average brand in each revenue/launch year cell

Revenue level (in million)	**Year of launch**		
	< 1994	**1994-1997**	**1998-2000**
$25-100	$0.0	$0.0	$0.0
$100-500	$0.1	$0.2	$0.2
$500 +	$0.4	$0.7	$1.3

Data from ARPP Study.

Table 4

Physician meetings and events ROIs for the average brand in each revenue/launch year cell

Revenue level (in million)	**Year of launch**		
	< 1994	**1994-1997**	**1998-2000**
$25-100	$0.1	$0.1	$0.1
$100-500	$2.0	$2.7	$3.6
$500 +	$3.1	$6.0	$11.7

Data from ARPP Study.

What was the overall approach?

- The study used historical data and was, therefore, a retrospective analysis as opposed to an experimental design.
- It analyzed the data using regression analysis, a widely-used statistical technique utilized by business, the social sciences, and the biological and physical sciences.
- It measured the average marginal ROI (incremental return on investment) of the last dollar spent on promotional tactic.
- It evaluated the data in aggregate for average brands based on their brand revenue categories and launch years (< 1994, 1994-1997, 1998-2000).

ARPP evaluated 392 branded drugs with revenues of $25 million or more for the time period 1995-2000, which yields a total of 21,436 observations for analysis.

What were the overall results?

Results are shown for the average brand in a revenue level/launch year cell. The average brand represents the results only for those brands that spent money on that tactic during the study period.

The average marginal ROI is not a report card on an individual tactic indicating whether the tactic works or doesn't. The average marginal ROI can be interpreted as an indication of overspending (overutilization) or underspending (underutilization) on a tactic.

An average marginal ROI of close to or less than $1 indicates overspending. If there had been less spending on that tactic, a higher average marginal ROI would most likely have been generated. The higher the average marginal ROI rises above $1, the greater the level of underspending for that tactic. If the spending level had been higher, a lower average marginal ROI would most likely have resulted.

The average marginal ROI results for average brands in each revenue/launch year cell are shown in Tables 1 to 4.

What conclusions can be drawn?

Based on these average marginal ROI results for the 392 brands, it can be concluded that all four promotional tactics work, but there are opportunities to increase the efficiency of the spending for each tactic.

The results suggest that:

- There is overspending in DTC advertising.
- Due to underspending, additional resources could be allocated to physician meetings and events, detailing, and advertising in medical publications for brands ≥ $500 million launched after 1997.
- Very positive returns could be obtained by allocating additional resources to advertising in medical publications for medium brands between $100 and $500 million, and especially small brands between $25 and $100 million.

Can the results be divided by therapeutic class?

The ARPP analysis also included the results for three therapeutic classes that were part of the analysis. The results were as follows:

- ***Arthritis***—Advertising in medical publications had the highest average marginal ROI at $5.5, followed by detailing at $1.9, physician meetings and events at $0.2, and DTC advertising at $0.1.
- ***Asthma***—Advertising in medical publications had an exceptionally high average marginal ROI of $15.6. The average marginal ROI for detailing was $1.4, for physician meetings and events $0.7, and for DTC advertising $0.1.
- ***Hypertension***—The detailing average marginal ROI was $3.0, followed by advertising in medical publications with a $2.5 average marginal ROI, physician meetings and events with $1.3, and DTC advertising with $0.1. CPM

Diane Harri, CEO Americas
Euro RSCG Life

Before assuming her role as CEO Americas for Euro RSCG Life, Diane Harri was responsible for the LM&P Group Euro RSCG and Managed EDGE. In her new position, Diane will assume responsibility for all of the network's operating units in the Americas.

Diane joined LM&P in 1988, when the Canadian operation had just opened in Montreal. She soon became managing director and, by 1995, LM&P Canada had developed into one of the top five health-care agencies, serving clients, such as Abbott, Novartis, Pfizer, Wyeth, and Procter & Gamble.

In 1996, Diane was promoted to executive vice-president, director of client services of LM&P in New York City. In this capacity, she played an instrumental role in expanding the agency's roster of accounts, both with U.S. and global brand assignments.

In October 1997, Diane was named president of LM&P. By focusing growth efforts specifically on "big pharma," LM&P has moved up the rankings of health-care agencies to become the 10th largest in the U.S. with capitalized billings of over $470 million. As LM&P expanded to include four agencies in the U.S., Diane's responsibilities expanded accordingly. Key clients now include Aventis, Novartis, Pharmacia, Pfizer, and Wyeth.

Diane originally came to LM&P from the client side, as she began her career in pharmaceutical sales and marketing with Ayerst Canada (now Wyeth). She received her Bachelor of Commerce degree (honours) with a marketing major from the University of Manitoba.

Diane and her husband Gordon reside in Manhattan and proudly call New York home.