

ARL NEW MEASURES

Market Penetration in Research Libraries

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I. Definition of “markets” in libraries

The concept of a “market” has traditionally been associated with the sale of goods and, further, to the location of the sale of goods ... the physical market. The idea of the physical market leads directly to the set of consumers who are attracted to that physical space to consummate their purchases of those goods that are expected to be made available at that location. Those consumers then, by extension, become the market. As transportation developed, the physical market expanded into many physical sites and the “consumers as market” expanded to be defined as the set of consumers of the several physical markets. Proceeding logically, as physical markets expand to near infinite sites, the concept of market becomes less that of individuals attracted to physical sites and more one of the total set of individuals who are potential consumers of the goods no matter where offered.

In libraries, services are substituted for goods. Those services can be active (reference services or bibliographic instruction) or they can be passive to the consumer (the development and maintenance of collections or the provision of networked information). The market for libraries is the set of individuals who might possibly take advantage of the services offered. In the most obvious case for academic research libraries, the market for libraries are the students, faculty and staff of the institution of higher education. In addition to representing a complete market, each of these constituencies (students, faculty and staff) defines market segments. Many academic libraries also define other market segments such as alumni, members of the local community, members of other higher education institutions, and members of general or specific scholarly communities. One of the keys to analyzing one’s effectiveness in any given market is to accurately define that market and its boundaries.

The market for research libraries becomes the set of individuals for whom the libraries services are constructed for possible use and market segments can be defined around a finer granulation of groups for whom services are constructed. Not only can we define market segments around members of the higher education with different status but we can also define market segments around members of different academic disciplines. Thus, while the total market for library services will include everyone for whom the library actively develops its services the market segments can be defined in many ways and will likely resemble a matrix along status and discipline.

II. **Definition of “market penetration”**

“Market penetration” (also known as market share) is a term that was developed to permit businesses to know what percentage of all possible sales were represented by their actual sales. In common practice, one measures market penetration by measuring all real sales of a given good for a given period and then comparing that total with the total of all sales of that specific good for the same period made by one’s own company. It is important to measure market penetration because one’s sales of a given good may go up, implying success, but actually not have increased as much as the total sales have increased. In this case one’s share of the market has fallen and one’s penetration has actually weakened.

In the service sector, and especially in the non-profit service sector, market penetration is somewhat more complex to measure because the total market is often more than all of those who actually take advantage of the goods or services in a given period. The total market also includes those who could take advantage of the market. In many instances there is no simple metric, such as total sales, to let us know what the total market is and thus to let us calculate what part of it we have captured. In these cases, we have to make assumptions (which must be eventually tested) about our market. We must make assumptions about the extent to which we expect all members of various communities to take advantage of our services and then measure the extent to which they do.

III. **Relation of “penetration” to Library markets.**

In the research library environment, libraries construct services under the assumption that all or most members of the academic community require those services. While we may make some differential expectation on members of various market segments (our expectations for university staff may be low, our expectations for graduate students may be very high) we still make assumptions about university need. The idea behind measuring penetration in the research library environment is to gain greater understanding of the extent to which our community makes any use of our services and, possibly, to measure both extent and quality of use.

To bring this matter into clarity requires some examples. Research libraries build collections and services on the assumption that all members of the faculty require those services. If we were to consider all members of the faculty (carefully defined) to be a market segment then we would want to verify that all members of the faculty did indeed make use of the libraries services. Most of us know that this is not true for faculty and not even close to true for many other market segments. However, knowing what percentage of the market segment does use our services gives us a metric for evaluating, over time, the impact of changes in services and/or marketing techniques designed to attract a greater percentage of the market segment to the service.

In the research university environment, the market for library services is all possible users of the research library. Many of these segments of this market should yield high penetration. The faculty and graduate student segments should be highly penetrated. The segment of the faculty and graduate students in History should be very highly penetrated. We would expect that undergraduate engineering majors are a segment that is very lightly penetrated. Likewise, we would expect that alumni that are no longer enrolled would be a segment that is very lightly penetrated, as we desire it to be. However, knowing through careful analysis, what our levels of penetration actually are for a given segment allows us to target services to attempt to enhance or lessen that penetration.

IV. Measurement techniques

There are two basic techniques for measuring market penetration in libraries. The first is by survey instruments and the second is through usage statistics. Survey's permit libraries to evaluate market penetration for a wide variety of services and many different services simultaneously. Surveys can be total population for small markets or for market segments or can be statistically valid samples for large markets or across many market segments. Usage statistics on the other hand, give accurate measures of use but restrict studies only to those areas where data collection is meaningful. One could set up library management software to record all valid patrons and then keep track of those who circulated books during the year. At the end of the year, by status, one would have a good sense of the degree to which the circulation service penetrated the entire market of valid borrowers and similar penetration of various segments by status and discipline. But it would only measure circulation, a poor measure of total library impact for engineers for example.

One of the tasks of the market penetration study group would be to design data capture and evaluation instruments that would build a suite of penetration studies that could be carried out in both longitudinal (temporal) and latitudinal (cross institutional) manners. In addition, much work would have to be done on the definition of standard markets and market segments.

V. Impact of "penetration" on mission

Research libraries expect that the service they provide is essential to the work of the institution. Studying market penetration will provide us with a more accurate sense of how critical libraries are to all members of the library's market and to those factors that enhance or lessen that impact. While it is important to understand what users of library services value in those services, it is critically important to understand if non-users could be enticed to use the library through the offering of different services. It is even important to know where there is little penetration and little hope that penetration can or should be increased. Market penetration is simply one technique for evaluating the relationship between a market or market segment and the services that are offered. While it may not be

possible for libraries to walk away from services that have little penetration into any market, it is clear that those services that have a high degree of penetration should have access to the organizations resources. Similarly, the success of new services can be measured by the rate of increase (or decrease) of market penetration.

VI. Next Steps:

1. With the assistance of public sector marketing specialists, improve definition of library market and market segments.
2. Develop some simple hypotheses on market and market segment penetration in libraries.
3. Develop instruments for simple market penetration analysis.
4. Test instruments and gain initial understanding of the concept of market penetration.
5. Refine instruments and test cross-institutionally.
6. Analyze cross-institutional results for indications of significance and investigate causes of significant difference.