The Marketing Carnival

by Beheruz N. Sethna, University of West Georgia

At the student research competition of the National Social Sciences Association, a student whose team won first prize for a paper from "The Marketing Carnival" course opened her presentation as follows: "Each of you in the audience, put yourself in the role of a manager who is interested in introducing a new product or an innovative change in an existing product. Those who believe that it is very necessary to collect data from consumers before you do so, raise your hands." She paused. Almost all hands went up.

"Now, each of you put yourself in the role of a consumer who is asked to complete one more questionnaire. How many of you would like to do that?" Almost no hands went up.

"This is the dilemma managers face," she continued. "They need consumer data, and yet consumers have no desire to fill in more questionnaires. Wouldn't it be great if there was a way of collecting data in which consumers would actually enjoy participating? That's what this course helped us do; the methodology generated a great sample size and good data that led to meaningful managerial conclusions."

Remarkably enough, all student research papers, graduate and undergraduate, were judged together at the national competition—and still this undergraduate team won the national award for its marketing research project. (In future years, graduate research will be judged separately.) Also quite remarkable is the fact that none of the students on this team were business students—and none of them had taken a business course before this "Marketing Carnival" class. The course has no prerequisites beyond "a spirit of inquiry, independent work, and individual initiative."

Students working with clients develop a research brief and questionnaire. In the typical marketing, consumer behavior, or marketing research course, data collection methodology involves the administration of mail or telephone questionnaires by several teams to essentially the same population. In a university town, this method sometimes leads to the same members of the community being interviewed by different teams for different projects.

This innovation uses a different approach. Student teams set up stalls or booths (as in a carnival) that represent new ideas or concepts. Visitors to the fair go to each stall, and play games of skill or chance to win prizes. In the process of doing so, they reveal information, knowingly, about their preferences, which is recorded by the students. Statistical analysis is then performed on the data, and reports are presented orally and in writing to the class and to the client.

The students' photos shown here are for a project on TCBY. The client wanted to know pricing and flavor preferences, and this team developed some innovative games to collect data. This method of data collection, similar to a mall-intercept, admittedly has the limitation of not being based on a random sample, which is more serious for an academic research publication than for a client who needs a working solution to a pressing practical problem. However, the positive aspects of the carnival methodology led to respondent enjoyment and larger sample sizes. To the best of the author's knowledge, the marketing carnival approach used in this course since 1987-1988 is quite unique in the U.S. Student projects from this course have led to actual implementation of recommendations and considerable client praise in New York, Texas, and Georgia; from local banks; national restaurants and food chains such as Arby's, Burger King, CiCi's Pizza, McDonald's, Papa John's Pizza, Pizza

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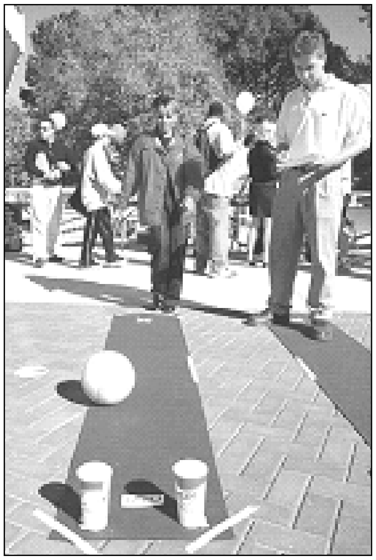

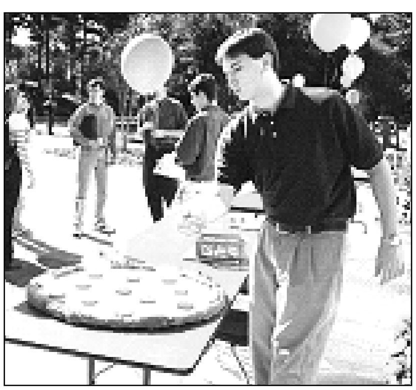

This innovative class uses a carnival approach to data collection. Games such as bowling, putt-putt and "pizza roulette" have led to respondent enjoyment and larger sample sizes.

Hut, TCBY; athletic facilities such as Gold's Gym; local movie theatres; soda bottlers such as Coke and Pepsi; local grocery stores; local television stations; university enterprises such as the bookstore and food services; and for student entrepreneurs themselves, such as a student in the course who wanted to start a laundry service. As an illustration of the students' enthusiasm and innovative thinking, some examples of Marketing Carnival games are mentioned here.

In past years, a game was played to test the feasibility of a laundry service for students (a team member was an entrepreneur himself, and also the client). Students played a "bean-bag" toss through holes representing their preferences (the cutouts were shaped like a washing machine representing doing your own laundry, and a truck representing a pick-up service). In another project, participants expressed their preferences for three television stations by a "nerf" basketball throw. Others indicated preferences for grocery stores by playing a computer game that was programmed just for this purpose; they tossed rings at plastic soda bottles to express preferences for soda; they threw darts and balls to record preferences for fast food restaurants; and so on. Respondents spun a wooden pizza to estimate pizza prices for CiCi's Pizza and did a bean toss to record frequency of visit to CiCi's.

The principles of marketing research are preserved (except for the random sample). For example, the alternatives are equally difficult (often rotated to reduce position bias) to ensure that respondents tried to hit or knock down the one which best represented their views. Respondents state their intention before they actually play the game, so that the appropriate response is recorded regardless of the quality of the respondent's aim. Respondents who succeed in knocking down the cans, or throwing balls into holes or bags, or otherwise demonstrating their skills, earn prizes, most of which are contributed by the clients. For example, Papa John's contributed pizzas for completing all four games in their research project and a grand prize of free pizza though a drawing. McDonald's actually printed special coupons for prizes for their research project. Similar prizes were donated by Arby's, Pizza Hut, the local movie theater, and others. The cost of these prizes was minimal relative to the research results obtained, and the distribution of their products led to increased exposure and publicity.

It is important to note that, although the games are an enjoyable way to collect data, the results are rigorous and defensible. Analytical methods include hypothesis testing, chi-square tests, correlations, and regressions. The success of the teams in university and national research competitions indicates that the work stands the test of external scrutiny.

Discussion

There are no class prerequisites for this course, which can be taken from freshman through senior year. In fact, one of the best research projects (aside from the one mentioned above) to emerge from this course came from a largely freshman team. That team was a finalist in the university-wide competition, and demonstrated very significant merit. This course has been taught over a 17-year period (not taught every year) at three different AASCB (I) accredited business schools in New York, Texas, and Georgia.

Major educational objectives of the approach

1. To provide majors and non-majors the ability to develop research skills and apply creative solutions to business problems.

2. To provide students with a method that involves the collection of usable marketing research data though the playing of games in a carnival-type atmosphere, thus meeting multiple objectives: (a) providing an enjoyable method of data collection, (b) providing a method that can be used for collection of data from children, and (c) providing a method that can be

used without much translation, in multiple languages and cultures.

3. To provide a means of giving non-majors and "undecideds" experience (very different from a survey course) with the ways of thinking and doing of the business world and discipline, thus facilitating their own business awareness should they continue in their non-business fields, and/or their movement into a business discipline should that become their modified desire.

Innovative and unique features of the approach

Data collection method: After students, working with the client, develop a research brief and questionnaire, instead of the typical data collection methodology which would involve the administration of mail or telephone questionnaires by several teams to essentially the same population, this innovation uses a different approach. Student teams set up stalls or booths (as in a carnival) with games representing clients' questions, ideas, or concepts. Visitors to the fair go to each stall and play games of skill or chance to win prizes. In the process of doing so, they reveal information (knowingly) about their preferences, which is recorded by the students. Statistical analysis is then performed on the data and reports are presented orally and in writing to the class and to the client. The data collection admittedly is not based on a random sample (as is true for mall-intercepts as well), a limitation more serious for an academic research publication than for a client who needs a working solution to a pressing practical problem. However, the positive aspects of the carnival methodology lead to respondent enjoyment and larger sample sizes.

Prerequisites: "A spirit of inquiry, independent work, and individual initiative"—period. No course prerequisites exist; yet, students complete research that is of sufficient quality to be recognized in university-wide and national student research competitions.

Student status and majors: Freshmen through senior (occasionally graduate), with majors from chemistry, mathematics, and any field including business.

Pace of the course: The first part of the course consists of a series of fast-paced lectures on business, marketing, and marketing research, and tests on knowledge of concepts, facts, and analytical methods. Then, the approach changes to one that is project-based and relies on student initiative and student-driven learning. They apply their knowledge to devise creative ways to collect data on a business problem, analyze data using SPSS, develop defensible conclusions, prepare a written report and a presentation, and recommend actions to the client.

Client relationships: Students work with clients to define their needs, develop a list of questions to be answered, and present their results. Projects have led to actual implementation of recommendations and considerable client praise in three states (mentioned earlier).

Organization: The course is organized into parts, with appropriate role changes for the instructor. Part 1 consists of two and a half weeks of lectures and case studies to bring students up to speed on core knowledge on marketing principles. Part 2 includes six weeks of research principles and statistics. Half-way through the semester the Marketing Carnival is held, during which 250-500 usable responses are obtained to help answer the entire set of client-specified questions. Part 3 starts just after that, with the role of the instructor shifting from teacher to guide and coach, as the students analyze the data and prepare their final oral and written presentations.

Interim reports: There are six graded interim reports due during the semester that ensure that students are continuously on track. In addition, a complete draft of the final report (or any interim report) is optional. If submitted, it is thoroughly reviewed but no grade is assigned.

Presentation: WebCT is used for communication of the course syllabus, outline, expectations, philosophy, several handouts, and grades. E-mail is used extensively for assistance at almost any reasonable hour, for review of drafts, and for answering of questions. In addition, face-to-face help sessions for individuals and project groups add to the enrichment of the learning experience.

Evaluation methods:

- evaluations at mid-term and at the end of the semester,
- evaluations by alumni (sometimes years after graduation) and by business clients,
- assessment of student learning using output and outcome indicators,
- external review of research papers written by students in the course (optional), and
- submission to, and success in, national student research competitions (optional).

Course Content

Based on significant experience in the corporate world in multinational marketing companies, and in higher education, the author believes that there is a critical need to prepare students to handle multiple competencies, sometimes in a compressed time frame. The course content reflects this reasoning through the following content dimensions:

- marketing principles,
- research and questionnaire design, construction, and implementation,
- statistical concepts and tools including descriptive statistics, hypothesis testing, chi-square, correlations, and regression,
- data analysis using SPSS, which is also taught during the course,
- planning and writing of a report, and
- oral and written presentations to the client and the class.

Organization

WebCT is used to help organize the course. Individual tests ensure that each student can demonstrate sufficient competence in the required content areas (marketing principles, research, and statistics), so that s/he may be a contributing member of the team. Class participation is the only other individual component of the course. Students are graded on the other components as a research team. The set of 5 percent assignments are significant milestones and checkpoints in the project. They serve to keep the students on track and on task, to provide multiple opportunities for feedback and mid-course correction, and to lead to an excellent final product. Un-graded optional opportunities exist to submit drafts of any report, particularly the final one.

Presentation

The presentation of the games is discussed above and is not repeated here. The course uses WebCT for the course syllabus, outline, expectations, philosophy, several handouts and exercises, immediate feedback and grades, and other items. Extensive use of e-mail for assistance during and (way) outside of regular hours, review of drafts, answering of questions, and the like, and personal face-to-face help sessions, make for an enriched learning experience. A series of exercises and handouts have been developed to enable the student to learn the concepts in a tight time-frame. These include:

- mini-case studies developed by the author—some based on first-hand actual industry experience and others on secondary research,
- handouts and exercises demonstrating the quantitative and the qualitative concepts discussed in class,
- spreadsheets with canned formulae to assist the student in understanding statistical tools, and
- sample presentations that show the final product (a sample of where they are headed) and sample questionnaires that might help teams as they design their own research and reports.

Effectiveness and specific benefits of the approach to the learning process

Effectiveness measures must tie into the course objectives: (1) to develop research skills and apply creative solutions to business problems; (2) to develop and use a data collection method that generates usable marketing research data which is enjoyable for the respondent to provide; and (3) to develop in non-majors and "undecideds" an awareness of the ways of knowing of the business world and discipline.

Evaluation methods include mid-term evaluations, end-of semester evaluations, post-course evaluations, alumni evaluations, feedback from clients, assessment of student learning, external review of research papers written by students in the course, and entry in national competitions. The last two are not required components of the course, but student teams have chosen to participate because of their pride in their work. Written and detailed feedback from course alumni, and results of quantitative and formal student-teacher evaluations are available. In the analysis of effectiveness, it is beneficial to examine outputs and outcomes. Output indicators include:

- exceptionally high student-teacher evaluations in the standardized university evaluations—often 5.0 on a 5-point scale and very favorable written comments,
- similar high scores and comments on special Honors College evaluations, and
- election by students of the instructor as honors professor of the Year.

Outcome Indicators: Assessment literature states that outcome indicators are even more important than output indicators. The rules of this competition place emphasis on "the demonstrated effect it (the course) has had" (emphasis added). Outcome indicators for this course follow.

- Satisfied clients in three states in banking, restaurants, fast food, retailing services, and a variety of consumer industries have shown that student teams have provided actual usable conclusions and recommendations. Many have returned in subsequent years with requests for new projects.
- At a university which does exceptionally well in national student research competitions, two research projects in the past few years have been finalists in the annual university-wide competition and one has won it. A project was selected for presentation at the National Collegiate Honors Council (which accepts fewer than 100 papers from honors students across America and has an acceptance rate of 10 percent). A paper has been accepted for presentation at the National Council for Undergraduate Research (NCUR). One student team has won the First Prize for student research at the National Social Science Association.
- In addition to marketing and business majors, students who have taken this course include majors in math, chemistry, international affairs, and several non-business fields. Each has developed a solid understanding of the "ways of knowing" and "ways of doing" in the business world.
- Alumni feedback includes exceptionally high praise for the course, and descriptions of how the course has proved useful in other courses, in graduate school, and in the "real" world.
- Pre- /Post-assessment shows significant increases in the content dimensions. Since the vast majority of students have never taken marketing, marketing research, statistics, or even business courses before, any demonstration of competency in these areas in tests, class participation, or written and oral reports indicates significant value added directly attributable to this course.

Transferability

This approach has been successfully used at three different AACSB-I accredited business Schools. The universities

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dent variables that are independent of each other and that are known or can be controlled (like a budget, or dosage of a chemical, etc.). This template provides a quick look at the data and I will leave the choice of the forecasting model up to each professor. I thought that showing this simple template (available as always through the DSI website) might help your students to investigate independence before they just shove all the data into a computerized forecasting model. ■

Excel file discussed in article is available from the Decision Line Web site at www.decisionsciences.org/decisionline.

r^2	Sales(k)	Budget ($k)
Sales(k)	100.00%	94.05%
Budget ($k)	94.05%	100.00%
# Stores	18.93%	4.27%

Figure 3: Colinearity removed from data.

	A	B	C	D	E	F
1	r^2 Table (Coefficient of Determination)					
2	Sales(k) Independent Variables					
3	r^2	Median Price	Year	Retail ($M)	Tourism ($M	GCP/Cap ($k)
4	Median Price	100.00%	77.08%	85.29%	71.30%	79.37%
5	Year	77.08%	100.00%	97.52%	94.65%	96.81%
6	Retail ($M)	85.29%	~~**97.52%**~~	100.00%	95.54%	98.85%
7	Tourism ($M)	71.30%	~~**94.65%**~~	~~**95.54%**~~	100.00%	96.49%
8	GCP/Cap ($k)	79.37%	~~**96.81%**~~	~~**98.85%**~~	~~**96.49%**~~	100.00%
15						
16		Y	X1	X2	X3	X4
17		Median Price	Year	Retail ($M)	Tourism ($M)	GCP/Cap ($k)
18		$211.0	1993	$3.9	$77.3	$28.1
19		$206.6	1994	$4.3	$89.7	$28.8
20		$199.9	1995	$4.4	$83.9	$29.9
21		$205.7	1996	$4.6	$85.6	$31.1
22		$219.3	1997	$4.9	$99.5	$33.9
23		$233.8	1998	$5.2	$101.2	$36.6
24		$255.0	1999	$5.9	$114.7	$42.8
25		$295.1	2000	$6.5	$126.4	$47.0
26		$322.6	2001	$6.8	$125.5	$50.2
27		$372.4	2002	$7.2	$128.1	$52.6
28		$462.5	2003	$7.7	$132.1	$55.0
29		$587.8	2004	$8.3	$138.9	$57.4

Figure 4: Median house price data for Ventura County.

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(in states as diverse as New York, Texas, and Georgia) at which successful implementation has already occurred, have included vastly differing characteristics: a private university in a rural setting with a residential, traditional-aged student body; a public university in an urban setting with a largely commuter, non-traditional student body in the business school; and a public university in a rural setting with a majority (~80 percent) of traditional students in the undergraduate body, but with a substantial number of non-traditional students at both levels.

Furthermore, the sizes of these institutions varied from under 3,000 to over 10,000 students, while the character of these institutions included those with heavy engineering roots to one with very traditional liberal-arts and teacher education roots. Among the universities were a national doctoral/research university and two Masters I (comprehensive) universities. This approach has been used successfully in honors courses and non-honors courses. So it is fair to say that significant transferability has been demonstrated across institutions, and indeed significantly different types of institutions and settings.

In each of these situations, course objectives have been demonstrably met for students and clients, non-majors and undecided students have gained a working knowledge of the "ways of knowing" and the "ways of doing," and majors have experienced exciting applications of the knowledge in their field. ■