Developments in Business Simulation & Experiential Exercises, Volume 12, 1985

USING THE COMPUTER AS A PLANNING AID
IN AN APPLIED MARKETING COURSE

Richard Kagel, Brigham Young University

ABSTRACT

Instructors teaching in applied areas, such as marketing planning and strategy, continually look for new techniques that simulate an actual business environment. The case study method is the traditional model used to make the subject matter as professionally realistic as possible.

An applied area that we teach is media planning and strategy. We use the traditional case study method. We remain convinced that no other approach provides as good a learning environment for this complex subject. Students in our course must deal with the many planning variables that make up an advertising media plan. Most of these, such as, the reach and frequency goals of an effective strategy, require a great many mathematical calculations that are, normally in professional settings, handled by computers. The computer, in media planning, has created a mini-Industry devoted to analyzing, restructuring and modeling the information provided by syndicated research companies. These service organizations, such as Telmar, Interactive Marketing Systems (IMS), and Marketronics, are becoming very important to media planners.

We struggled with the task of introducing the use of the computer to our students as a media planning aid, as it might be available in professional settings. We asked the media service companies for help in terms of on-line computer time. The response was that if we were willing to pay like regular clients, they would accommodate us. Of course, the costs involved precluded following this line any further. We then inquired about the possibility of companies helping us set up our own system on microcomputers. The answer was no, because of the protected nature of the simulations used in media modeling.

We then looked at the possibility of finding published software that would provide the models needed to give our students the hands-on experience that would simulate actual media planning activities. We would be willing to buy the computers to match the software. There was no published software to be found.

The only reasonable alternative left was to buy our own microcomputer and program it ourselves. This has proved to be a highly satisfactory solution. We now have the capacity to tailor-write computer programs to match the specifications of our case studies. Writing programs is hard work, involving long hours, but we feel that we have made a successful start. The students seem to respond well to generating their own marketing data and we may even have added some new interest to an old teaching method. At least the students are using the computer in a similar way that professional media planners would. This alone seems to justify the time and expense involved in the course development process.

For a copy of an example case and the accompanying computer listing, write to:

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The following case is one example we have developed to provide students with as realistic learning experience as possible. The case objectives were to have students buy newspaper space for a client based on specified marketing and media goals and to teach the use of four media planning variables: unduplicated reach, circulations, cost per thousand (CPM), and newspaper coverage.

These four terms were defined in textbooks available to students. In laboratory classes, the use of the computer was taught and students were able to generate the information they felt most important in making the marketing decisions. The complete case and computer listing follows. The program was written on a Radio Shack Model III in TRS-DOS Basic and can be adapted easily for use on other microcomputers.

**DOWNEY SAVINGS AND LOAN NEWSPAPER MEDIA CASE**

Downey Savings and Loan, founded in 1945, is a statewide association with 25 offices in Southern California and has 20 offices in the San Francisco Bay Area. Assets are currently $1.3 billion. The company has been steadily growing and this coming fiscal year management hopes to boost assets by 5 percent.

Currently, Downey has an advertising budget for the Bay Area of $350,000: 50% radio, 25% direct mail, and 15% outdoor. The advertising budget will be increased to $400,000 in order to introduce newspapers into the media mix. $140,000 of the budget will be used strictly for newspapers. The company hopes that this amount will adequately cover the bay area market where the 20 offices are located. The target consumer is similar to Downeys prime competitor, Home Savings and Loan. Downeys Bay Area locations are: East San Jose (3), San Jose (2), San Francisco (2), Oakland (2), Berkeley (1), Palo Alto (2), Hayward (1), Fremont (1), Antioch (1), Walnut Creek (1), Concord (1), Livermore (1), Martinez (1), Milpitas (1), Richmond (1), Sunnyvale (2), San Mateo (2), Redwood City (2), Menlo Park (1), Cupertino (1).

Management has decided that the size of the ads would be the same in each location (½ page or 1050 lines). Downeys sales department has also indicated that the major thrust of business over the years has occurred during the months of September/October, December/ January, March/April, June/July, especially the last and first 10 days between these months, i.e., (20th of September through the 10th of October).

**Your Assignment:**

Budget the $140,000D to determine what buys would give the best coverage of each segment of the market. Determine the relative importance of coverage (reach), audience duplication and cost per thousand. Use the computer assistance program to help you make this determination. Include your printouts with the final report. Get a map of the Bay Area and determine where the offices are, relative to media coverage. (Use the most recent Standard Rate and Data Service edition available).

Determine the demographic/psychographic profile of the Downey customer using the Simmons Market Research Bureau data in the library. Use the case study format provided. Other possible sources include U.S. Census Data and SIC and Marketing Management Survey of Buying Power. For Monday, turn in a type written report listing the Bay Area newspapers you would want to consider in the campaign, including circulation, coverage cost per 1D50 lines. This will be used for your computer assisted analysis.
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5. Total Expenditure for Each Newspaper

<table>
<thead>
<tr>
<th>Newspaper Name</th>
<th>Budget Allocated</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Daily Reporter</td>
<td>$00,000</td>
<td></td>
</tr>
<tr>
<td>b)</td>
<td>$00,000</td>
<td></td>
</tr>
<tr>
<td>c)</td>
<td>$00,000</td>
<td></td>
</tr>
<tr>
<td>d)</td>
<td>$00,000</td>
<td></td>
</tr>
<tr>
<td>e)</td>
<td>$00,000</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$120,000</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

6. Price Paid per Individual Ad Based ( ) Lines

<table>
<thead>
<tr>
<th>Newspaper Name</th>
<th>Morning or Evening</th>
<th>Sunday Paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Daily Reporter</td>
<td>Morning</td>
<td>$0000.00</td>
</tr>
<tr>
<td></td>
<td>Minimal</td>
<td>$00.00</td>
</tr>
<tr>
<td></td>
<td>$0000.00</td>
<td>Minimal</td>
</tr>
<tr>
<td>b) Daily Babble</td>
<td>Morning &amp; Evening</td>
<td>No Buy</td>
</tr>
<tr>
<td></td>
<td>$0000.00</td>
<td>Minimal</td>
</tr>
<tr>
<td>c) Daily Shadow</td>
<td>Evening</td>
<td>$0000.00</td>
</tr>
<tr>
<td></td>
<td>Minimal</td>
<td>$00.00</td>
</tr>
<tr>
<td>d) Daily Tempest</td>
<td>Morning &amp; Evening</td>
<td>$0000.00</td>
</tr>
<tr>
<td></td>
<td>Minimal</td>
<td>$00.00</td>
</tr>
</tbody>
</table>

7. Flow Chart
The purpose is to give a graphic description of media buy.

B. Monthly Budget Summary
List monthly summary of newspaper expenditures. Give information about each paper including:
A) number of insertions
B) sub-total of budget allocation year-to-date
C) percent budget allocation

9. Appendix
Computer summaries

SAMPLE PRINTOUT OF COMPUTER PROGRAM
RICHARD KAGEL 04/08/83 02:32:46
565-B9-7B90

COMPUTER ASSISTED PROJECT FOR DOWNEY SAVINGS AND LOAN CASE

<table>
<thead>
<tr>
<th>Newspaper</th>
<th>Circ.</th>
<th>Coverage</th>
<th>Cost/per 1050 Lines</th>
<th>CPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAMPLE NEWS</td>
<td>35000</td>
<td>34</td>
<td>456.76</td>
<td>13.05</td>
</tr>
<tr>
<td>DAILY WIT</td>
<td>3549</td>
<td>35</td>
<td>343.67</td>
<td>97.40</td>
</tr>
<tr>
<td>EX POST FACTO</td>
<td>25000</td>
<td>25</td>
<td>356.73</td>
<td>14.27</td>
</tr>
</tbody>
</table>

ESTIMATED UNDuplicated REACH:
Unduplicated reach for 3 newspapers in BAY AREA: 67.83
Verified in my presence,
HAL the computer
REFERENCES


2. Represents, through statistics the probabilities of a percentage of the homes or people with a media vehicle, usually over a four week period.

reach % of vehicle A + (plus) reach % of vehicle B

(-) minus

reach % of vehicle A x (times) reach % vehicle B

combined reach of vehicles A and B


3. The audience size of a newspaper is commonly measured in terms of the number of copies distributed per issue. This number, which is called circulation, includes all copies delivered to subscribers as well as those bought at newsstands or from other sellers. From Roger D. Wimmer and Joseph R. Dominick, Mass Media Research, An Introduction, (Belmont, CA: Wadsworth Publishing Co., 1983), 305.

4. Cost per Thousand (CPM) is a device for comparing media and is normally calculated on a weighted basis by media planners.

\[
CPM = \frac{\text{cost} \times \text{times}}{1000} \times \text{circulation}
\]


6. From case material developed by Dennis Martin, Brigham Young University.