

The Need for PSM Student Recruitment and Marketing: MTSU as an Effective Model

*Saeed D. Foroudastan, Ph.D.,
MSPS Program Director, Middle Tennessee State University*

*Kristina R. Hulsey,
Graduate Research Assistant, Middle Tennessee State University*

*Sandra Hollis-Hyde,
Graduate Research Assistant, Middle Tennessee State University*

College of Basic and Applied Sciences, Middle Tennessee State University

Our world is in a constant state of rapid change. The knowledge, entrepreneurialism, and industriousness which once kept the United States at the forefront of progress are now globally shared, thusly creating a more competitive environment. There is an increased effort to be efficient, lean, and agile in the business world. Companies in science and technology need motivated, capable, and creative problem-solvers.

Dependence upon multiple entities to research an idea while also depending on other business, marketing, or communications-savvy units to promote or sell new products can hinder streamlining activities. However, this issue could easily be rectified utilizing a workforce of Professional Science Masters (PSM) graduates. Companies hiring PSM graduates get technically-

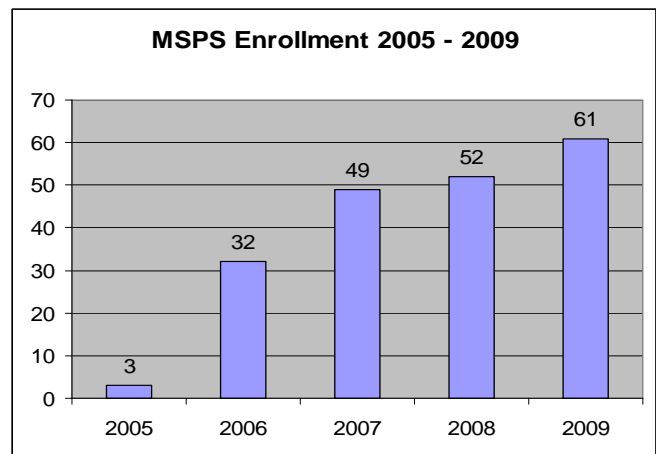
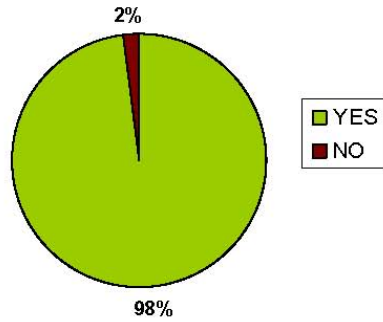


Figure A: MTSU MSPS Enrollment from 2005 to 2009.

trained professionals capable of understanding and communicating within business environments. *Washington Post* reporter Valerie Strauss wrote that “PSM degrees, sometimes described as a science version of the MBA degree, are being hailed as one of the most promising innovations in graduate education in years [1].” Sheila Tobias lauds the PSM degree as the “21st Century MBA [2].” Yet, of the nearly 605,000

HAVE YOU HEARD OF AN MBA?



HAVE YOU HEARD OF A PSM?

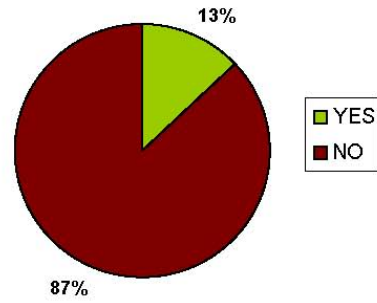
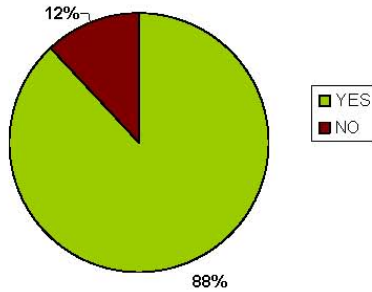


Figure B: Respondents Familiar with MBA and PSM Degrees

DO YOU KNOW SOMEONE WITH AN MBA?



DO YOU KNOW SOMEONE WITH A PSM?

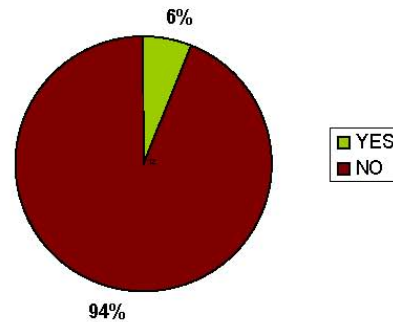


Figure C: Respondents Acquainted with MBA and PSM Graduates

masters degrees awarded 2006-07, 54-percent were awarded in fields of education and business while less than 1-percent of these were PSM degrees [3]. If PSM graduates can bolster American companies striving to become globally competitive, then obvious questions would be, “What could be done to promote and market PSM degrees and do successful models exist?”

To meet the increasing demand for professionals of this type, Middle Tennessee State University (MTSU) offers the Master of Science in Professional Science (MSPS) degree, a PSM-equivalent, which has been successfully promoted and marketed. The program has seen steady growth from the initial enrollment of 3 students in 2005 to 61 students in the spring of 2009 (Figure A, page ##). The MSPS program provides

students with strong scientific backgrounds in disciplines of Biostatistics, Biotechnology, or Health Care Informatics while simultaneously preparing them for industry through business-related courses.

PSM programs in the United States, while rapidly growing, are relatively new. To evaluate the best utilization of marketing methods, it is necessary to discern what may be generally understood about PSM degrees. A voluntary, online survey conducted July through August 2009 probed to discover how PSM compares to MBA in recognition (figures B and C).

These figures indicate that, despite the national growth of PSM programs such as MTSU’s, effective marketing strategies must include

activities that familiarize both students and industry with PSM programs and their benefits. Traditional marketing methods such as brochures, newspaper, or magazine ads can certainly provide some levels of PSM awareness. Other non-traditional marketing methods, such as advertisements on social websites (YouTube, Facebook, etc.), could also be utilized to strengthen nation-wide awareness. However, marketing programs to a population unaware of the benefits of PSM programs may not effectively generate interest. Therefore, utilization of traditional and non-traditional marketing methods that could enhance program awareness should be combined with the efforts of universities, students, alumni, industry, and policymakers. Program success at MTSU can be attributed to active recruitment of students and consistent advertisement to industry.

From potential students' perspectives, university leaders must ensure that their programs are adequately designed to provide students with skill-sets required to become successful employees. Support networks should be established to aid students, if necessary, with internship placements. Student advisors (one for each concentration) and internship coordinators should mentor and assist with internship placements that will position the students for successful future employment. Students will instinctively gravitate toward programs with favorable post-graduate employment and salary rates. Colleges must foster environments that encourage "organic word-of mouth" (WOM) advertising. According to the Word of Mouth Marketing Association, "Organic WOM occurs naturally when people become advocates because they are happy with a product and have a natural desire to share their support and enthusiasm [4]." Students and graduates who are excited and pleased with their respective programs should be willing to share their experiences. Current MSPS students at MTSU, pleased with their programs,

often offer to assist staff with recruiting activities. Existing students and graduates could be encouraged to speak to potential students, students at freshmen orientations, and individuals at career fairs. According to former marketing VP Emanuel Rosen, "For buzz to spread, you need two things: a contagious product – one that has some inherent value that makes people talk- and someone behind the scenes who accelerates the contagion [6]." Students, interns, and the PSM programs themselves can be the "products" while universities, employers, and alumni become "accelerants."

University PSM departments should ensure their representation early in the academic processes such as college fairs, tours for visiting high-school seniors, and freshmen orientations. According to the website for the National Center for Education Statistics, of the 1.5 million bachelors degrees conferred during 2006-07, more than 50-percent were concentrated in liberal arts. The fields of math and science represented only 17-percent of graduates [3]. Providing freshmen students with information about careers, salary, and employment records while they may still be unsure about their course of studies may encourage them to pursue undergraduate degrees which position them to complete future PSM programs. MTSU introduces its program to undergraduates during an annual campus-wide Student Organizations Fair where the MSPS Club displays a colorful poster and distributes program information to interested students. The MSPS program director visits classes and talks vividly about the degree, stressing key program selling points such as an internship experience in lieu of a thesis and business courses that enable dual workforce competencies. MSPS club members set up eye-catching information tables in the departmental buildings and speak with other campus organizations to further program awareness. Club membership is open to all students- current, prospective, and

undergraduate- considering MSPS. This club provides a forum for discussing ideas and concerns about the program. The club gives students opportunities to learn about work environments by visiting concentration-related companies such as the Research Triangle, the CDC, and Memphis BioWorks. MSPS Club members have also represented MTSU at meetings of the National Professional Science Masters Association (NPSMA) and made invaluable contacts with program directors at other universities. The MSPS website also provides valuable program information.

Colleges and universities offering PSM degrees bear the responsibility of promoting PSM recognition through program development, industry support, and student support. Academic institutions should present their programs and initiatives to existing industry partners and strive to establish new partners. Institutions should explain program benefits and encourage dialog regarding the skills and educational needs for industry. This proactively leads to the development of flexible programs which meet the needs of ever-changing business markets. Ensuring that programs nurture industry confidence, universities should encourage industry leaders to speak to, mentor, or provide internship opportunities for students. The MSPS program is marketed to local businesses primarily through contacts on the MSPS Advisory Board. The Advisory Board is comprised of MTSU faculty and local industry representatives and meets regularly to discuss advances and program updates, such as a recent vote to create a student-reference website listing companies who have hired MSPS interns.

Fostering academic-industry relations will generate discussions across multiple groups, leading to influencer-type marketing. In the book *Grapevine: The New Art of Word-of-Mouth Marketing*, Dave Balter and John Butman explain

that, "...people are always influenced more by other people than they are by anything else. Hearing about a new product or service from another person...has more influence than hearing about it from television or a web site [6]." Contact should be maintained with companies who have hosted interns regarding the successes of their internship-hosting experiences and their willingness to continue participating. This information can then be used to ensure that program development meets industry needs and that students are adequately prepared for internship experiences. For example, MTSU has established multiple internships at companies such as Blue Cross-Blue Shield and Vanderbilt Medical Center. Productive and knowledgeable interns working for companies in lieu of these provides students with invaluable and practical work experience while creating a natural product-seeding marketing tool. In addition, industry leaders who are pleased with interns and graduates may share their PSM extolment to associates and colleagues. MTSU MSPS interns and alumni are walking, talking advertisements to the business world of the benefits of PSM graduates. Thusly, organic word-of-mouth advertising is established [5] and more PSM graduates will be sought, hired, and promoted.

Each MTSU MSPS major is required to complete a career and program-related internship which has been approved by the student's advisor and the business coordinator. The internship requirement is very structured, requiring students to work 250 hours for 3 hours of college credit and requiring the host-company to offer positions related to students' concentrations that enhance the interns' professional and educational development. The company must also complete and submit student intern evaluations to the Internship Coordinator. The purpose of the MSPS internship program is to provide student interns with opportunities to develop professionally, acquire real-world experiences related to their

concentrations, and apply classroom learning to the workplace. At the conclusion of each semester, interns submit their required course assignments and present oral summaries of their internship experiences to MSPS students, MTSU faculty, and local company and industry leaders. Hosting companies often attend to congratulate their interns and to meet potential interns. The MSPS Club offers peer-critiquing by hosting a “practice presentation” meeting each semester as students work to polish their presentation skills. The presentations facilitate communication between faculty and industry regarding development of programs for specific industry needs as well as enhancing conversation between upper- and lower- classmen about internship experiences and expectations.

In an effort to maintain student input and to foster post-graduation contact, universities could conduct exit interviews and should use them to evaluate the employment rates and average-starting incomes for PSM graduates. Interviews with alumni and students could be posted on program websites to illustrate the variety of jobs and experiences available to graduates and student-interns. Videos of internship capstone presentations could also be posted illustrating typical projects of non-theses programs. Links on university websites to PSM-promoting organizations such as NPSMA.org and MastersDegrees.org, as well as links from search engines such as Google, Yahoo, and Bing to university programs could bring awareness and understanding to prospective students.

In addition to university promotional activities, governmental policy leaders could assist with marketing and promotion. Firstly, policy leaders could encourage and provide assistance to colleges and universities planning to initiate PSM programs ensuring available programs to interested students. Secondly, the costs of undergraduate and graduate educations continue

to increase. The cumulative cost of obtaining a masters degree from a public institution in the U.S. is approximately \$49,000 [7], but the average annual-gross salary of masters-degree holders is \$77,000 [8]. Therefore, efforts to keep the costs of post-secondary education affordable, providing PSM scholarships and providing reduced-interest student loans could be attractive incentives PSM program recruitment. Thirdly, policy leaders could assist by providing funding allowing a consortium of universities to create one-voice mass-media ads, such as television commercials, capable of reaching multiple markets advertising the benefits and availability of PSM programs. Tuition-reimbursement assistance, flexible work hours, and incentive programs for employees obtaining advanced degrees are all ways industry leaders can promote PSM.

The Bureau of Labor and Statistics projects a growth of 18.9-percent for jobs requiring masters degrees from 2006 and 2016. The growing need for masters-level graduates is predicted to outpace the requirement for bachelor-level graduates [9], and specific benefits exist to industries utilizing PSM graduates. A well-organized and marketed approach has led to MTSU’s continuing MSPS success. Efforts to market PSM programs nationally will position American companies to be leaders in the global market.

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