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PRODUCTS DEVELOPMENT AND COSTING OF LIBRARY SERVICES: A SURVEY OF PRACTICES AND PROSPECTS IN MEDICAL LIBRARIES IN LAGOS AND IBADAN, NIGERIA

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ABSTRACT

This study was about the survey of practices and prospects of products development and costing of library services in medical libraries in Lagos and Ibadan, Nigeria. Data was gathered through a questionnaire administered to all senior and professional librarians in health science libraries located in these two areas. Analysis of the data revealed that medical librarians would want new products and services introduced to their libraries in order to generate additional funds. The highest in ranking were indexing and abstracting services while the least was development of audio-visual services. This seems to suggest that there is a high prospect for product/service development in these libraries. They also agreed that in spite of the monetary involvement and the risks, development of new products remained key to keeping the medical library relevant to the parent institution in future. Recommendations on the effect of constituting a standing committee in the library/information departments for the purpose of generating new products and services were made. These carefully generated products and services were more likely to survive, when thrown into the market.

KEYWORDS: MARKETING SERVICES, COST EFFECTIVENESS, INFORMATION PROVISION, INCOME GENERATION

Introduction

Charging fees for products development, time and expertise has always been an important part of most professions. Library and information science is not one of these professions. In fact, history tells us that since the middle ages, library and information services have been part of a bigger structure (like the church or the state), and therefore "free" in terms of users not having to pay directly for the use of the libraries (Tymbios, 1996). A casual reader of Nigerian library literature is already aware of the poor state of libraries and library services in the country. The empty library shelves or the outdated books on the shelves, according to Ojoade and Ochai (2000) tell the whole story. This is as a result of the economic down turn which in local parlance is described as "oil doom" that began in the early 1980s with the fall of the value of the Naira leading to cost of imported materials becoming so excessively high, that companies which were unable to meet the new challenges began to fold up. The field of librarianship was not left out of this ugly situation. Many higher institutions, the major employers of librarians, were forced to do with less staff, which worsened the unemployment situation in the country (Ajala, 2003). In addition, the purchase

of textbooks, journals and audiovisual materials for the libraries was on the decline. Even the 10% subvention that goes to the university libraries as from 1993 did not seem to make much difference to the situation (Ojedokun and Ola, 1993). The National Universities Commission (NUC) grant was introduced in addition to this. However, it was stopped due to what NUC termed as "misuse of funds" by some chief executives of some tertiary educational institutions.

This situation notwithstanding, some chief executives are still directing their libraries to begin generating funds required for running their libraries. In addition to limited budgets, rising salaries and other costs, growing user demands, pressures to ensure sustainability of library and information services funded by government or by donors are facts of life for the librarian. These have forced library and information managers of public funded organisations to begin thinking of charging for services even if only to establish the credibility and usefulness of their services. This school of thought is premised on the belief that if the library is to meet the objectives for which it was established, money is essential for the procurement and processing of materials, for hiring personnel and for the purchase and maintenance of equipment. Where financing is impossible, organising a library service of any kind becomes impossible. Where it is inadequate, the efficiency of the services was bound to be adversely affected.

This trend of revenue generation is further supported in a study by Agbola (2000) who stated that "no matter how well funded the universities may be, there is never enough money for library needs". His view is supported by a study conducted in the United States, by Abels (1994) on the library collection crisis. He suggested that authors, booksellers and publishers should get together to make representations for higher revenue allocations to academic libraries. Similarly, Nicholson (1992) stated that academic libraries are going into entrepreneurship in order to ensure that adequate resources are available to maintain library services because the universities' grants have been cut and are no longer sufficient. He also stated that academic libraries go this way for prestige and the intangible side benefits to the institutions that is, showing that the libraries are in tune with the enterprise culture. At other times, he said the reason for embarking on entrepreneurship is because the management of the institution has directed so. Whatever the reasons, he advised that it should be compatible with the library's institutional objectives. It must be managed in such a way that they do not undermine or put at risk the mainstream activities of the library and its services. Institutional support at the highest level is also essential and finally everybody must know that it is risky and must accept the likely consequences of failure in both financial and human terms. Some organizations have gone to the ridiculous extent of using the library buildings as a venue for hosting parties all in the name of generating revenue (Banjo, 1977).

The above problems confronting libraries all over the world and the academic libraries in Nigeria in particular, have led Edoke (1991) to recommend strategies for generating income for tertiary institution libraries. He further recommended that library school educators equip their students with skills in fund raising among others. This view is shared by Ajala (2003) who in his study on "Library and employment: A case study for the introduction of entrepreneurship training to the

library schools" recommended that library schools should introduce entrepreneurship training. This is to make it possible for graduate librarians to have alternative employment outside that of organised public and private sectors. He also said this will result in the librarians impacting positively on the society in which they live. Ifidon and Nwalo (2003) have also recommended the re-examination of the concept of free library and information services. They suggested the introduction of fee-based services to at least the tertiary institutions, especially the universities, where according to them, there is a fairly large collection, ample accommodation for user services and a group of professionals.

In tertiary institutions in Nigeria, the use of the library was and is still free and open to the members of the institution and in most cases to other members of the public. The purpose of the university library is to assist the academic staff and the students in their academic task and build a collection suitable for these purposes. This means that the services to outside users can only be rendered if they do not intrude on the times and quality of the information services that the primary users are entitled to. If an outside user needs time, intensive help or information on an on-going basis, another system has to be created. Jotwani and Haraury (1993) also in their study on pricing advised the librarian to identify those services that can be charged using criteria such as capacity to pay and the availability of the services desired. Adeloje (2000) supported this view and suggested that various technologies associated with efficient information marketing be exploited to the advantage of the information manager.

Products and services development according to Lahiri (1994) are of two groups; the standard and the custom-made. Some products and services like current awareness, indices, bibliographies, abstracts, digests, etc. might fall into the two categories. However, database searches, training, consulting etc would be only custom made. The method used for assessing or testing product requirements varied from informal, in-depth discussions to group discussions, presentations and discussions and surveys. The information required for designing products included assessment of what information was needed by clients, how information was used and what was the value of such information to the user. Information required for testing a product or a service included advantages and disadvantages of the proposed product or service vis-à-vis client requirements and competing products, likes or dislikes of the product, and levels of preferences and willingness to try or buy.

The above scenario, where there are inadequate funds for the tertiary institution libraries, and by implication, the medical library, leading to insufficient library resources and poor services can be harnessed by developing new products and services which are costed in such a way that both the internal and external users can access them at an affordable fee and thereby enable the medical library generate income which can be used to improve the human and material resources of the health sciences libraries. In order to cost appropriately, Lucey (2002) recommended a method of costing (costing method), which is designed to suit the way goods are processed or manufactured or the manner in which services are provided. This means that each firm will have a costing method, which has unique features. Nevertheless, he added that with recognizably common features of the costing systems of firms (in this case libraries) who are in the same line of

business, there are two broad costing methods which are specific order and continuous operation costing respectively.

Lipsey and Chrystal (1999) support this view and add that to arrive at a cost of production, a value must be put on each of the separate inputs used. The assignment of monetary values to physical inputs is easy in some cases and difficult in others. They conclude by stating that all economic costing is, however governed by a common principle, which is sometimes called user cost but is more commonly called "opportunity cost." Product development and costing of library services will ensure that the library is dynamic and is meeting the challenges of the time. By so doing, it will continue to remain relevant to its immediate and external environment.

This paper aims at determining the fee-based products and services that are already in existence in the medical libraries in Lagos and Ibadan, Nigeria as well as sampling the views of the health sciences librarians on taking up the challenge of developing new fee based products which will assist in making the libraries more relevant to the yearnings and aspirations of the user community, while at the same time, ensuring that the libraries generate income which will assist them partially, if not totally in meeting their financial commitments. This will at the same time help improve the quality and quantity of services given to users.

Objectives of the Study

The objectives of this study are as follows:

- i. To find out what information products are already in existence in medical libraries in Ibadan and Lagos;
- ii. To find out the costs of existing products/services;
- iii. To determine what new products/services librarians of these institutions will want introduced;
- iv. To determine how the costing was determined and calculated; and
- v. To determine how resources are costed to produce value added information services in the libraries studied.

Research Problem

Libraries and library services in Nigeria are in a poor state. The empty library shelves or the outdated books on the shelves tell the whole story. Many higher institutions, the major employers of librarians, were forced to do with less staff, thus worsening the unemployment situation in the country. In addition, the purchase of textbooks, journals and audiovisual materials for the libraries was on the decline. The National Universities Commission's (NUC) grant of 10% subvention to the university libraries as from 1993 have not made much difference. This situation notwithstanding, some chief executives are still directing their libraries to begin generating funds required for running their libraries. In addition to limited budgets, rising salaries and other costs, growing user demands, pressure to ensure sustainability of library and information services funded by government or by donors are facts of life for the librarian. These factors have forced library and information managers of public funded organisations to begin to think of charging for services even if only to establish the credibility and usefulness of their services. This is premised on the

belief that money is essential for the procurement and processing of materials, for hiring personnel and for the purchase and maintenance of equipment. Where financing is impossible, organising a library service of any kind becomes impossible. Where it is inadequate, the efficiency of the services is bound to be adversely affected.

This study therefore seeks to empirically verify the extent of products development and costing of library services practices in selected medical libraries in Lagos and Ibadan in Nigeria. The prospects for developing and introducing new products are also studied.

Research Questions

The following research questions were used as a guide in the conduct of the research:

- i. What information products/services exist in the medical libraries of Ibadan and Lagos?
- ii. What are the prices attached to such services/products?
- iii. What other new products/services should be introduced?
- iv. How should prices attached to the new products be determined?
- v. How are resources valued to produce value added information services in the libraries studied?

Scope of the study

This study covered all medical and health related libraries in Lagos State and Ibadan city of Nigeria.

Significance of the study

This study is significant in several ways. It creates awareness of the possibility of developing new products and services in the medical libraries in order to enhance their services, generate additional funds, and also make them competitive and dynamic enough to meet the challenges of the future.

Literature Review

Product development

The issue of product development and costing of library services is closely related to the survival of the library in the face of dwindling resources, reduced funding and hydra-headed inflation. Sustainability carries with it a certain responsibility to maintain and continue an activity. The libraries may wish to do this by requesting for additional funding and grants from the Government and other funding agencies forever or by trying to make some money as a result of internal activities. Development of new products, improving existing products and services and costing them in a way that users can afford and are willing to pay, will be one way of obtaining some funding for future activities as well and ensuring that the library and information profession remains dynamic and meets the challenges of these times.

New products are the life-blood of companies operating in a free market economy (Onasanya, 1991). New product development and the activities involved in the process constitute one of the most risky investments any company can make. Statistics show that only one out of every one

hundred new products actually makes it successfully in the market place. Given this dismal record, is it advisable for the libraries to conceive of development and introduction of new products? Onasanya (1991) answered in the affirmative, and gives the following reasons; firstly, new products represent the business opportunities of tomorrow for any company. Secondly, few companies can continue in business without experiencing problems. Consequently, associated with the product life cycle, there is an ever present need to protect companies' future by planning for subsequent product offerings. Thirdly, new products help to ensure that a company remains competitive in the market place. It also helps to replace company products, which are no longer generating satisfactory profit.

New products assist a company take advantage of its marketing strengths. For a product to succeed, there must be proper planning that allows efficient allocation of resources and the result is a new product development. Tiamiyu (1993) described information products as the techno-physical objects designed by man to express, store, convey and or transfer communication or information symbols from a particular source to one or more user destinations. He classified information into traditional information products (books, journals, newspapers, and files, maps and drawings, sound and videos recordings, painting and museum artefacts etc.) as well as new electro-products (computer databases and software products, telecommunication based products etc). He further stated that information products could also include all discrete real-time events designed to express, convey and transfer communication of information symbols. Examples of these include news broadcast over the frequencies, user interaction with online systems and a presentation by a resource person at a workshop. However, he adopted this broad view of information products because he was trying to review conceptual and practical issues pertaining to the design of information. Lafond (1994) referred to information products as an information commodity in a commercial sense only if it can be owned, valued and traded. Thus, an expert system software product could easily qualify as an information commodity. Jain, Roa and Jambheler (1994) posit that new information product /service development to an organization is one way of overcoming resources crunch brought about by cost escalations and shrinking government support which are exerting pressure on the resources of libraries. The result of their study revealed that there seem to be significant and growing opportunities for information products and services in academic, business/industry and service sector markets. The opportunities they noted are likely to be further enhanced as a result of increased availability and use of computers and networks. These opportunities are challenged by prices of such products and services when supplied by the international information supplier. They will be out of reach of a large population of the user community. They also noted that the private domestic suppliers are not likely to have access to basic source materials as well as the expertise to bring out viable information products and services of particularly conceptual and applied nature. The above was however in relation to India.

The consensus of the above literature is that there is need to develop new products by the library in order to generate extra funds and remain competitive. A proceeding of the India Institute of Management, Ahmedabad International Development Centre, Canada, 1994 Workshop reported that all participants recommended the use of the marketing concept by libraries and information

centres, particularly in developing countries. They cited the following five major reasons; the need for generating resources to meet the increasing operating costs and investments to acquire the required base products and technology; inadequate utilization and returns on the huge investments already made; lack of marketing orientation and staff training; lack of market development and lack of understanding of the impact of information on users and society.

Steps in Product Development

In order to develop a product which will sell, there is need for the libraries to follow certain steps as suggested by Onasanya (1991). The libraries must answer the following questions:

Is there an idea worth pursuing as a new product – *idea generation*? Can the product idea be successfully converted into a valid business opportunity for the library department – i.e *identifying the business opportunity*? Will it be possible to make a profit in this business opportunity – *venture analysis*? Can the product sell and be produced at a development cost that the buyer will be willing and able to afford – *product design and development*? And finally, can a strategy that will match a company's capabilities and the product to the characteristics of the market place be developed – *market strategy*?

Okehi (2005) states that new product development process usually involves six stages which encompasses generation of new product idea, screening and evaluation of ideas, business analysis of the idea, product development, test marketing the product and commercialisation. To Nwokoye (2000), product development is the stage of producing a prototype of the product embodying all the desirable features that will appeal to buyers. He states further that the major activities involved here are design and production, branding, packaging and consumer concept-testing. Thus every new product whether in information and library sciences or in other industries started from an idea which often came as a result of market research which identified a market niche that needed to be filled. For example, Mutula (2003) suggested that the librarians in Africa should pursue like their counterparts in the United States and Britain is advocacy by being vocal on topical issues like HIV/AIDS and disseminating as much information as possible on such issues to its user community and environs.

Costing the Products

Cost, according to Lucey (2002), is the amount of expenditure (actual) incurred, or attributable to, a specified thing or activity. Cost of library products and services is often loosely equated with expenditure on library services, that is, all real resources that are used up by the services as well as the opportunity cost (i.e sacrificed alternative opportunities for present consumption or for some other form of investment). Achumba (2000) may have had this at the back of his mind when he posited that cost sets the floor for the price a company can charge for its products and services. He further states that a company may want to charge a price that covers part or all of its cost of producing, distributing and marketing the products and at the same time returns a fair rate for its effort and risk. While many companies work to become the lowest – “cost producer,” others strive to set lower prices that will result in greater sales and profits. Besides the cost directly associated with a particular product, it is necessary to take account of other costs that the product shares with others in the product line. Therefore, marketers, must take cognisance of

the fixed costs – cost that do not vary with production or sales, **variable costs** – cost that products often share such as cost of research and development, production and distribution. All these make up the total or real cost – the sum of the fixed and variable costs for any given level of production. A product cost therefore is the minimum or floor below which the product cannot be priced. Variable costs and fixed costs are added up to get total costs which when divided by the volume of output gives average total cost per unit - in the case of the library per user.

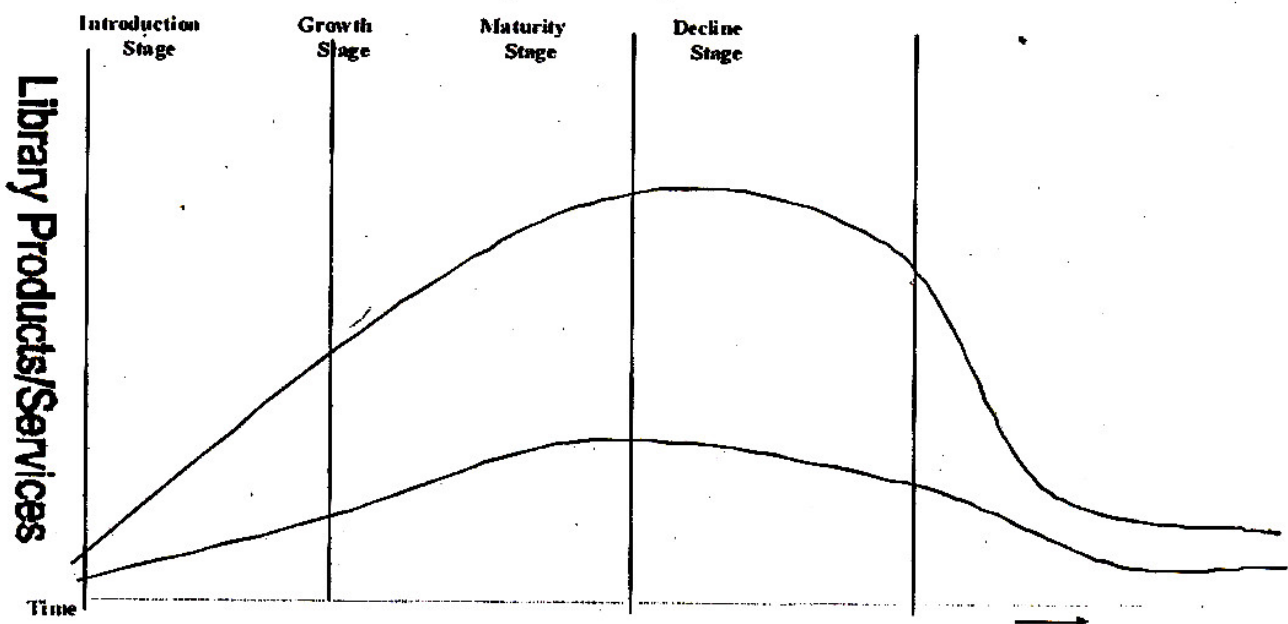
Specifically, allocating cost to products involves determining a product price, it is easy enough to identify and allocate the variable costs and the specific programme costs (if any) since these costs are directly traceable to the product. Overhead costs, that is the general programme costs are difficult to allocate to specific products, because these are, computed as joint costs and no equitable basis really exists, for some of the methods used are quite arbitrary. The rationale of the full-cost method is that all products must bear their full share of costs. Any product price therefore, must cover all allocated costs plus a reasonable profit mark up or margin.

Another method for determining the average total cost as enunciated by Nwokoye (2000) is by making no attempt to isolate for the product the individual components of the total fixed cost (i.e various overhead costs). Instead each overhead is taken as the arbitrary percentage of the direct material and/or labour costs for the product.

Theoretical Framework

Vespory(1994) in his study on '*Marketing of information and generation of income: The LEDC experience*' reported that all products have a life cycle. The sales performance starts from nothing, rises, reaches a peak and then declines. This is true of all human endeavours. The stages are development, introduction, growth, maturity, saturation and decline (Figure 1). There are

Figure.1: Information Product Life Cycle Development



many examples among periodicals but the cycle can be prolonged. If before the saturation phase, the product range is extended, there could be a new period of growth. New markets could be developed for the products to extend its life further. Where however the product/service is dead, it behoves on the librarian – the information professional to develop a new product so as to remain relevant to its user community and the Library and Information Science (LIS) profession. This study is based on the Life Cycle theory because the medical libraries are departments that use products/services in the performance of their duties. There is therefore, a constant need to develop new products/ services and renovate the existing ones to meet with the new economic challenges facing medical libraries and indeed virtually all public and government owned libraries in Nigeria.

Methodology

A questionnaire was designed and administered to all senior and professional librarians, with a minimum qualification of Ordinary National Diploma (OND) in health science libraries in Lagos State and Ibadan, all of Nigeria. This was supported by personal interviews and participant's observation conducted at the libraries. The target population of the study was all known health science related libraries in Lagos State and Ibadan. The sampling size was all known health sciences libraries in these two locations. They are the Medical Library, College of Medicine, University of Lagos; Central Medical Library, Yaba, Lagos; Nigerian Institute of Medical Research Library, Yaba, Lagos; Pharmaceutical Library, Yaba; Psychiatric Hospital Library, Yaba; Lagos State School of Nursing Library, Ikoyi, Lagos; National Orthopaedic Hospital Library, Igbobi, Lagos; National Postgraduate College of Medicine, Ijanikin, Lagos; School of Radiography, Yaba; Lagos State University Medical College, Ikeja, Lagos; School of Occupational Therapy, Yaba, Lagos; National Agency for Food, Drugs, Administration and Control (NAFDAC), Yaba, Lagos; and the College of Medicine Library, University of Ibadan.

The sample and sampling consisted of all senior and professional librarians in the institutions visited. The respondents were allowed to answer the questionnaire, while additional information was gathered through personal interviews. Observation of participants' was conducted in the libraries to get further information on the available products and services and the amount charged for such products/services.

The research instruments were a questionnaire, interviews and participant observation. The questionnaire covered bio-data, traditional services and products, costing of new products, new product development, pricing methods and recommendations by respondents after it had been pre-tested.

The reliability of the instrument was ensured by a pilot test conducted on librarians at College of Health Technology, Yaba. The study was carried out between the months of February and April 2006. Data was analysed by using mean ranking, simple percentages, charts and a histogram.

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Analysis of Data and Results

This section provides an explicit analysis of the data collected from 13 health libraries in Lagos State and Ibadan. The data collected were analysed using mean rating/rank order, tables, chart and histograms.

Figure 2: Profile of Respondents

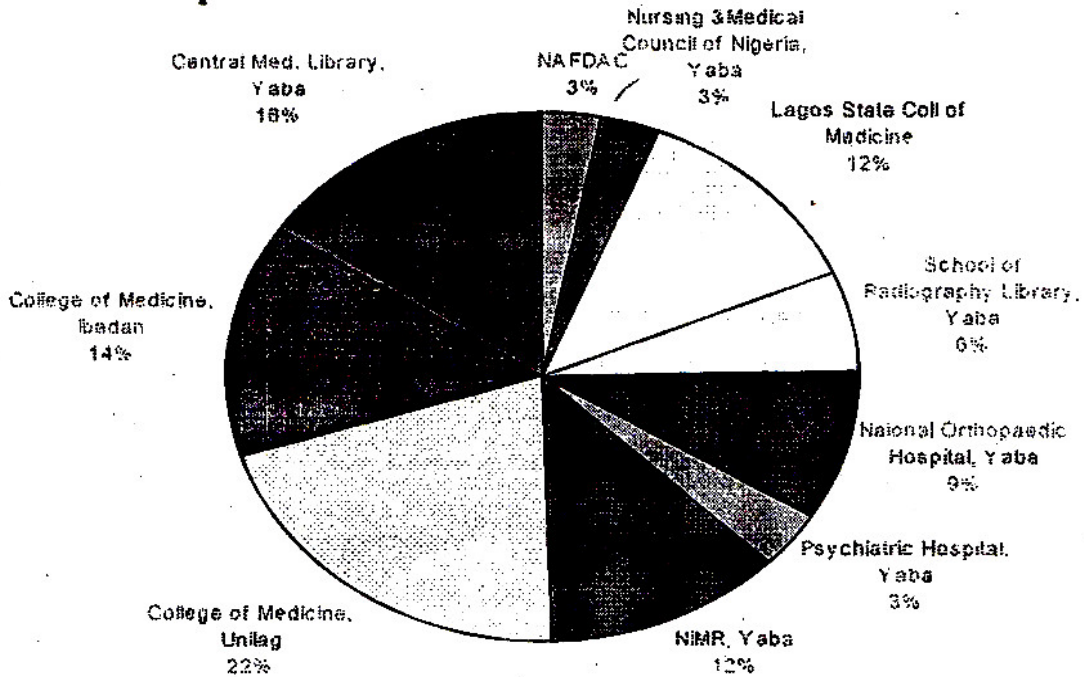


Figure 2 presents information on the percentages of copies of the questionnaire returned by respondents by institution. In all 42 copies of the questionnaire was administered and 36 representing 85.7% were duly completed and returned.

Figure 3: Products / services available in medical libraries

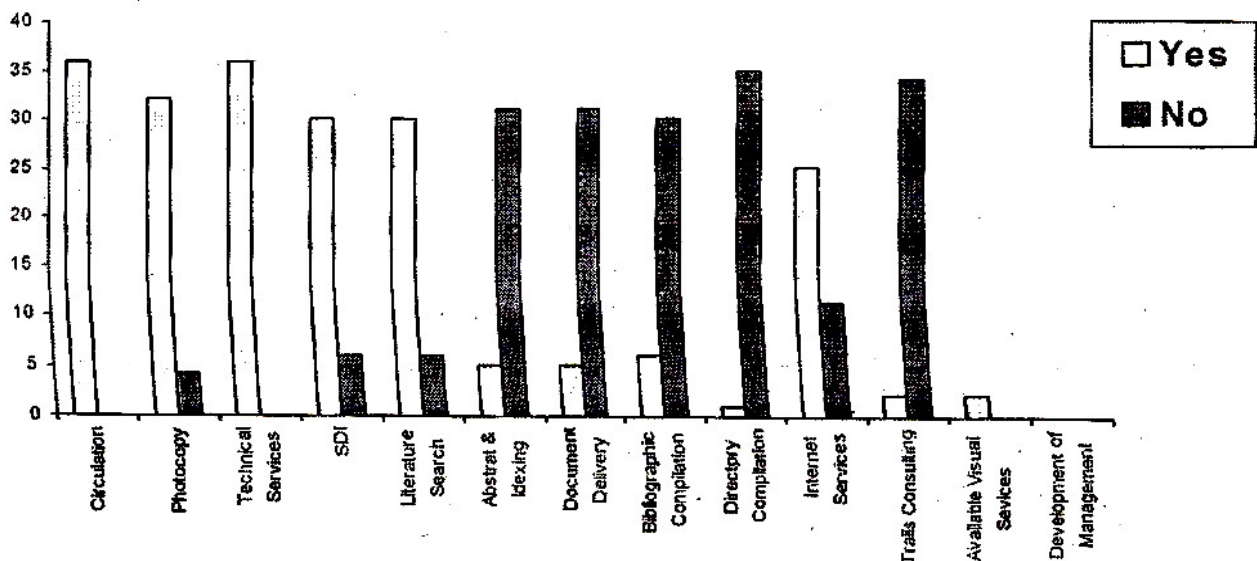


Figure 3 shows traditional library services and products available in medical libraries of Ibadan and Lagos. Circulation (100%), technical, (100%) and photocopying (88%) services were the most popular, while the training, consultancy and audio – visual services respectively were the least popular. The development of management games was not available in any of the libraries. Figure 3 shows that there are indeed products and services already in existence in these medical libraries.

Table: 1. Fee-based and free products and services available in medical libraries

Product / service	Available	Not Available	Price	Percentage
Reference service	36		Free	100
Circulation & lending	36		Free	100
Photocopy & other reprographic service	23		N2-3	63.9
Technical services	36		Free	100
S. D. I	9		N20.00	25
Literature search	11		N10.00	30.6
Indexing & Abstracting	14			38.9
Document delivery		36		
Bibliographic compilation		36		
Directory compilation	28			
Publishing & translations	5	36	Free	13.9%
Consortia service		36		100
Inter library loans	10	25	free	

Key: N. I. P = not in practice

N36

Source: Field Survey, 2006

Table 1 revealed that majority of the library services and products were free. Those that were fee-based attracted the sum of between 2-20 Naira. The commonest was photocopying and other reprographic services which 23 of the 36 respondents said were available in their libraries. The traditional services of reference and circulation were still basically free. The respondents also reported that bibliographic services were basically free as only 13.8% reported charging fees for this service.

Table 2: New products and services

Product/ services	Yes	No	Percentage of Yes	Ranking of yes
Index & abstracts	31	5	86.1	1
Internet services	28	8	77.8	2
Advocacy on typical issues	25	11	69.8	3
Training consultancy	23	13	63.8	4
Consultancy services	22	14	61.1	5
Computer data base service	19	17	52.8	6
Publishing / translation	15	21	41.7	7
Consortia service	12	24	33.3	8
Development of A-V service	12	24	33.3	8
Software product development	10	26	27.2	10
Telecom based product	8	28	22.2	11

N=36

Source: Field Survey, 2006

Table 2 shows the new products/services that medical librarians would want to introduce to their libraries in order to generate additional funds. The highest in ranking were indexing and abstracting services (86.1%) while the least was development of audio-visual services (5.6%). This seems to suggest there is the prospect for product/service development in these libraries.

Table 3: Costing objective of medical libraries products / services

Products	Agree	Disagree	Total
Price of similar products/ service in other libraries	33	3	36
Cost of producing products /service	23	13	36
Purpose of user in buying new product	5	31	36
User's capacity to pay	31	5	36
Internal & external marketing environment	29	7	36
The cost plus certain project margin	34	2	36
Demand oriented method	23	13	36
Arbitrarily price fixing	-	36	36
No knowledge of how price is fixed	3	33	36

Source: Field Survey, 2006

Table 3 depicts the results of the respondents' objectives for the costing of their products and services. The major reasons were the cost plus a certain projected margin (94.4% of the respondents). The price of similar products in other libraries, for some respondents (91.7%) was also a contributing factor. The least reason, was arbitrary fixing of prices, some (8.3%) of the respondents were not even aware of how their libraries arrived at the price of the products and services within their domain. This table shows that there were guidelines that defined the costing of these products and services in the libraries surveyed

Table 4: Factors to be considered before Developing New Products/Services

Products	Agree	Disagree
A new product development and activities in the process constitute one of the most risky investments any library can make	31	5
New products represent for a library the business opportunities of tomorrow	32	4
My library will continue in business only if we plan for new products to replace the present after they have gone through the product life cycle.	29	7
Developing new products can help the library remain competitive in its immediate environment	27	9
Introduction of new services will help the library remain competitive in its immediate environment.	34	2
New products help replace those library services which are no longer generating strengths	27	9
New product development takes a lot of planning	22	14
New product development, ill-conceived, ill planned, ill executed and under supported in all respects can be harmful to the overall health of the library	33	6
Introducing a new product in the library services requires an expenditure of money and thus becomes an investment in the future of the firm.	30	6
New product development is more risky, more difficult to evaluate as an investment, more difficult to predict result	35	1
Despite the risks involved new product development is the key to a relevant medical library of the future.	16	20

Source: Field Survey, 2006

The librarians agreed (Table 4) that the introduction or the development of new products and services required expenditure of money and thus becomes an investment in the future for the firm.

They also agreed that in spite of the monetary involvement and the risks, development of new products remained key to keeping the medical library relevant in the nearest future of their institution. These were the views of 97.2% of the respondents respectively. This implies that the health sciences librarians think the introduction of new products/ services is advantageous to their institutions

Recommendations of Respondents

Most of the respondents (94.1%) were of the view that new services and products should be introduced. However, 86% of the respondents declared that they would only be competitive if the librarians were Information Communication Technology (ICT) compliant. They also recommended the acquisition of Internet skills (44.4% of the respondents) by the information managers. However, 13.9% of the respondents felt that "our mentality will not allow the fee - based products/services developed to see the light of day, since users have been used to free library services." A couple of the respondents (5.5%) therefore suggested that the libraries should seek additional funding from government and also look to foundations outside the country for additional funding instead of generating income internally.

Discussion of Findings

The study aimed at discovering the practice and future of products and services development in medical libraries in Ibadan and Lagos. The result of the study through the analyses of the questionnaire, as well as through personal interviews and direct observation has major implications for further development of health sciences library products and services. The strategy for costing such fee-based products is also of great importance. Based on the findings of this study, most of the institutions were enthusiastic about the library getting involved in new products / services development, while others stated that the library should seek for grants and other external funds from foundations instead of getting involved in the economics and marketing of library services. It is also worthy of note that most medical libraries were still not involved in services outside the traditional ones with the possible exception of the Internet service. The study also revealed that *abstracts and indexing* was not a means of generating income for these libraries when in actual fact, it was observed that many academic members of staff are writing books in order not to 'perish' within the university system. Observation also revealed that many of these books written by the academic staff were not indexed. What this means is that there may be the need for the health sciences libraries to market this product, even if it means a certain percentage of the service fee will be given to the librarian who brings the contract to the library as an incentive. The ages of the respondents were from 36 - 55 years. These are senior officers in their institutions. It may be interesting to discover what opinion the younger generation of librarians will have about this issue of product development and costing of library services and products. Also worthy of note is support given to advocacy by the respondents, giving the impression that it is an area that can be exploited to the advantage of the health sciences librarian. The implication of this for policy is that the parent body should give both financial and moral support to assist their libraries in taking this step of generating and developing new products / services (at least the takeoff grant).

- The implication of the above for practice is that it is not impossible that some librarians were not even aware of the services they can offer to the clients outside the traditional ones. Thus, encouragement should be given to them to partake of continuous education, workshops and seminars, as well as ensuring that current journals on medical librarianship were available for them to read for self development. This will in no small way develop their interest in 'entrepreneurial' the products and services of the medical library (Crossley, 1985). At the same time the librarians should be alert and busy looking for the business in every venture that the library undertakes in order, to generate as much income as possible. In fact they should also get as much education as possible about economics and marketing of library sciences (Oloruntoba, 2002). Also as recommended by Ajala (2003), it will be a good idea to introduce a course in product development, costing and marketing at the library school for the undergraduate and the postgraduate students.

Development of new products and services as well as its appropriate costing is key for the development and sustenance of the medical library of the future. The need for the medical librarians to see the problem of inadequate funding as a challenge and stepping stone to the development and progress of the medical library of the future cannot be over emphasized. There is also the need for support from parent institutions of these libraries, especially in the area of take-off funding. This can be done through awarding research grants for such products and services projects, so that these new projects will see the light of day. Another area that the libraries may need more grounding will be the appropriate packaging and marketing of such products and services.

Most of all, the librarians must realize that a product that may be doing well today may die tomorrow hence she/he must be constantly looking and thinking of ways to better the products/services in their department. Creating a section in the library called the *Consultancy Unit* as recommended by Steele and Elder (2000) can solve this problem. A standing committee within the library that meets regularly to find new ways of improving products and services that will meet the needs of users can also be instituted. Members of this committee should be people who really share the vision that the library can survive these hard times and come out better than it was, by harnessing this new area.

Conclusion

This study focused on the practices and prospects of products development and costing of library services in medical libraries in Lagos and Ibadan. Data were gathered through a questionnaire administered to all senior and professional librarians in health science libraries located in these two areas. Analysis of the data revealed that several products and services are already in existence in these medical libraries.

Most of the librarians agreed that the development of new products and services required expenditure of money. They also agreed that in spite of the monetary involvement and the risks, development of new products remained key to keeping the medical library relevant to the parent institution in the nearest future. A recommendation to the effect of constituting a standing committee in the Library/information departments for the purpose of generating new products and services among others was made.

References

- Abels, E.G, Kantor P.B and Sacracevic (1996) Studying the cost and value of library and information services: Applying functional cost analysis by the library in transition. **Journal of American Society for International Science**. Vol. 47, No. 3, pp. 217-227.
- Abele, R. (1994) The library collection crisis: What is to be done. **Publishing Research**. Vol. 10, No. 2, pp. 40-44.
- Achumba, I.C. (2000) **Strategic management in the 21st century**. USA: Mac-Williams & Capital Pub. Co., pp. 465.
- Adeloye, A. (2000) The information market in Nigeria. **Journal of Information Sciences**, Vol. 2, No.1, pp. 282-285.
- Agbola, A.T. (2000) Shared loans collections in Nigerian university libraries. **Lagos Librarian**, Vol. 21, No.1&2, pp. 46-56.
- Ahmedabad, Lahiri (1994) Inculcating marketing orientation in information centres. In K.A Jain et al. (eds), **Marketing of Information Products and Services**. pp. 59-72.
- Ajala, E. B. (2003) Librarians and entrepreneurship: A call for the introduction of entrepreneurship training in library schools-Southwest Nigeria as a case study **NSLISER**. Vol. 21, No.1, pp. 52-65.
- Agbola, A.T. (2000) Shared loans collections in Nigerian university libraries. **Lagos Librarian**. Vol 21, No.1&2, pp. 46-56.
- Anyanoku, E.N & Ajala E.B. (1993-1994) Staff development to meet the challenges of academic status for librarians working in Nigerian universities. **NSLISER**, Vol. 21, No.1, pp.29- 38.
- Banjo, G. (1997) Address at the opening ceremony, 35th National Conference and AGM. of the Library Association Annual Conference at Kaduna 5-9 May.
- Crossley, C. (1985) The marketing of library services prospects for information service: Essays in honor of Daphne Clark **Aslib Proceedings**. pp. 5-22
- Clements, D.W.G. (1994) The costing of library systems. In S. A. Roberts (ed), **Costing and the economics of Library and Information Services**, pp. 93 – 106.
- Definition of products development. (2005). Herkules:only.filisbn9511449378/html/g240/html.
- Edoka, B.E. (1991) Prospects of priced information services in public funded libraries in Nigeria. **African Journal of Library Archives and Information Sciences**, Vol. 1, No.2. pp. 83-94.
- Homan, J.M and McGowon, J.I. (2002) The Medical Library Association; promoting new roles for health information professionals. **Journal of Medical Library Association**, Vol. 20, No.11, pp. 81-85.
- Ibegwam, Ahiaoma (2005) Adequacy and utilization of human resources in health science libraries in Lagos State. MED. Project, Department of Edu. Admin. Faculty of Education, University of Lagos, pp. 75.
- Ifidon, E. I. and Nwalo, K. I. N. (2003) Marketing dynamics of libraries of information services in Nigerian universities. **Contemporary issues in educational management book of honour**.
- Jain, A, T P., Rao, Rema and Jambhekar, A. (1994) Marketing of management information research at IIMA In A.K. Jain, (ed) **Marketing of Information Products and Services**. pp. 89.
- Jotwani, D. and Haravu, L.S. (1993) Pricing of the SDI services at ICRISAT. **Journal of Information Science**, Vol. 19, pp. 51-55.

- Lafond, R. (1994) Information products and services: Marketing the new thrust areas. In Jain, et al. (eds), **Marketing of Information Products and Services**
- Lucey, T. (2002) **Costing Great Britain**: Biddles Ltd. 609p.
- Lipsey, R.C. and Chrystal, K. A. (1997) **Introduction to positive economics**. Oxford: University Press. pp. 919.
- Mutula, S. (2003) Issues in library associations in Eastern, Central and Southern Africa: The case of the Botswana Library Association (BLA). **The Electronic Library**, Vol. 21, No.4, pp. 335-351.
- Nicholson, H. (1992) Uncomfortable bed fellows: Enterprise and academic libraries. **Journal of Librarianship and Information Science**, Vol. 24, No.1, pp. 9-13.
- NMA and Healthy Living Com Ltd. (1993) **The National Medical Directory, Nigeria**.
- Ojedokun, AA and Ola, C.O. (1993) Fee charging in Nigerian academic libraries. What justification? **Nigerian Libraries**, Vol. 27 & 28, No. 94, pp. 56-80.
- Okehi, D.O. (2005) **Insurance marketing and marketing**. Lagos: Audrey Ventures 489p.
- Oloruntoba, A. (2002) Funding library services in a depressed economy. **Nigerian Libraries**, pp. 30-37.
- Onasanya, A.M. (1991) Critical steps and decisions for introducing new products to the market place. **Management in Nigeria**, Nov/Dec, pp. 21-55.
- Robertson, S.E, et al. (1984) Standard costing for information systems: Background to current study-costing and the economics of library and information services. **Aslib Reader series**, Vol. 15, pp. 349.
- Rosenberg D. (1997) Financial management and fund raising in libraries: A resume in libraries of papers presented at the NLA conference, Kaduna. **Nigerian Libraries**, Vol. 31, No. 122, pp. 121-160.
- Ojoade, A.B and Ochai, A. (2000) Income generation as alternative source of funding libraries in Nigeria: Myth or reality. **Nigerian Libraries**, Vol. 34, No.1, pp. 1-8.
- Rowley, J. and Butcher, D. (1996) Factors influencing pricing of information. **Journal of Information Science**, Vol. 22, No.1, pp. 39-46.
- Steele, O and Elda, S.D. (2000) **Becoming a fund raiser. The principles and practice of library development**. Chicago: American Library Association, pp.139.
- Tiamiyu, M.A.(1993) Analysis of components for designing information products. **Aslib Proceedings**, Vol. 45, No. 7/8, pp. 209-214.
- Tymbios, C. (1996) Doing it for money: The info bank way. **The Law Librarian**, Vol. 27, No. 2.
- Ulrich and Eppinger, A. (2000) hercules.oulu.fi/libn9514259378/html/g240.html.
- Vespry, H.A. (1994) **Marketing of information and generation of income: The LRCD experience in marketing information products and services**. Ahmedabad: IIMA, pp. 83-121.
- Webber, Sheila. (1993) Charging for library and information services in medical libraries: A review of the literature and summary of current practices. **Health Librarians Review**, Vol.10, pp. 202-223.
- Webber, Sheila (2001) Costing and pricing information services <http://disshef.ac.uk/sheila/marketing/pricing.html> downloaded 21/5/06.