

ESSENTIALS OF MARKETING FOR AN ACADEMIC RESEARCH LABORATORY: THE MARKETING MIX

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LAYING THE GROUNDWORK:

Medical and basic science researchers are some of the most highly educated people with multiple advanced degrees. These highly motivated professionals master a variety of technical skills in their chosen area of interest. They constantly read, learn new skills and are at the forefronts of efforts to generate new knowledge. In addition to their technical prowess, academic researchers also manage laboratory enterprises which include overseeing personnel hiring and termination efforts, mastering interpersonal communications skills and budgetary decisions. Despite this pervasive requirement of management skills, only a handful of researchers ever consider general management training, which would seem very obvious to the business counterpart.

The important concept that researchers need to clearly understand is how their activities fit into a business framework. In a business setting, ‘marketing’ is a very important activity which can make or break your business. Over centuries of trade, business managers have thus honed marketing to a high science. Managers discuss selling a product in terms of a Marketing Mix – a combination of four crucial activities, whether selling soap, aircraft or medical devices. The four elements are 1) *Product*, 2) *Promotion*, 3) *Placement*, and 4) *Price*; and are commonly referred to as the “Four P’s” of marketing (Figure 1). In this brief report, I have redefined the different elements of the marketing mix as it would apply to an academic research laboratory.

PRODUCT:

What is it that we offer?

The *product* of the research lab is ‘knowledge.’ It could be the identification of a novel genetic mutation/marker, development of a new material with altered properties, a surgical technique, identification of the mechanism of disease, markers in the progression of disease, etc. Our *customers* are primarily governmental agencies such as the National Institutes of Health (NIH), National Science Foundation (NSF) and the Department of Defense (DoD). An important customer base includes private biomedical research foundations such as the Whitaker Foundation and the Rockefeller Foundation. Corporations such as pharmaceutical, medical device and biotech companies routinely support academic research as well. Customers pay for the knowledge with financial grants and other sources of funds.

Our laboratories deliver this knowledge “product” in the form of written publications or oral presentations. Specific details of research are first published in peer-reviewed journals, followed by topical reviews, and subsequently as chapters in books. Research details are also published in written Abstracts or Proceedings of Annual Meetings of National Scientific and Clinical Societies such as the Orthopaedic Research Society, the Society for Biomaterials, Tissue Engineering Society or any other similarly appropriate forum. These societies also provide a form of peer-review of the quality of the science. Oral presentations are made at meetings of these societies, or researchers may be invited to present their findings at Symposia and Workshops. Teaching in the classroom to undergraduate students, graduate students, medical trainee residents and clinical training fellows also represents a delivery of our core product.

PROMOTION:

How do we advertise our products?

As in any business, good products promote themselves. Published articles convey to the reader the necessary medical and scientific details, and also provide a testimonial to the quality of our work, the infrastructure at the institution and the research philosophy of the lead investigator. If the topic and quality meets the approval of the reader, they will seek out other published articles from the same laboratory. Writing reviews and book chapters disseminates our findings to a wider audience and is usually associated with leadership in a niche area of study. Oral presentations at conferences, workshops and symposia also promote our studies. Podium presentations at large national society meetings surely propagate the gener-

Fig 1. Marketing Mix for Academic Research Laboratories

The products that research laboratories deliver is knowledge in the form of publications. Customers who pay for this knowledge are Governmental granting agencies and corporations such as pharmaceutical, device and medical device companies.

Product	Promotion	Placement	Price
What is it that we offer?	How do we advertise our products?	How do we distribute our products?	How do the customers pay for the products?
<ul style="list-style-type: none"> Research knowledge Basic Science Research Clinical Outcomes Publications Books Teaching 	<ul style="list-style-type: none"> Peer review journal articles Reviews Book Chapters Seminars, Workshops Teaching Personal Relations 	<ul style="list-style-type: none"> National International Conferences Invited Seminars Journals Students/Fellows 	<ul style="list-style-type: none"> Grants Consulting Gifts Endowments

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ated knowledge to interested parties, and also make an attractive case for the investigators to potential customers. With added prestige associated with conference presentations, there is no doubt that large research labs invest a lot of funds and resources to ensure their papers are accepted at specific conferences. Host institutions also use the number and quality of publications to evaluate the researchers for promotion and, less frequently, pay raises. Publications are used to convince granting agencies of the quality and productivity of the research labs. Teaching also acts as a promotion for the laboratory. Among classes of students working on advanced degrees are potential highly-skilled candidates for lab personnel. Newspaper coverage of laboratory development has a very high impact in terms of promotion of the research activities.

PLACEMENT:

How do we distribute our products?

Journals, conferences, workshops and conferences where studies are presented, represent the distribution channels for our knowledge. Thus the types of journals for article submission are carefully selected depending upon readership within the area of research. This is similarly true for conferences, which have spawned an increasing number of niche workshops. As in the business world, there is interaction and overlap between the different elements of the Marketing Mix. While published articles represent our product, they also promote the labs and institutions. Similarly, teaching students in the classroom or physicians at a continuing medical education session serves as a *product* of our activities, and simultaneously *promotes* the laboratory and institution. Very reputed journals have a high ‘impact factor’ representing the number of readers who cite the articles. This permits journals to be highly selective in accepting articles, forces research labs to improve the quality of their research and is also used as a promotion criterion by host institutions. In a departure from business practice, even though journal publications act as promotion, such advertising cannot be purchased – it has to be earned with quality of the product.

PRICE:

How do customers pay for the knowledge?

Customers who seek the knowledge pay for the research using a variety of mechanisms including research grants, sponsorships and research contracts. Governmental agencies generally give grants based on unsolicited submissions of grant applications. These grants generally cover very basic research investigations and further our knowledge for the betterment of humanity. Corporations usually give grants in the form of research contracts. The focus of such contracts is more closely tied to the products that the companies sell. Corporations may also provide consulting arrangements to harness the ‘promotional’ aspect of working closely with stellar academic researchers. Funding for academic research can also come from gifts and endowments. More recently, royalties and licensing agreements for developed technologies also represent an attractive source of funding.

SUMMARY:

In an academic research laboratory, the different elements of the marketing mix are very tightly integrated. Understanding the interconnections between the different elements, and the specific roles that they play in different settings is crucial to developing an appropriate strategy to enhance and sustain the competitive edge of the lab. In the laboratory, customers [sponsors] and the products represent a central axis along which the other marketing elements provide the support for executing a successful long-term relationship (Figure 2).

As we survey the field of academic researchers, we notice that successful investigators are also successful marketers of their research. Most may not have the formal training in this ancient business art, but they have innately honed it to a high science. For the remainder, adapting these skills from our business colleagues is worth attempting for future success.

Fig. 2 Marketing Mix Relationship

