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# Appropriate strategies for developing information marketing in Iranian Faculties of Agriculture

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## Abstract

The main purpose of this research was to identify strengths and weaknesses, opportunities and threats associated with information marketing and appropriate strategies for the development of information marketing in Iranian Faculties of Agriculture. The research population consisted of all staff employed in central libraries of in the selected Faculties of Agriculture (Universities of Tehran, Ferdowsi of Mashhad, Shiraz, Tabriz and Isfahan technology) (N=107). The respondents selected by census sampling method so that ultimately number of 90 questionnaires obtained (n=90). According to the findings, the majority of respondents (72.3%) has a positive and very positive attitude to applying information marketing factors. Also, items of strengths (the more scientific validity of the information products and services than other information competitors, terms and conditions of access to reliable information databases), weaknesses (Inadequacy of required physical infrastructures (marketing office or unit, sales place, warehouse, etc.) for information marketing and inadequacy of ICT infrastructures for information marketing), opportunities (diverse target markets for new information products and services, and High educational level and information seeking skills of most information clients) and threats (the traditional attitudes of community requiring information for the free access to information recourses and failure to maintain compliance with laws related to copyright and immaterial property of developers and providers of information in society and internet) were the most outstanding. In following, appropriate strategies for the development of information marketing presented.

**Keywords:** Information marketing, Agricultural Higher Education System, SWOT analysis, Information products and services.

## Introduction

The educational institutions in higher education system were among the early institutions undergoing radical changes with the dawn of the information age (Ismail et al., 2010). In this regard, academic outreach gradually developed in Higher Education System. Academic Outreach is an effort by a faculty/ university or organization to connect its ideas, products or practices, to the efforts of other organizations, groups, scientific clients or the general public, in which marketing activities is a key component (McGivney, 2000). In Iran, marketing activities for Faculties of Agriculture is in related to Academic Outreach, but trustee unites of marketing of information products and services in them (academic agricultural libraries) don't have comprehensive strategies for marketing.

Marketing is a set of activities by which the demand for goods, ideas, and services is managed to facilitate exchange (Kotler, 2000). In other hand, marketing is planning and managing the organization's exchange relations with its clientele. It consists of studying the target market's needs, designing appropriate products and services, and using effective pricing, communication,

and distribution to inform, motivate, and serve the market (Joseph Jestin & Parameswari, 2002). But, when the main products and services of marketing is “information”, it’s called information marketing (Suresh Kumar, 2010; Kanaujia, 2004). Information marketing is an aggregate of activities directed at satisfying information clients and wants through exchange processes. Marketing involve viewing the whole information service or product from the point of view of the final result, i.e. from the information client’s viewpoints (Kamba, 2009). Information marketing is not just disseminating information; it includes the optimum use of information products and resources in information centers (Kanaujia, 2004). Information marketing involves promoting the information products and services by adopting marketing strategies effectively. The most important objective of information marketing is to attract more number of clients and to encourage them to utilize the resources of the information centers to the maximum extent (Suresh Kumar, 2012; Kumarjit and Mohan, 2014).

Garusing Arachchige (2002), investigated an approach to marketing in special and academic libraries of Sri Lanka. According to findings, special libraries and academic libraries of Sri Lanka had a sufficient amount of resources acquired and market opportunities available. Yet, they practiced poor marketing. In comparison, marketing performances were more available in special libraries than in academic libraries. Special libraries and academic libraries of Sri Lanka had cost recovery capabilities and even profit potentials from their services if they undertake proper marketing. Library personnel had very little knowledge of marketing principles. Lack of trained staff; poor library investments (allocations), insufficient technology and know-how etc. identified as problems that hinder the practice of marketing.

Kanaujia (2004), in her paper discussed the role of marketing of information products/ services with the help of survey in information centers of India. Her findings revealed that librarians have a positive attitude towards the different aspects of marketing of information products/services. The study recommended that currently efforts for increasing clients’ awareness and separate financial support are requisite for efficient marketing. Instead of scattered approaches and different styles, a coherent view must be taken. According to 91 percent of the librarians, marketing helps in justifying the involved cost in generation of information products, and aspects such as resource constraints, shrinking budgets, electronic information age have made marketing necessary. Also, many librarians perceived many barriers to apply the concept of marketing in their respective libraries. These barriers consist of lack of knowledge; lack of manpower and financial support (89 percent of the librarians strongly agree that implementing a marketing program requires adequate manpower and financial support); and misconception about the concept of marketing. librarians and information managers were facing challenges such as an increase in clientele, their variety, demands, and expectations; an increase in the initial or capital cost of information and information technology; drying up of the public sponsorship and subsidy and the need to find alternative sources of revenue; and complexity in ways of identifying clients and their requirements, and servicing them, which in following, appropriate strategies for the development of information marketing was presented.

Suresh Kumar (2012), in your research performed an objective analysis of the strength, weakness, opportunities and threats (SWOT analysis) of four university libraries in Kerala viz. Kerala University Library (KUL), Mahatma Gandhi University Library (MGUL), Cochin University of Science and Technology Library (CUSATL) and CH Mohammed Koya Library of University of Calicut (CHMKL) in terms of collections, infrastructure, human resources, and library and information services. He also analyzed the strength and weakness of the university libraries according to the opinion of the chief of each library. According to findings, all University Librarians in Kerala have a positive opinion towards marketing but none of the libraries has specific allocation of funds or a designated person or a marketing wing for marketing of information products and services. Most of the libraries identified certain problems encountered in the marketing of information products and services such as lack of trained staff, less demand from the users for the existing resources and services. In this research, the SWOT analysis shows all the university libraries in Kerala with their strengths and opportunities can easily overcome the threats and weakness with appropriate positioning and marketing strategies. Based on the average score of university libraries in Kerala, the strengths identified were lack of fund, customer care, special collection, membership, and geographical position of the library. The major weaknesses identified by the Kerala University Library and CUSAT Central Library were shortage of staff strength, inadequate fund, space problem, lack of weeding out policy, absence of University Librarian etc. MG University Library identified the major weakness as geographical position of the library; computer networks etc. while CHMK Library identified lack of sufficient fund as the main weakness. The opportunities identified were in related to academic plan, new sources of funding, cooperation and consortium in collection building, technology; also the opportunities identified were consist of alternative information providers and rate of change in information field and information technology.

Garoufallou et al. (2013), examined the current situation in Greek academic libraries as well as staff attitudes and perceptions towards marketing applications. The findings of the study indicate that Greek librarians acknowledge the need to adopt marketing techniques as a means of promoting library services, and they realize that marketing approaches can be effective if they are correctly incorporated into their work. However, the results indicate a divergence in practice. The majority of libraries made an ad hoc use of some marketing techniques, mainly related to promotion and advertising, without incorporating the concept of marketing into their general institutional goals and strategic planning. The major weaknesses identified were factors such as lack of marketing education, seminars and training courses, resistance to change, budget cuts, etc. Findings indicated that, although the majority of the librarians showed an appreciation for the concept of marketing, they also had limited exposure to marketing education, therefore, a long way to go in order to fully understand its procedures and integrate it into their strategic planning. Also, the absence of any formal education, seminars or workshops on marketing and managerial topics hinders strategic planning in Greek libraries in conjunction with lack of appropriately educated staff and funding.

Given aforementioned discussion, the present research seeks to determine the appropriate approaches to develop information marketing while identifying the strengths and weaknesses,

opportunities and threats related to information marketing in Iranian Faculties of Agriculture. Secondary objectives of the study are as follows:

- 1- Respondents' attitudes to information marketing
- 2- Comparison of respondents' personal and professional characteristics, their attitudes towards information marketing.
- 3- Identification of internal and external factors affecting information marketing in Faculties of Agriculture, and
- 4- Prioritization of internal and external factors affecting information marketing in Faculties of Agriculture.

### **Research method**

This research is applied and has been done with survey method. The statistical population of the study consisted of all staff employed in information units (central libraries) in the selected Faculties of Agriculture of Iran (N=107). The representative Faculties of Agriculture were found to be selected through quintuple classification (polarization) by Ministry of Science, Research and Technology (MSRT) (Institute for Research and Planning in Higher Education (IRPHE), 2013). Within each class (each pole in polarization performed by MSRT), the most appropriate faculty of agriculture in terms of facilities and Infrastructures for information marketing, number of faculty members, number of students and more experimental about information marketing activities (five major universities) were selected consisting of Faculties of Agriculture in Universities of Tehran, Ferdowsi of Mashhad, Shiraz, Tabriz and Isfahan technology. The respondents selected by census sampling method so that ultimately number of 90 questionnaires obtained (n=90). Questionnaires contained staffs personal and professional characteristics (Includes items associated to age, sex, marital status, educational level, field of study and work experience), attitudes toward information marketing (9 items) and items related to strengths (15 items) and weakness (12 items), opportunities (12 items) and threats (12 items) in the Likert scales.

To determine the validity of the questionnaire, content validity was established. The content validity of the questionnaire was obtained using a panel of faculty members (Department of agricultural extension and education (University of Tehran) and Departments of Communications and Informatics ((Universities of Tehran and Ferdowsi of Mashhad)) and a multi-step correction and review process. Reliability of scales determined with Cronbach-Alfa coefficient (higher than 0.7). For describing dispersion of respondents' attitudes to applying information marketing factors, Interval of Standard Deviation from Mean (ISDM) index was used as follows (Gangadharappa et al. 2007; Jamini et al., 2013):

A: Very negative:  $A < \text{Mean} - \text{Sd}$

B: Negative:  $\text{Mean} - \text{SD} < B < \text{Mean}$

C: Positive:  $\text{Mean} < C < \text{Mean} + \text{SD}$

D: Very positive:  $\text{Mean} + \text{SD} < D$

It should be noted that in the above formula, SD imply the deviation from mean.

The main method of study is SWOT analysis. The SWOT Analysis is used to generate strategies and actions. Identification of SWOT is essential, because subsequent steps in the

process of planning for achieving the selected objective may be derived from SWOT (Hazidah and Edzan, 2012). Strength is a resource or capability an organization possesses to successfully achieve its objectives. A weakness is a debility, fault, defect, or limitation in the organization that prevents the achievements of its objectives. An opportunity is any conducive or favorable situation in the organization's external environment. A threat, on the other hand, is an unfavorable situation, a barrier or constraint that may pose problems in the smooth working of the organization or information unit or it may even damage it. Naturally, SWOT analysis allows strategies to be planned that can successfully utilize strengths and opportunities to overcome the threats and weakness facing the organization or information unit (Suresh Kumar, 2012).

## **RESULTS AND DISCUSSIONS**

### **Respondents personal and professional Characteristics**

According to the findings, the most age frequency of the respondents was (32.6%) between 30 to 34 years old. With a view to the gender of the respondents, 63.3 percent were women and 26.7 percent were men. As for work experience among respondents, the majority of them were (46.6%) between 6 to 10 years and in contrast, the least one was ranged of 21 years and above (2.3%). Respondents with educational level of Bachelor's degree had the highest frequency (70.1%). Also, the most common study field among the respondents (52.3%), was Knowledge and Information Science followed by Agriculture, with 25.6 percent. The highest prevalence rate of participation in the courses / workshops in conjunction with information marketing varied 3 to 5 courses (70%).

### **Respondents' attitudes to applying information marketing factors**

For assessing of respondents' attitudes to applying information marketing factors used of ISDM index and they were classified into four groups. Results in table 1, showed that the majority of respondents have a positive and very positive attitude to applying information marketing factors (72.3%); while 27.7 percent of them have negative and very negative attitude to applying information marketing factors in our job.

Table3. Grouping the respondents' attitudes to applying information marketing factors

Attitude levels	Frequency	Percent	Cumulative percent
Very negative	8	8.8	8.8
Negative	17	18.9	27.7
Positive	43	47.8	75.5
Very positive	22	24.5	100
Total	90	100	-

### **Comparison of respondents' attitudes to applying information marketing based on personal and professional characteristics**

Kruskal-Wallis test was used to compare the respondents' attitudes to applying information marketing factors, with personal and professional characteristics. According to table 2, among their characteristics (age, educational level and work experience), only educational level (Associate's, Bachelor's, Master's, and Doctorate degrees) showed significant difference in respondents with respondents' attitude to applying information marketing factors ( $p < 0.01$ ) and respondents with higher educational level have the more positive attitude.

Table 2. Kruskal-Wallis test for comparison of respondents' attitudes to applying information marketing based on educational level

	educational level groups	Mean Rank	Chi-Square	Sig.
respondents' attitudes	Associate	10.17	47.388	0.000
	Bachelor	5.00		
	Master	27.50		
	Doctorate	50.00		

## Findings of SWOT analysis

### 1 - Internal factors affecting the marketing of information products and services:

This analysis aimed to assess internal conditions affecting marketing of information products and services in the Iranian Faculties of Agriculture in respect to its strengths and weaknesses. Summary of strengths and weaknesses as internal factors are presented in Table 3.

Table 3. Internal factors in SWOT analysis

Strengths	Weaknesses
S1. Terms of offering information products and services to external clients (Outreach)	W1. Effect of low budget on staff tasks, facilities and equipment
S2. Proper utilization of manpower characterized by suitable expertise and skills	W2. The mismatch between budget and inflation in the society
S3. Suitable geographical and place position	W3. Lack of a systematic approach to evaluate staff services and performance for marketing activities
S4. Fruitful academic information resources and communication with different academic departments	W4. The high cost of upgrading or providing new information sources
S5. The more scientific validity of the information products and services than other information competitors	W5. Poor interactions with other information production centers and units (academic departments, research centers, etc.)
S6. Diverse and comprehensive information products and services	W6. Poor interactions with other information dissemination centers and units (research and educational institutions, academic libraries, etc.)
S7. Terms and conditions to hold a variety of specialized courses and workshops	W7. Shortage of skilled manpower for information and advisory services
S8. Terms and conditions of access to reliable information databases	W8. Inadequacy of required physical infrastructures (marketing office or unit, sales place, warehouse, etc.) for information marketing
S9. Positive attitudes among managers and staff to implement information marketing plans	W9. Inadequacy of ICT infrastructures for information marketing
S10. Appropriate knowledge among managers and staff about information marketing	W10. Failure to account for additional obligations and benefits for staff on information marketing
S11. Adequate number of experienced and qualified staff in multiple tasks of information services	W11. Poor advertisements of information products and services
S12. Easier and more convenient internet access	W12. Lack of staff adaptation to keep up new communication and information technologies
S13. Adequate space and facilities for clients	
S14. Internal rules and guidelines supporting the Information marketing	
S15. Adjacency to academic departments and scientific research centers	

### 2- External Factors affecting the marketing of information products and services:

This aimed to assess the external conditions of information units (in Faculties of Agriculture), to identify the opportunities and threats to marketing of information products and services. Summary of opportunities and threats so called external factors are shown in Table 4.

Table 4. External factors in SWOT analysis

Opportunities	Threats
O1. Hiring new staff to develop new activities and services in information marketing	T1. Inadequate allocation of academic credits
O2. Developing regional marketing of information products and services	T2. Increased advertising and information costs
O3. Developing trans-regional and sometimes international marketing of information products and services	T3. Lack of expertise and ability to keep up with modern information technologies
O4. To expand domestic and foreign partnerships with other agencies, organizations and universities	T4. Lack of financial asset to keep up with modern information technologies
O5. Appropriate potential for efficient use of space in marketing information	T5. External rules and guidelines supporting the Information marketing
O6. Diverse target markets for new information products and services	T6. Failure to maintain compliance with laws related to copyright and immaterial property of developers and providers of information in society and internet
O7. Increasing demand for information products and services in society	T7. Increasing costs of supplying initial materials for information resources (paper price increase, print, etc.)
O8. More tendency and skills to use of ICT among information clients	T8. Managerial instability and hence frequent changes of policies and decisions
O9. High educational level and information seeking skills of most information clients	T9. Increase the number and diversity of information competitors in the society
O10. Government policies and higher education on the development of information electronic services	T10. Rising inflation in the society
O11. The increased tendency to Interdisciplinary and multidisciplinary studies among researchers	T11. The mismatch between needs of target markets with information products and services
O12. Improved higher education and Increasing number of students	T12. The traditional attitudes of community requiring information for the free access to information recourses

### 3- Determination of the weighted scores and rankings of internal and external factors

As shown in Table (5), in the study information unites number of 15 internal strengths vs. 12 internal weaknesses and 12 external opportunities vs. 12 external threats were identified and subsequently evaluated. Thus totally, 27 strengths and opportunities were served as advantages and 24 threats and weakness as constraints or bottlenecks to which factors affecting marketing of information products and services were encountered in Faculties of Agriculture. Now, according to Table 5, weighted scores and rank for each item of weaknesses, strengths (internal factors), opportunities and threats (external factors) are discussed. Also, analysis of the results (Table 5) on respondents' viewpoints in terms of both internal and external factors can be provided.

Table 5. Weighted scores in SWOT matrix

	Items	Relative Weight	Mean Rank	Weighted Score	Ranking
Strengths	S1. Terms of offering information products and services to external clients (Outreach)	0.035	4.11	0.1429	5
	S2. Proper utilization of manpower characterized by suitable expertise and skills	0.047	1.98	0.0923	10
	S3. Suitable geographical and place position	0.038	3.22	0.1237	6
	S4. Fruitful academic information resources and communication with different academic departments	0.053	3.07	0.1621	3
	S5. The more scientific validity of the information products and services than other information competitors	0.054	4.13	0.2209	1
	S6. Diverse and comprehensive information products and services	0.028	1.91	0.0529	14
	S7. Terms and conditions to hold a variety of specialized courses	0.042	2.64	0.1120	8

	and workshops				
	S8. Terms and conditions of access to reliable information databases	0.058	3.09	0.1798	2
	S9. Positive attitudes among managers and staff to implement information marketing plans	0.033	2.71	0.0895	11
	S10. Appropriate knowledge among managers and staff about information marketing	0.040	2.64	0.1048	9
	S11. Adequate number of experienced and qualified staff in multiple tasks of information services	0.022	3.85	0.0833	13
	S12. Easier and more convenient internet access	0.022	3.87	0.0870	12
	S13. Adequate space and facilities for clients	0.017	2.20	0.0363	15
	S14. Internal rules and guidelines supporting the Information marketing	0.026	4.64	0.1192	7
	S15. Adjacency to academic departments and scientific research centers	0.034	4.60	0.1571	4
Weaknesses	W1. Effect of low budget on staff tasks, facilities and equipment	0.047	4.15	0.1960	3
	W2. The mismatch between budget and inflation in the society	0.034	3.78	0.1273	5
	W3. Lack of a systematic approach to evaluate staff services and performance for marketing activities	0.022	4.27	0.0939	7
	W4. The high cost of upgrading or providing new information sources	0.049	1.49	0.0735	9
	W5. Poor interactions with other information production centers and units (academic departments, research centers, etc.)	0.016	3.93	0.0629	10
	W6. Poor interactions with other information dissemination centers and units (research and educational institutions, academic libraries, etc.)	0.014	3.84	0.0543	12
	W7. Shortage of skilled manpower for information and advisory services	0.033	2.58	0.0862	8
	W8. Inadequacy of required physical infrastructures (marketing office or unit, sales place, warehouse, etc.) for information marketing	0.059	4.25	0.2515	1
	W9. Inadequacy of ICT infrastructures for information marketing	0.059	4.15	0.2435	2
	W10. Failure to account for additional obligations and benefits for staff on information marketing	0.048	3.00	0.1449	4
	W11. Poor advertisements of information products and services	0.041	2.62	0.1079	6
	W12. Lack of staff adaptation to keep up new communication and information technologies	0.029	2.04	0.0599	11
	<b>IFE= 3.2654</b>	<b>1</b>	<b>-</b>	<b>3.2654</b>	<b>-</b>
Opportunities	O1. Hiring new staff to develop new activities and services in information marketing	0.016	2.85	0.0463	12
	O2. Developing regional marketing of information products and services	0.023	3.00	0.0687	8
	O3. Developing trans-regional and sometimes international marketing of information products and services	0.028	2.00	0.0560	11
	O4. To expand domestic and foreign partnerships with other agencies, organizations and universities	0.031	4.22	0.1289	5
	O5. Appropriate potential for efficient use of space in marketing information	0.032	1.93	0.0625	9
	O6. Diverse target markets for new information products and services	0.057	3.33	0.1890	1
	O7. Increasing demands for information products and services in society	0.048	2.96	0.1411	4
	O8. More tendency and skills to use of ICT among information clients	0.041	3.16	0.1286	6

	O9. High educational level and information seeking skills of most information clients	0.64	2.67	0.1720	2
	O10. Government policies and higher education on the development of information electronic services	0.018	3.45	0.0616	10
	O11. The increased tendency to Interdisciplinary and multidisciplinary studies among researchers	0.064	2.67	0.1707	3
	O12. Improved higher education and Increasing number of students	0.043	2.82	0.1220	7
Threats	T1. Inadequate allocation of academic credits	0.050	2.45	0.1223	5
	T2. Increased advertising and information costs	0.046	2.73	0.1246	4
	T3. Lack of expertise and ability to keep up with modern information technologies	0.025	3.91	0.0969	8
	T4. Lack of financial asset to keep up with modern information technologies	0.061	1.93	0.1184	6
	T5. External rules and guidelines supporting the Information marketing	0.013	2.93	0.0369	12
	T6. Failure to maintain compliance with laws related to copyright and immaterial property of developers and providers of information in society and internet	0.065	4.22	0.2737	2
	T7. Increasing costs of supplying initial materials for information resources (paper price increase, print, etc.)	0.058	1.93	0.1121	7
	T8. Managerial instability and hence frequent changes of policies and decisions	0.038	2.47	0.0931	9
	T9. Increase the number and diversity of information competitors in the society	0.033	2.45	0.0806	11
	T10. Rising inflation in the society	0.022	4.29	0.0926	10
	T11. The mismatch between needs of target markets with information products and services	0.059	4.09	0.2395	3
	T12. The traditional attitudes of community requiring information for the free access to information recourses	0.068	4.13	0.2787	1
1.	<b>EFE= 3.0166</b>	<b>1</b>	<b>-</b>	<b>3.0166</b>	<b>-</b>

#### 4- Identification and developing SWOT analysis strategies

In strategies formulation, the internal and external factors in SWOT matrix were compared with each other to prepare possible strategies as a result of the SWOT analysis in Table (6).

Table 6. The obtained strategies from SWOT analysis

	Weaknesses	Strengths
Opportunities	SO1- Taking in-service training of staff on activities associate to information marketing	WO1- Reviewing current hardware and physical infrastructure for effective implementation of marketing plans
	SO2 – Holding training courses for clients in relation to information seeking skills and information literacy	WO2- Reviewing interactions with other units or information and research centers
	SO3- To create a sector so called information marketing through developing a set of responsibilities, tasks, and written guidelines.	WO3- Reviewing the formulation of new responsibilities to staff with job benefits, associated with engagement in information marketing activities.
	SO4- To develop contacts to information clients system to get feedbacks, information, and orders on information products and services.	WO4- Reviewing traditional methods of marketing management and to consider new approaches to management and relevant technical information.
	SO5- To identify and procure software , hardware , facilitators and appropriate technologies for efficiently implementation of the information marketing plan	WO5- Checking ICT infrastructure components associated with the development of information marketing factors.
	SO6- To establish appropriate administrative contexts to facilitate the replication process, to get orders or	WO6- Reviewing staff in-service training courses with respect to new management technologies and of e-marketing

	send information products and services.	
	SO7- To prepare and compile a comprehensive list on types of divers information products and services	WO7- Reviewing rules and guidelines to provide the optimum conditions for membership or to facilitate information needs of clients
	SO8- To enact internal rules and guidelines supporting the Information marketing	WO8- Revising mechanisms to facilitate feedbacks from information clients on information products and services.
	SO9- Participation in conferences and scientific exhibitions to introduce and provide a list of information products and services and experiences exchange.	WO9- Revising the procurement process, introduce and deliver information products and services with special emphasize on capabilities and capacities of information units to optimize implementation of the information marketing plan.
	SO10- Focusing on the preparation and development of electronic and digital information products and services for access of information clients through virtual channels and the internet.	WO10- Revising processes of warehousing, packing format, duplicate and deliver information products and services forward to improve the quality
	SO11- Supporting applied research in universities and research institutes on information marketing and target markets.	WO11- Reviewing special attention to continuously and periodically awareness from update list of the latest information products and services to the target markets.
	SO12- To establish a link with information producers and suppliers to exchange feedbacks and suggestions from information clients	WO12- Reviewing developing interactive useful link among the marketing activities and academic outreach.
	SO13- To establish a link among information unites in Faculties of Agriculture to exchange information and experiences in marketing	
	SO14- To develop or strengthen website forward to marketing on information products and services	
Threats	ST1-Providing and supporting researches on the useful strategies for solutions of optimal advertisements of information products and services.	WT1- Creating suitable substrates for financial transactions and selling information products and services.
	ST2- Holding training courses for staff and personnel in order to gain new knowledge related to internet and information technologies and marketing software.	WT2- Integrating capabilities of the various information units suitable for adaptation of marketing plans with optimal administrative actions.
	ST3-Identifying present and future needs for the implementation of marketing plans and pay more attentions to create suitable substrates.	WT3- Formulating rules and guidelines for the information services and products to support and facilitate internal and external clients.
	ST4- Organizing information marketing system in regional and international scales in order to gain competitiveness with competitor information units.	WT4- Identifying and determining appropriate standards for assessment of information services and performance of staff
	ST5- Identifying diverse and potentially new markets on information marketing and support related researches.	WT5- Building a culture to respect copyright and immaterial property of information products and services among information clients.
	ST6- Facilitating administrative and management mechanisms to accelerate search processes associated with searching of information products and services (face-to-face and virtual).	WT6- Creating suitable substrates for application of electronic technologies to facilitate administration and Reducing bureaucracy in marketing information activities.
	ST7- Determining mechanisms for financial management, sale and apply relevant software	WT7- Improving efficient advertisements, incentives and facilities to attract more clients.
	ST8- Developing useful guidelines to identify appropriate standards in embed university logo on information products.	WT8- Creating executable strategies to make competitive condition to information competitors
	ST9- Enhancing existing website functions to do internet and financial transactions	WT9- Organizing pricing process of information products and services in line with growing costs.
	ST10-Identify and set short- medium- and long-term goals for information marketing	WT10- Developing indexes and standards to improve the quality of information products and services.
	ST11- Making awareness for universities managers	WT11- Identifying strategies to alleviate costs in

on existing scientific information potentials and the ability of information units to attract funding to implement the marketing plan and to attract the additional budgets.	communication unites and databases and common use from portals and networks to implement information marketing plans.
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## Conclusion

The present study seeks to identify strengths and weaknesses, opportunities and threats associated to information marketing in Iranian Faculties of Agriculture and hence appropriate strategies to develop effective information marketing. The SWOT Analysis was used to generate strategies and actions. Identification of SWOTs was essential because subsequent steps in the process of planning for achieving the selected objective may be derived from SWOT. According to the results, the majority of respondents (72.3%) has a positive and very positive attitude to applying information marketing factors and supported applying information marketing initiatives, in turn paves the way to adopt implement the information marketing plan in academic information units of Iranian Faculties of Agriculture. Among personal and professional characteristics (age, education levels, work experience), only educational level showed significant difference ( $p < 0.01$ ) with in respondents with varied attitudes to information marketing. In other words, those staffs with higher educational level showed the more positive attitude to information marketing.

In light of the obtained results, as for the most important components of strengths, those components regarding the more scientific validity of the information products and services than other information competitors and terms and conditions of access to reliable information databases and fruitful academic information resources and communication with different academic departments were the most outstanding. As for weaknesses, Inadequacy of required physical infrastructures (marketing office or unit, sales place, warehouse, etc.) for information marketing and inadequacy of ICT infrastructures for information marketing were found to be as the most important internal weaknesses. The major external opportunities were diverse target markets for new information products and services, and High educational level and information seeking skills of most information clients. Additionally, some factors like the traditional attitudes of community requiring information for the free access to information recourses and failure to maintain compliance with laws related to copyright and immaterial property of developers and providers of information in society and internet were the most important external threats to information marketing. Finally, the strategies presented in this paper to design a strategic plan is not enough because turning developed strategies to operational plans and implement them to overcome weaknesses and exploit opportunities and avoid threats play determinant role.

## References

1. Gangadharappa, H.V, Pramod, K.T.M, & Shiva, K.H.G. (2007).Gastric floating drug delivery systems: a review. *Indian J. Pharm. Ed. Res.* 41, 295–305.
2. Garoufallou, E., Zafeiriou, G., Siatiri, R. & Balapanidou, E. (2013). Marketing applications in Greek academic library services, *Library Management*, 34(8/9), 632 – 649.
3. Garusing Arachchige, J. J. (2002). An approach to marketing in special and academic libraries of Sri Lanka: a survey with emphasis on services provided to the clientele. *JULA*, 7 (1), 12-36
4. Hazidah, N.A., & Edzan, N.N. (2012). The SWOT analysis: marketing and promotional strategies used at the University of Malaya Library. In: International Conference on Gennext Libraries, October 2012, Universiti Brunei Darussalam. Pp. 8-10.
5. Institute of Research and Planning in Higher Education (IRPHE). (2013). The statistics of higher education (polarization of agricultural and natural resources faculties). Tehran: The Institute of Research and Planning in Higher Education, Ministry of Science, Technology, and Higher Education. In Farsi.
6. Ismail, I., Ramli, A., Rosli, M. & Idrus, R.M. (2010). Information Technology System Environment: The Needs for Learning Materials in e-Learning Portal. *Malaysian Journal of Educational Technology*, 10 (2), 83-89.

7. Jamini D., Ghadermarzi H., Mafakheri A., Jamshidi A., & Nikbakht S. (2013). Investigation and assessment of factors that influence sustainable farming: A case study of rice farmers in Shirvan Cherdavel Town, Ilam province, Iran. *International Journal of Agri-science*, 3 (6), 444-452.
8. Joseph Jestin K.J. & Parameswari B. (2002). Marketing of Information Products and Services for Libraries in India, *Library Philosophy and Practice*, 5 (1), 1-6.
9. Kamba, M.A. (2009). Access to information: the dilemma for rural community development in Africa. Paper presented at GLOBELICS 2009, 7th International Conference, Dakar, Senegal, Pp. 6-8.
10. Kanaujia, S. (2004). Marketing of information products and services in Indian R&D library and information centres", *Library Management*, 25 (8/9), 350-360.
11. Kotler, P. (2000). *Marketing Management. The Millennium Edition. 10th Edition.* Prentice Hall, London.
12. Kumarjit, P. & Mohan L. V. (2014). Tools and techniques for marketing of information products and services of libraries in ICT environment. *E-Library Science Research Journal*. 2(6), 1-7.
13. McGivney, V. (2000.) *Recovering outreach: Concepts, issues and practices.* National Institute of Adult Continuing Education. Leicester: NIACE. 128 pages.
14. Suresh Kumar, P.K. (2010). *Marketing of information products and services of the University libraries in Kerala: An investigative study.* University of Kerala, Trivandrum, Doctoral thesis. pp. 320-25.
15. Suresh Kumar, P.K., (2012). *University Libraries in Kerala: A SWOT Analysis for Marketing"* (2012). *Library Philosophy and Practice*. Paper 787. Pp: 1-10.