





Identifying and Analysis of Marketing Mix in Medical Libraries

Maryam Moqiseh¹, Maryam Kazerani^{1*} , Maryam Shekofteh¹ 

¹Department of Medical library & Information Science, School of Allied Medical Sciences, Shahid Beheshti University of Medical Sciences, Tehran, Iran

Abstract

Received: 6 May 2020

Accepted: 25 May 2020

Keywords:

Marketing Mix

Academic Libraries

Medical Science Universities

* Corresponding author

Maryam Kazerani

Kazerani.m@gmail.com

Introduction: Considering the marketing importance in libraries and information centers, this study aims to identify and compare 4Ps marketing mix components, including product, place, price, and promotion activities in libraries of medical sciences universities in Tehran.

Methods: This research is an analytical survey performed in three central libraries and 36 faculty libraries of Shahid Beheshti, Tehran, and Iran Universities of Medical Sciences. The survey questionnaire includes 48 questions about the 4Ps marketing mix.

Results: The mean score of product, place, and promotion marketing mix in Shahid Beheshti, Tehran, and Iran Universities of Medical Sciences is 2.91, 2.55, and 2.22 out of four, respectively. Their total average in price is also 0.31 out of one. The highest average score of the product mix is 2.97 in Shahid Beheshti and Tehran Universities of Medical Sciences. The highest average place mix score is 2.62 in Shahid Beheshti University of Medical Sciences. The highest averages score of promotion mix is 2.30 in Shahid Beheshti and Tehran Universities of Medical Sciences. Also, the highest average score of the price, 0.34, obtained by Iran University of Medical Sciences. ANOVA test showed no significant difference among the average score of 4Ps marketing mix in the intended Universities (P-value > 0.05).

Conclusion: The survey shows that the product, place, and promotion marketing mix get an average score, but the price is the least. Considering the powerful competitors of the libraries in this virtual age, librarians should play an essential role in appraising and develop the current state of libraries.

Introduction

Today, social institutions need to apply new approaches to economics and practical strategies, like marketing principles, to maintain their survival (1-3). The American Marketing Association's definition of marketing is "an organizational function and a set of processes for creating, communicating, and delivering value to customers and for managing customer relationships in ways that benefit the organization and its stakeholders" (4). Philip Kotler, the father of modern marketing, considers marketing as a human activity directed at satisfying needs and wants through an exchange process and a customer-oriented concept that acts as

a key through an integrated process to achieve organizational goals, to acquire satisfaction of customers in short term and welfare for them in the long run (5).

The marketing mix includes several Ps like:

- 4Ps: (Product, Price, Place, Promotion)
- 4Cs: (Customer value, Customer cost, Customer convenience, Customer communication)
- 7Is: (Interconnection, Interface, Interactivity, Involvement, Information, Individualism and Integrity)
- 7Ps: (Product, Price, Place, Promotion, Process, Physical Evidence, and Participants)



The background shows among the various marketing mix, and the 4Ps marketing mix is used the most in all the academic libraries around the world (6-9). Besides, the p4 model is more typically used for cases where the product is not of high value to the customer and needs to use other methods to attract people (10-13).

The components of the 4Ps marketing model are the product, price, place, and promotional activities. Product is the most crucial elemental P. The product mix is a good or service that offers customers to meet their inquiries. Price is the cost consumers pay for a product.

The price mix is the cost users pay for the products. It should be a reasonable and suitable price. In the place mix, where the product is offered to the buyers should be easily reachable. In the promotion mix, the product information is conveyed to the clients through advertising and available media (14).

Libraries are not currently the only reference in the presentation and dispersal of information, even their traditional role in providing services has diminished by technological development.

Therefore, they need to revise the traditional ways of providing services and introduce their products to the community of actual and potential users and design new services according to the needs of users, i.e., the same marketing concept. (6, 8, and 11)

The importance of marketing in libraries and information centers has led to various studies. Pashootanzadeh et al. determined and compared the sights of managers and users of public libraries on the use of social media for library services marketing. Their findings show that from the users' point of view, the most crucial feature of social media marketing in libraries is "communication ability". Regarding the managers' perspective, "creating a true vision of the role of the library" and "informing users about all library services" items are the essential reasons to do library marketing on social media. The point of view of both groups is that the Telegram is the most convenient medium to introduce library marketing services. The study's results help library managers make better decisions about marketing their library services through social media (15).

In this regard, reviewing the growth and marketing strategies of University libraries in Tanzania indicated that e-journals applied extensively in Tanzanian universities and college bodies. Moreover, various marketing strategies such as, OPAC and Web 2, have a significant role in informing the users about e-resources. It is recommended that e-resource marketing channels be strengthened to make better and more use of e-resources (16).

Osninylyu et al. proclaimed that the most prevalent marketing strategies used by librarians at Nigeria State University are user survey studies, purchase and use common and current books, interlibrary loan services, and improved burrowing privileges. The most critical challenges for significant library resources and services marketing are an unstable internet connection and inadequate funding. It was recommended to use ICT and social media tools as marketing strategies (17).

The previous studies have highlighted the importance of marketing in libraries, especially in academic ones (2, 5, 8, 10, 12, and 18). Due to the notable position of Shahid Beheshti, Tehran and Iran Universities of Medical Sciences in Iran, and their libraries' decisive role as the beating heart of the university; and since the status of the marketing mix has not been evident in these libraries, the present study aims to investigate and compare the status of the marketing mix in the mentioned libraries.

Identifying and evaluating the libraries' current statuses in this study help the librarian to recognize their strengths and

weaknesses of libraries and provide better plans to achieve their goals successfully, and make the users fully satisfied with the resources and services.

Methods

This research is a descriptive-analytical survey. The research population consisted of 39 libraries, including three central libraries and 36 faculty libraries of Shahid Beheshti, Tehran, and Iran, Universities of Medical Sciences. A researcher-made questionnaire is an instrument for gathering the data. Eight library information professors and experts confirmed the validity of the tool.

Cronbach's alpha test was used to measure questionnaire reliability. The obtained result was 0.94, which indicated that the reliability is acceptable.

The research questionnaire consisted of 48 questions to measure 4Ps marketing mix components (product, place, price, and promotion). The product, price, and promotion have 19, 13, 11 questions, respectively, which evaluated through a four Likert scale. The price mix included five questions with 0 and 1 answering which code 0 assigned to a not received cost, and code 1 showed a received cost, so the mean score of this mix is 0.5.

The distributing and collecting of questionnaires in the mentioned libraries was personally. The SPSS software, version 16, was used for analyzing data. The overall 4Ps and questionnaire items' scores were determined by the mean and standard deviation. The mean score of product, place, and promotion is between 2 to 3, and the mean price score is between 0.33 and 1. ANOVA test was used to compare the average score of the overall 4Ps marketing mix throughout the studied universities and the four marketing mix components.

Results

Table 1 shows that the average score of product mix on a four-point Likert scale at the libraries of Shahid Beheshti and Tehran Universities of Medical Sciences was 2.97, and at Iran University of Medical Sciences was 2.72. The items with the highest average scores were "Possibility of computer and Internet access for the users" (3.75), "providing online/offline information services database" (3.76), and "library print resources borrowing" (3.86). Providing translation services items got the lowest average score in all three Universities. The ANOVA test results showed that there is no significant difference among the product mix average scores of the intended libraries ($P=0.464$).

Table 2 shows that the libraries of Shahid Beheshti University of Medical Sciences have the highest total average score of the place marketing mix (2.62). The second questionnaire item, "Library internal sections easy access," has the highest score in the libraries of all three Universities.

"Soundproof (acoustic) walls" item has got the lowest scores in all libraries. The following items, "Library building vertical and horizontal expansion," "Library facilitation for handicapped and blinds," and "Library meeting hall" in at least two libraries of the studied libraries obtained the lowest scores. The ANOVA test showed that there is not any significant difference between the mean score of place mix component in the studied libraries ($P=0.877$).

Table 3 shows that 37.5 % of Iran University of Medical Sciences' libraries, 30.3 % Tehran University of Medical



Table 1. The production marketing mix status in the libraries of Medical universities

Product mix components	Universities	Iran University of Medical Sciences		Tehran University of Medical Sciences		Shahid Beheshti University of Medical Sciences	
		Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
1 sequential evaluation of services and products		3.22	0.66	2.63	0.92	3	1.09
2 Workshop holding for users to get acquainted with the library		2.87	0.83	2.70	0.85	3.25	0.96
3 Print resources (books, journals, etc.) loan		3.88	0.33	3.92	0.27	3.66	0.88
4 Non-print resources (audio and visual materials, and e-books) loan		2.22	0.66	3	0.73	2.33	1.23
5 Interlibrary loan		1.33	0.50	3	1.15	1.36	0.67
6 Reference consultation service		3.33	1.33	3.50	0.85	3	0.95
7 Information services (online/offline database)		3.66	0.50	3.76	0.43	3.41	1.16
8 Possibility of computer and internet access for the users		3.88	0.33	3.58	0.90	3.75	0.45
9 Resources copy and print allowance		1.88	0.92	2.61	1.26	2.90	1.37
10 Translation services		1	0	1.40	0.69	1.10	0.31
11 Providing users-required journals' subscription		2.50	1.06	2.72	1.19	2.45	1.12
12 Providing users-required reference resources		3.50	0.75	3.07	1.03	3.41	0.51
13 Library catalog (OPAC, Sheet, etc.)		2.62	0.74	3.25	0.86	3.25	1.13
14 Online/offline database		3.44	0.72	3.27	1	3.66	0.88
15 Library website design		2.75	0.70	3	1.26	3.50	0.90
16 Consulting Services (to use the library, conduct research, etc.)		3.25	0.88	2.92	1.25	3.50	0.67
17 Providing reference services on the phone		2.55	1.01	2.41	1.24	2.83	1.11
18 Getting in touch with the patrons via Fax		1.66	0.70	1.84	0.98	2.45	1.21
19 Getting in touch with the patrons via email		2.11	0.78	2.28	1.20	2.63	1.12
Overall average score			2.72		2.97		2.97

Table 2. The place marketing mix status in the libraries of medical universities

Place mix items	Universities	Iran University of Medical Sciences		Tehran University of Medical Sciences		Shahid Beheshti University of Medical Sciences	
		Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
1 Library location easy access		2.77	1.09	3.28	0.82	3.16	1.11
2 Library internal sections easy access		3.88	0.33	3.53	0.77	3.58	0.99
3 Library building exterior design		3.11	0.92	3.14	0.66	2.91	1.16
4 Library building internal design		3.22	0.66	2.92	0.82	3.25	0.86
5 Library building HSE (building fire safety, entry/exit and through shelves monitoring, etc.)		3.22	0.66	2.84	1.06	3	0.85
6 Library proper hall		3	1.11	2.84	0.89	3.09	0.94
7 Library facilitation for handicapped and blinds (slopped surface, elevator, etc.)		3	0.86	1.92	1.18	1.9	1.30
8 Library meeting hall		1.66	1.55	1.83	1.19	2.1	1.44
9 Visual and auditory facilities		1.88	1.16	2	1.04	2.18	1.25
10 Soundproof (acoustic) walls		1.44	0.88	1.41	0.79	1.1	0.31
11 Library internal acoustic flooring		2.66	0.86	2	1.15	2.45	1.12
12 Library different parts proper temperature, light, ventilation, relative humidity control		2.55	1.01	2.64	1.08	2.45	0.82
13 Library building vertical and horizontal expansion		1.75	0.46	1.58	0.79	2	1.15
Overall average score			2.51		2.51		2.62



Sciences' libraries, and 28.4 % Shahid Beheshti University of Medical Science's libraries provided the price mix and charge for the printing and copying services. The results of the ANOVA test showed that there is not any significant difference between the mean scores of the price mix in the libraries of studied universities ($P=0.907$).

Table 4 shows that the total average score of the place marketing mix in the libraries of Iran, Shahid Beheshti, and Tehran Universities of Medical Sciences is 2.33, 2.30, and 1.97, respectively. The second item, "Introducing new resources and events," obtained the highest averages score in all three Universities.

However, "Holding books review and criticism sessions", "Holding movies display and criticism sessions", "Holding

meeting sessions with authors and composers," "Public relation department establishment", "Library introduction and advertisement (via mass media likes TV, newspaper)" items received an average score less than other items in the present study. The ANOVA test results showed that there is no significant difference between the mean scores of the place mix in the libraries of studied universities ($P=0.481$).

Figure 1 shows that the total average score of the product mix (2.91) is higher than the place (2.55) and the promotion (2.22). It should be noted that the mean score of the price marketing mix in the mentioned libraries is (0.31) out of one. ANOVA test also showed that there was no significant difference between the mean scores of the 4Ps marketing mix in Shahid Beheshti, Iran, and Tehran Medical Sciences Universities ($P>0.05$).

Table 3. The price marketing mix status in the libraries of medical universities

Price mix items	Universities		Iran University of Medical Sciences				Tehran University of Medical Sciences				Shahid Beheshti University of Medical Sciences			
			Charged		No charged		Charged		No charged		Charged		No charged	
	N	P	N	P	N	P	N	P	N	P	N	P	N	P
1 Membership	1	8.3	11	91.7	2	15.4	11	84.6	3	37.5	5	62.5		
2 Copy	4	57.1	3	42.9	5	41.7	7	58.3	4	100	0	0		
3 Print	4	66.7	2	33.3	3	37.5	5	62.5	1	50	1	50		
4 Translation	0	0	2	100	2	40	3	60	0	0	1	100		
5 Internet and database access	1	10	9	90	2	16.7	10	83.3	0	0	7	100		
Overall average score			28.4		71.6		30.3		69.7		37.5		62.5	

N=Number, P=Percent

Table 4. The promotion marketing mix status in the libraries of medical universities

Promotion mix items	Universities		Iran University of Medical Sciences		Tehran University of Medical Sciences		Shahid Beheshti University of Medical Sciences	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
1 Library exhibition	2.12	1.12	2.40	1.17	1.42	0.78		
2 Introducing new resources and events	33.3	0.79	3.15	1.14	3.66	0.65		
3 Library website or weblog	2.7	1.28	2.46	1.19	3.54	0.93		
4 Library survey (via questionnaire, e-mail, etc.)	2.66	0.70	2.76	1.30	2.91	0.90		
5 Library introduction and advertisement (via mass media likes TV, newspaper, etc.)	1.22	0.44	2	1.04	1.36	0.67		
6 Newsletters, brochures, and posters publication	1.66	0.50	2.25	0.96	2.50	1.16		
7 Holding educational workshops	2.66	1.11	2.64	1.08	3.09	0.94		
8 Holding books review and criticism sessions	1	0.0	1.33	0.88	1.11	0.33		
9 Holding movies display and criticism sessions	1	.0	1.25	0.86	1.11	0.33		
10 Holding meeting sessions with authors and composers	1.25	0.70	1.42	0.96	1.10	0.31		
11 Public relation department establishment	1.22	0.66	2	1.27	0.82	1.27		
Overall average score			1.97		2.33		2.30	



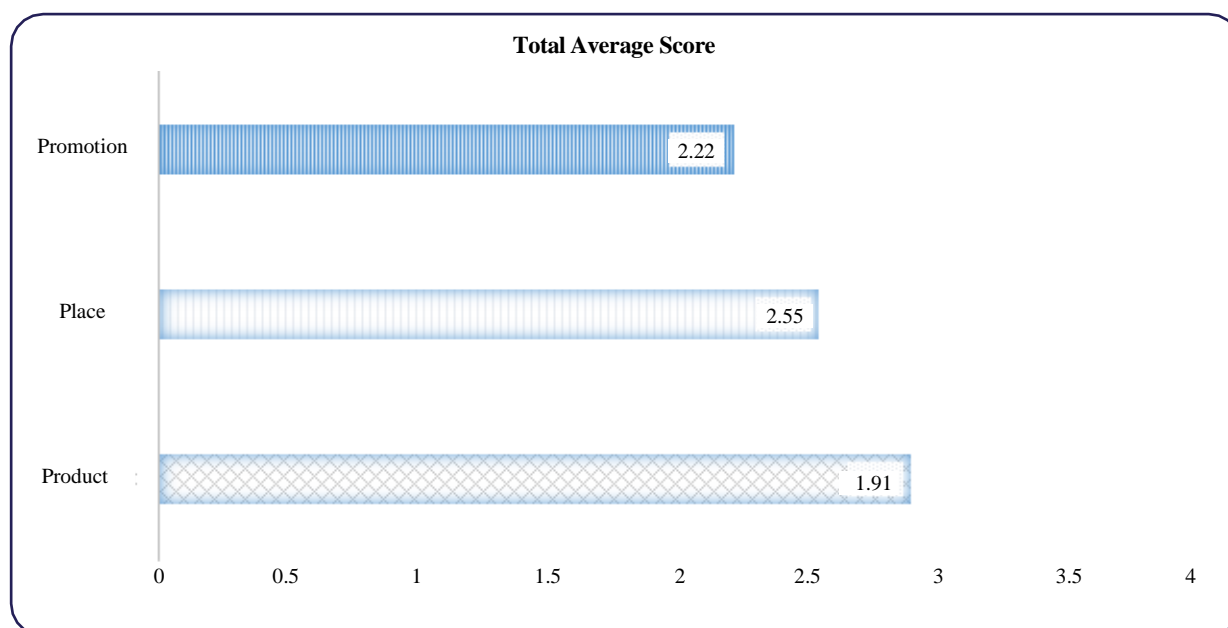


Figure 1. Total average score of product, place, and promotion marketing mix in the study intended libraries

Discussion

Nowadays, librarians and information managers need to provide the best possible services for their customers. In such a way, they have to use library services to carry out their scientific activities inevitably. Using Marketing techniques can be used to attract more and more clients to achieve this aim. The findings of the present study approve that the mean score of the product mix is higher than the score of other marketing mix components, and this is consistent with similar researches conducted in academic and non-academic libraries in Iran (19-21). However, the score of the product mix in the research is still at an average level. In this regard, since information and communication technology (ICT) and the expansion of information networks allow offline services for users, it is essential to pay attention to the required infrastructure in this section.

If the users are satisfied with the library services, this leads to the repetition and continuation of library use. In the libraries of the mentioned Universities, the translation services, interlibrary loan, and then getting in touch with the patrons via Fax, received the lowest attention. In this context, recovering and developing the product marketing mix elements of a University library's products and services should be considered by librarians and library managers (9).

The study of the place marketing mix in the present study stands in the second stage after the product component in the middle level. In this respect, library internal sections available access item has the highest average score, and the soundproof (acoustic) walls item has the lowest.

Facilities for handicapped and blinds (such as sloped surface, elevator) should be provided for the disabled to use in an academic library (23). However, the libraries of the two of the three universities in the present study, like the findings of Farkhari research (22), get below the average in this regard.

The library building vertical and horizontal expansion item is low, and the needs of the library in the coming years are not foreseen according to the standards (23). Besides, some of them have entirely ignored the existence of a meeting hall in a library.

The price marketing mix score is lower than the average. According to this research and similar researches, it seems that the managers and librarians consider the price mix as their least priority (20-22, 24). While librarians should notice the users' needs to make customer satisfaction, they should create a balance among services, information, financial and human resources. In the present study, most libraries have received fees for print and copy services, which is in line with the library's revenue generation. Libraries can provide every service at a reasonable price to most people by assessing the needs analysis of different users. They can provide an acceptable amount of useful and/or unreachable resources that people can find them by difficulties, or it is sometimes impossible to access them. However, most of the libraries offer most of their services free to attract audiences. Therefore, they do not attempt to provide ancillary or revenue-generating services (20). While some library users may be willing to pay as much as they afford to access to their information resources or services, there is no other way to get them but to visit the library. If the libraries put the price mix in their priorities, they can generate revenue for the library to expand the services and facilities, and overcome some of the budget shortage and other problems.

The promotion mix activities are in third place after the product and place mix components and received a middle-level score. Farkhari's research also shows that the sequence of the priorities of library managers in applying each of the variables is assigned to the product, place, promotion, then price mix, respectively (22). However, in Karaji's research, the order of the scores obtained in each marketing mix, from the highest to the lowest, is for promotion, place, product, and then price mix

at the end (24). The use of bulletins, posters, and advertisements can cause the users to come to a library and help to develop the promotion and encouragement activities. In general, introducing the library services and activities to customers and encouraging them to use library resources more is the first step in establishing and promoting marketing mix (25).

Moreover, applying social media leads to attracting the users' attention, library development, and the promotion of its services and products (26). So, one of the most critical ways to attract users is to display the library's activities and services through promotion and encouragement marketing mix. Nevertheless, in this study, it is the least critical component at the libraries. Therefore, the libraries' managers and librarians should revise their policies and add promotion and encouragement marketing mix strategies to their higher priorities, specifically the following items that received the lowest score in this study: "Holding books review and criticism sessions"; "Holding movies display and criticism sessions"; "Holding meeting with authors and composers"; "Public relation department establishment"; "Library introduction and advertisement (via mass media likes TV, newspaper, ...)".

Conclusion

In recent years, due to the progressive growth of information, competition, and number and variety of user expectations, marketing activities in libraries has become increasingly

References

- Golder PN. Historical method in marketing research with new evidence on long-term market share stability. *J Mark Res.* 2000;37(2):156–172.
- Charles D, Kitagawa F, Uyarra E. Universities in crisis?—new challenges and strategies in two English city-regions. *Camb J Reg Econ Soc.* 2014;7(2):327–348.
- Marquis C, Raynard M. Institutional strategies in emerging markets. *Acad Manag Ann.* 2015;9(1):291–335.
- What is Marketing? — The Definition of marketing — AMA [Internet]. American Marketing Association. [cited 2020 May 4]. Available from: <https://www.ama.org/the-definition-of-marketing-what-is-marketing/>
- Kotler P, Armstrong G, Harker M, Brennan R. *Marketing: an introduction.* Vol. 1. Prentice-Hall Englewood Cliffs, NJ; 1990.
- Konya U. Marketing communication in libraries: observations of German research libraries. *Qual Quant Methods Libr.* 2017;2(2):149–156.
- Lamprey WO. Marketing library services in selected private Universities in Ghana [Internet] [Thesis]. University of Ghana; 2016 [cited 2020 May 4]. Available from: <http://ugspace.ug.edu.gh/handle/123456789/21124>
- Gupta DK. Marketing of library and information services: building a new discipline for library and information science education in Asia. *Malays J Libr Inf Sci.* 2003;8(2):95–108.
- Alipour-Hafezi M, Ashrafi-Rizi H, Kazempour Z, Shahbazi M. Using 4p marketing model in academic libraries: an experience. *Int J Inf Sci Manag IJISM.* 2013;11(2):45–58.
- Dhiman AK, Sharma H. Services marketing mix in library and information centers. [Internet]. ICAL-Advocacy Mark. 2009;456–460. [cited 2020 May 4]. Available from: http://crl.du.ac.in/ical09/papers/index_files/ical-78_246_697_1_RV.pdf
- Moikan Mollel M. Marketing mix for librarians and information professionals. *Infopreneurship J.* 2013;1(1):10–28.
- Rowley J. Promotion and marketing communications in the information marketplace. *Libr Rev.* 1998;47(8):383–387.
- Ojiambo JB. Application of marketing principles and techniques to libraries and information centres. *Libr Rev.* 1994;43(2):46–51.
- Singh M. Marketing mix of 4p's for competitive advantage. *IOSR J Bus Manag.* 2012;3(6):40–45.

important. It can help to know the patrons and their wants more efficiently; moreover, it has a positive effect on the users' thoughts towards the library.

In this regard, the research intended that have performed weakly and have not been able to meet the users' needs while the basis of successful marketing is to consider the potential and actual needs of the clients.

As long as the library location and structure have not been suitable in terms of interior and exterior construction and design; the in-need services' costs have not been transparent and defined; the types of services and products, and their diversity have not been developed; the relationship between the library and the community has not improved; the libraries' efforts will not reach success to increase the number of their users.

Acknowledgement

This paper is the result of a thesis entitled "Comparative Study of Marketing Mixes in Libraries of Shahid Beheshti, Tehran and Iran Universities of Medical Sciences." The authors would like to thanks all librarians in the intended universities who cooperate in this research.

Conflicts of Interests

The authors declare no conflict of interests.



15. Pashootanzadeh M, Rafie Z. Social media marketing: determining and comparing view of public library directors and users. *Public Libr Q*. 2020;39(3):212–228.
16. Pessa JC. Marketing and promotion of e-journal in academic libraries in Tanzania. *Am J Inf Sci Technol*. 2019;3(1):10-16.
17. Osinulu LF, Adekunmisi SR, Okewale OS, Oyewusi FO. Marketing strategies used by librarians in a state university libraries. *Univ Dar Es Salaam Libr J*. 2018;13(2):18–32.
18. 18. Kutu Jacob O, Olajide O. Marketing of information products and services in public libraries in South West, Nigeria. *Int J Libr Inf Sci*. 2018;10(6):54–61.
19. Jalilpour P, Farajpahlou A. A Study on the feasibility of applying the 4p model of marketing in Khuzestan public libraries from the viewpoints of the library managers and librarians. *Res Inf Sci Public Libr*. 2014;19(4):511–25. [In Persian].
20. Tafreshi S, Sedigh M. Comparative study of Qom's participative libraries and public libraries affiliated to Foundation of Public libraries concerning the application level 4p marketing mix style. *Sci J Manag Syst*. 2013;6(22):1–18. [In Persian].
21. Basirian Jahromi R, Erfanmanesh MA. Marketing the libraries in Iran: An Ideal opportunity in 21st century. *Int J Inf Sci Manag*. 2011;9(2):93–103. [In Persian].
22. Farkhari F. Evaluation of using marketing mixes in libraries of Zabol Medical Science University. *Health Inf Manag*. 2013;10(6):819–26. [In Persian].
23. Tavoni S. Standards for Iranian university libraries. Tehran: National Library and Archives of Iran; 2011. [In Persian].
24. Karaji M, Jafari M, Rashidi Tabar S. Factors influencing the marketing mix to attract users of public libraries in Sanandaj city. *Libr Inf Science*. 2015;18(1):91–114. [In Persian].
25. Anafo P. Marketing strategies for information services: A case study of the institute of chartered accountants (Ghana) library and information services. *Libr Philos Pract*. 2014.
26. Khan SA, Bhatti R. Application of social media in marketing of library and information services: A case study from Pakistan. *Webology*. 2012;9(1):1–8.

