References

Broder, J.M., and J.E. Houston. 1986. "Employer Assessments of Graduates," NACTA Journal 30:18-22.

Cobia, David W. "Incorporating Writing in Agricultural Courses," NACTA Journal. June 1986, pp. 22-25. 3-(2).

Dale, Edgar. Audio Visual Methods in Teaching. 3rd Ed. The Ohio State University, 1969.

Magill, Becky. "Communication Skills Top Employers' Wanted Lists." Spectrum, North Dakota State University, May 14, 1982, p. 1.

Recruitment Strategy With A Detailed Marketing Plan

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Abstract

Because of an advisor's role in developing competitive marketing plans as part of the National Agri Marketing for student competition and the need for the same process in the marketing of post-secondary education, the author received a single quarter leave to investigate how a marketing plan could be developed for an individual department or major. The research identified and noted as part of the leave included a product profile, competitive positioning, target market analysis, and promotional alternatives.

Declining enrollment at institutions of higher education has become a well-established trend. This is particularly true with regard to colleges which offer agricultural programs. In an attempt to reverse this trend, many institutions have initiated efforts to incorporate marketing techniques to assist in the area of student recruitment and then student support areas.

Several papers in the NACTA Journal have reported progress in incorporating marketing techniques. Schuster and Castantino (9) have conducted market research with regard to the student enrollment decisions at Virginia Tech. Betts and Newcomb (1) report on high ability students' perceptions of agricultural study in Ohio. Mollet and Leslie (6) have established a demographic profile of beginning animal science students at the University of Missouri. Drueckhammer and Key (4) have undertaken product evaluation of educational programs at Oklahoma State University. Each of these papers deals with a marketing concept applied to education.

A single quarter leave taken by the author in the summer of 1984 offered the opportunity to explore how business concepts of marketing could be incorporated in the educational sphere. A small grant through the University of Minnesota offered financial assistance in this effort. The major products of this leave were an industry verification of educational objectives in a sabbatical program, a perceptual analysis of competitive institutions made by employees of students, a survey of target markets for student enrollment, and the development of a marketing plan and several accompanying strategies.

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The marketing plan focused on an existing major at the University of Minnesota Technical College, Waseca, which had recently been part of a curriculum review to add an option area. The marketing plan is based on a strategy of growth in the agribusiness sales and marketing program.

Kotler (5) demonstrates how a marketing plan can be assembled with reference to education. The steps are as follows:

- (1) Situation analysis (background, normal forecast)
- (2) Opportunities and Threats
- (3) Objectives and Analysis (includes selecting a target market)
- (4) Marketing Strategy
- (5) Action Steps
- (6) Budgets to Accomplish the Above Steps
- (7) Evaluation of Marketing Plan

The paper will follow this outline in reporting the research undertaken in 1984. Kotler (5) suggests that institutions must react to changes in several environments: macroenvironment (including outside forces, such as the economy); a public environment (public image of institution); market environment (such as potential students); and an internal environment (faculty and curriculum). A marketing plan must address all of these environments at the college level. At the department or major level, Kotler suggests that large universities which have different locations need to do strategic planning at each branch, since each has different threats and opportunities. This is extended for the purpose of this paper to the individual program, or major. The treatment of the major is similar to that of the management of a product in an industrial setting. It may well be that the program will need to be marketed to new enrollees to insure graduation of these individuals. Schuster and Castantino (9) found that about 29.9% of the group sampled at Virginia Tech made their career choice while in college. The following section addresses the situation facing the college and its environments.

Situation Analysis

Macroenvironment:

The University of Minnesota Technical College at Waseca is a public, two-year postsecondary collegiate institution with a single mission of providing midmanagement technical education for rural homes and businesses.

- 1. UMW is dependent on state funding for a large share of its budget.
- UMW is in an area of Minnesota with a relatively stable rural population. Most students in the past have come from a radius of 75-100 miles.
- 3. The rural agricultural economy is in the depths of a severe downturn or recession with many farms currently being threatened.
- 4. Technology continues to develop in products of agriculture and its service industries.

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Public Environment:

UMW seems to have a good reputation in its immediate service area, based on informal feedback from a variety of sources. It must continue to reinforce its image as a college after its transition from an agricultural secondary institute in 1971. The media has shown an adequate coverage of college events and student achievements. In the academic area, the North Central accreditation team for colleges and universities granted full re-accreditation for the college.

- 1. The image of UMW as a branch of the University of Minnesota is a positive factor in establishing a quality instruction.
- 2. The involvement of faculty and administration with many public and private organizations assists in furthering its image.
- 3. The existence of a parents' organization helps to provide the necessary feedback for student-related issues.
- 4. The most serious event in the college's history was its near-closing in 1973 due to funding cutbacks. This event must continually be explained in terms of the possibility of public misunderstanding.
- 5. An alumni organization is in place and progressing in terms of participation.

Competitive Environment:

The groups and institutions that compete for attention, participation, and loyalty are as follows:

- 1. Other educational institutions including:
 - a. Four-year public colleges and universities
 - b. Four-year private colleges
 - c. Two-year community colleges
 - d. Two-year Area Vocational Technical Institutes
 - e. Other private groups offering educational services such as farm organizations, farm management and marketing groups, and local cooperatives.
- 2. Nonprofit organizations featuring educational displays such as Farmamerica.
- 3. Community education departments of local school districts.

Market Environment:

The market environment consists of students, both prospective and current, donors, suppliers, and marketing intermediaries.

- 1. Student numbers in the traditional age-group attending postsecondary institutions has fallen since 1980.
- 2. Educational participation by nontraditional students (those who do not fit the age criteria of current students) is increasing.
- An active fund drive for donors has increased college resources. Some gifts are being received by various departments. The nature

- of the economy suggests some stabilization will occur in the near-future.
- 4. Marketing intermediaries continue to be high school counselors and teachers (vo-ag, business, and home economics) for the traditional age group as well as referral agencies such as the Minnesota Department of Employment Security, Veterans Affairs, welfare office, local industries, USDA and Department of Education (foreign students), adult vo-ag, Agricultural Extension Service, and others. These have become contact points in determining the existence of students.

Internal Environment:

This consists of administration, staff, and faculty—with these broad forces making up the respective environments. A situation analysis will now focus on the agricultural business division and one of its current majors.

Sales and Marketing Major

Threats and Opportunities

The situation analysis implies trends in the environments, implications of trends, and significant threats and opportunities.

- 1. In the market environment, the number of students in the traditional high school pool has dropped and is projected to continue dropping into 1990.
- 2. In the public environment, the agricultural image of the college does not strongly associate with agricultural business careers.
- 3. The local community has a better association with the ag business department due to extensive involvement in business projects.
- 4. The number of job opportunities in sales of ag products and services is increasing nationally at a rate of at least 5,000 new jobs per year. Many of these jobs are due to new technology and/or shifts in the marketing system.
- 5. In the public environment, the value of a degree is declining as (a) more people possess degrees, and (b) knowledge requirements become more specific.
- 6. In the macroenvironment, the current depressed state of the ag economy will impact some jobs in agribusiness.
- 7. In the macroenvironment, the changes in technology of selling and the economics of selling will eventually dictate a smaller number of sales and greater number of personnel involved in the sales process.
- 8. In the competitive environment, stronger competition will be experienced by the sales and marketing programs in selected Agricultural Vocational Technical Institutes (AVTI) and community colleges. However, some attrition in programs at these level

- could provide a stronger market position for surviving institutions.
- 9. In the competitive environment, UMW sales and marketing is a high cost program relative to its competition in AVTI's. Students seem cost-conscious. UMW, however, enjoys an advantage over lengthier programs due to the time/cost relationship.
- 10. In the internal environment, UMW sales and marketing seems to be attracting a high level of students in terms of academic qualifications relative to other institutions.
- 11. In the internal environment, UMW ag business faculty have good depth of experience in their respective fields.
- 12. In the market environment, UMW as an open enrollment institution is positioned to receive students who do not fit academically into other programs.
- 13. Staffing levels must be maintained to address the student numbers currently available.
- 14. In the market environment, it appears that the sales and marketing major is positioned to be attractive to students with career plan shifts out of production agriculture. A recent Strategy for Focus confirmed the appropriateness of this program.

Objectives and Analysis

The enrollment goal of the Ag Sales and Marketing Program is to enroll 10 new students. The goal in finance option is to maintain a base of 8 to 10 students pending stabilization in financial institutions. The trend in enrollment is as follows:

1980	1981	1982	1983	1984	1985	1986
10	11	14	15	12	16	20*

The student behavioral goals are to: (1) prepare students for careers in ag sales and marketing (including finance); (2) prepare students for leadership in general citizenship, and (3) prepare students with necessary skills for living in a modern society.

An academic portfolio analysis was conducted by evaluating needed skills in agricultural sales. The results showed that greater communication skills, ability to deal with new technology, strengthening of general business skills, and a high level of student motivation were needed by employers. The curriculum is being revised to address these changes.

Market Strategies

The process of developing a market strategy consists of the following steps:

- 1. Define and choose a target market(s).
- 2. Choose a course of action in approaching that market(s). This consists of growth or no growth each with several alternatives.
- 3. Establish a basis for a specific marketing program. This consists of strategies for product, price, promotion, and distribution.

Our market strategy consists of focusing on (a) tar-

get markets, (b) a proposed marketing mix, and (c) a market expenditure and promotion program.

The key market variables selected in defining target markets are:

- Age traditional population (18 years); nontraditional (greater than 19 years, including senior citizens)
- 2. Previous education in family greater participation will stem from greater acceptability in family. A recent article cited parents as a major factor in choice of institution (9).
- 3. Location a gravity model seems to apply with greatest numbers in a nearby radius.
- 4. Farm or rural background some exposure to the career area seems to be a motivating factor except for careers in Food Science and Biochemistry (4).
- 5. Success in classes in public speaking, vo-ag or business — previous development of people skills builds the desire for a career dealing with people. Junior Achievement and other sales experience for high school groups may also provide this incentive.
- 6. Income educational participation is higher with higher levels of income.
- 7. Occupational emphasis.
- 8. Family life-cycle.
- Score on standardized aptitute test, verbal skills
- 10. Academic ability bottom 40%; middle 40%; top 20%.

These key variables as applied to a marketing strategy would involve choosing the meaningful variables. First of all, age would separate the traditional from the non-traditional group. In the traditional group, the most significant variables appear to be location, rural residence, previous family education, participation in ag organizations, stage of verbal skills, high academic ability (middle 40%), indication of vocational preference (high school counselors).

A survey of recent enrollees identified high school activities, work experience, and self-motivation as key factors in choosing ag sales.

Competitive Positioning Strategy

Using these variables describing the target market, it is now imperative that a positioning statement be made. The major, Ag Sales and Marketing, is to be positioned by means of (1) an image map and (2) with regard to general features of other programs. It appears that the main competition is with regard to selected AVTI programs, community colleges, and other technical programs in agriculture. Conceptually, the ag sales and marketing major fits as follows:

- 1. Four-year programs in Ag Business:
 - University of Minnesota Institute of Agriculture
 - Other (Southwest State University, Mankato State University, Iowa State University)

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- 2. Two-year programs:
 - Mankato AVTI Ag Business
 - Austin AVTI Sales
 - Willmar AVTI Ag Business
 - Albert Lea AVTI Business Management
 - Faribault AVTI Business Management
 - Detroit Lakes AVTI Sales (one year)
 - Hennepin AVTI Ag Sales
 - Alexandria AVTI Banking and Finance
 - Pipestone AVTI Ag Banking
 - Minneapolis Community College Sales
- 3. Others: Rasmussen Business College, informal education.

UMW Ag Sales and Marketing is positioned most closely to Mankato and Willmar AVTI programs. Students cannot easily distinguish between sales and general business programs at this point. Therefore, it will be necessary to detail the importance of this emphasis on employability. The FFA regional sales contest held at UMW will continue to display this emphasis. Perhaps a postsecondary DECA contest will be able to be added in the future.

Strategy for Growth

It appears that several ways are available to expand the offerings in the educational market for this major. First of all, market penetration can be used as a growth strategy. This involves encouraging greater frequency of use of the product by existing consumers, including expanding course enrollment to existing students and converting parttime to fulltime students.

Secondly, market development could be used as a strategy. Finding new markets for existing products is the strategy suggested. It could consist of offering courses to other segments not before attempted such as senior citizen groups, etc. The vehicle of telecommunications may allow more distant groups to be served by the courses of the program. A program or unit in sales training could be offered this way.

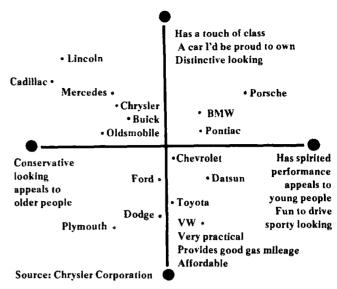
The third strategy is product development. This would take place largely through curriculum change and research in placement opportunities. New majors or emphasis areas could be added in this way. The finance option of sales and marketing was such a creation. Additional options need to be created.

The last strategy is diversification. In this strategy, new products or service in the broad area of service to the public are created. This could involve expanded service activities through study centers, grant activities, and the broad area of information management.

Positioning Strategy

Kotler (5) suggests that the development of a positioning strategy mentioned earlier involves a stepwise process: (a) assessing the major's current image, (b) selecting the desired image, (c) achieving the desired position, and (d) implementing the strategy. An example of industry positioning of automobiles suggests how customers perceive major brands.

Perceptual Map-Brand Images



The image of the major is best assessed by studying its ranking on key factors compared to other competitive institutions. When this is accomplished, a brand (major) map will be created. The criterion used as factors will be ag focus, student employability, faculty qualifications, student support, appropriate curriculum, and cost of the program.

The brand map reveals that the greatest disadvantage of the Ag Sales and Marketing major is in the area of cost. Its greatest advantage lies in its ag focus, student support, and appropriateness of curriculum. Mankato AVTI and Willmar AVTI programs are its closest competitors. These programs include sales in a general ag business program so it may be emphasized to prospective students that UMW's program is more specialized.

The brand map reveals that the Ag Sales and Marketing major is currently positioned as a high cost, and quality program. There does not appear to be a sound rationale to alter this image. However, it is necessary to emphasize that it will be valuable to focus on the price-quality relationship for the nearest competitors and a price-time relationship with four-year programs.

Brand Map - Sales and Marketing Programs.

low 1	2 3	4	5	high
Ag Focus	* X	0	#	_
Employability	*X	0 #		
Faculty Qualifications	* X	0 #		
Student Support	X *	0	#	
Appropriate Curriculum	X *	0	#	
Cost of Program	* X	0	#	

* Source - research conducted (Summer, 1984)

Key - # = UMW, 0 = Mankato AVTI, X = Willmar

AVTI, * = Austin AVTI

Selected Marketing Mix

Action Steps

The marketing mix (product, price, promotion, and distribution) associated with this major would look as follows: (1) The product is defined in terms of a

survey of key instructional variables done in 1984. These emphasized maximum communication skills, self-management, and expanded course exposure in agriculture is needed in the future. These objectives were cross-referenced between agribusiness employers and a sampling of employment listings for verification. Both formal speaking and experimental instruction in sales methods are needed. The linkage with speaking organizations such as Toastmasters will be emphasized. (2) The price will be in the high range compared to both shorter and less costly AVTI programs. Formal instruction in the classroom with the resident student is the primary focus, with parttime students attending offcampus courses. The enrollment in sales minicourses has the potential to increase due to a shift in industry training methods. (3) Promotion would be handled through agricultural magazines (The Farmer), special booths and displays at county fairs, and Farmfest, high school visits, radio and TV advertisements, and direct mail to high potential students.

Selected Promotional Mix

The following promotional mix is favored for the Ag Sales and Marketing major. In the traditional student market, contacts from the Propsective Student Information Program, college fairs, contacts with local business groups, in particular sales-related, alumni contacts, direct mailings to interested parties, and selected radio, newspaper, and television advertisements will be used over a yearly schedule to gain the attention of prospective students. These activities were selected because they represent an effective means of communicating with the market segment.

The nontraditional student market would appear to have a profile as follows: an older student, possessing a degree of work experience, having more developed goals, seeking a higher level of a job offering independence, more demanding of course content, requiring a more flexible schedule, and with more selfsufficiency financially. The major influence in this group is the experience of friends and acquaintances.

The nontraditional student market is reachable through promotion by a different set of communication alternatives. Contact by direct mail, radio advertisements, contacts in ag extension, manpower security, and other offices including business firms located in proximity to the college would be the most effective means to speaking to this market segment. Point of sales displays in area business, over cable networks, and in shopping malls should become part of this promotional plan. A plan of promotional activities is carried out and evaluated over the period of one year.

Evaluation of Marketing Plan

The market audit is the accepted industry method of market evaluation. This concept of re-evaluating environments, strategies, and the market mix which was chosen. At this point, detailed analysis has been accomplished with regard to the promotional plan.

This will be expanded in the future. Focus groups and surveys will be utilized to evaluate other aspects of the marketing plan. It is generally concluded that the basic plan has succeeded in increasing enrollment.

Summary

A marketing plan for a major within a program has been assembled based upon research conducted during a recent study leave. The plan is developed from an analysis of general environment facing the college as a whole to specific goals and objectives dealing with the existing major. As part of the plan, target market variables are identified and defined with regard to both traditional and nontraditional student profiles. Strategies for growth are selected, as well as a general positioning strategy with respect to competitive institutions. Lastly, a market mix which addresses the product, pricing, promotion, and delivery (distribution) is proposed with accompanying methods of evaluation.

Bibliography

- 1. Betts, S. and Newcomb, L.H., NACTA Journal 30 (4): pp. 14-17.
 - 2. Coombs, Phillip, The World Education Crisis, 1986.
- 3. Branson, R.F. and Norvall, D.G., Introduction to Agricultural Marketing, McGraw-Hill, pp. 299-321, pp. 417-426.
- 4. Druekhammer, D.C. and Key, J.D., NACTA Journal 30 (4): pp. 29-31.
- 5. Kotler, Phillip and Fox, K., Strategic Marketing for Education, Southwestern Press, 1986, pp. 75-81, pp. 83-91, pp. 145-154.
- 6. Mollet, Jeff and Leslie, E.K., NACTA Journal, 30 (3): pp. 26-29.
- 7. Murphy, E., "Market or Perish;" Sales and Marketing Management, May 13, 1985, pp. 50-53.
- 8. Prospective Student Information Plan, University of Minnesota Technical College, Waseca: 1984.
- 9. Schuster, C. and Castantino, P., NACTA Journal, 30 (3): pp. 4-8

CASE STUDY

Real Food Industry Product Development Problems Provide Learning Opportunities

William F. Stoll Introduction

Students majoring in Food Industry and Technology at the University of Minnesota, Waseca receive an Associate in Applied Science degree. They are prepared to enter industry in a number of technical positions including new product development technologist.

New Product Development is one of the courses required for a degree in Food Industry and Technology at UMW. In the food industry, new product

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