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COMPILING STRATEGIES AND DETERMINING STRATEGIC SITUATION E-LEARNING SYSTEM OF PNU (PAYAM NOOR UNIVERSITY) IN IRAN

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ABSTRACT

The purpose of this article is to compile strategies and to determine strategic situation of E-Learning system of PNU (Payam Noor University) in Iran. According to the objective and data collection method, this article is of applied type and descriptive-analytic respectively. The final SWOT list includes 16 strong points, 14 weak points, 17 opportunities and 15 threats identified and prioritized through confirmatory factor analysis, Bartlett and KMO tests. The results show that in advantages, the item of "identity and mission of PNU as the only distance education and open learning university in Iran" with the load factor of 0/829 has the highest level of importance and in disadvantages, the item of "mismatch of the current structure of the university with its main mission (distance education development)" with a load factor of 0/800 has the highest level of disadvantage according to the respondents. In opportunities, the item "attention of senior official at the Ministry of Science and University to the subject of Science and software movement" with a load factor of 0/850 has the highest level of importance and in threats, the item of "the development of E-learning centers in universities as actual and potential competitors" with a load factor of 0/809 as the highest case that threatens the E-learning system of PNU. Moreover, the results proved that E-Learning system of PNU need to change direction for improvement and beside internal weak points, system faced with several major external opportunities that put it in the conservative (WO) position in the SWOT matrix.

Keywords: SWOT, Strategy, E-Learning, Strategic situation, PNU.

Contribution/ Originality

This study is one of very few studies which have investigated the strong and weak points, opportunities and threats of one of the largest universities of distance education of Asia. The results of this study can be useful as a sample for other distance education centers.

1. INTRODUCTION

Offering distance education by using information technology and Technology communication (ICT) tools created a new method of learning Called E-Learning. Due to geographic Population distribution and the impossibility of holding the classes lower of quorum because of the limitations of financial and human resources has been considered to Iranian educational planners and universities officials. According to Payam Noor university original mission, this university providing the distance education inside and outside of Iran; [1]. In fact, E-learning is a subset of the common intersection of information technology and educational technology. In E-learning teaching and learning performs by electronic technology. This type of learning is based on technologies such as internet, intelligent teaching, computer-based training systems and multimedia [2]. In another definition, E-Learning is flexible and inclusive educational methods that produce standard infrastructure and various educational resources by the use of technology-driven tools and make them accessible and it also provides customized learning interactive model at learning and teaching process [3]. Development of interactive model from teaching resources is essential with regard to the needs of all members of the educational system [4]. E-learning system obeys such a model and the organizational structure in such a system consists of a group of Web resource, such as a permanent organizational unit with the parts of IT system that is necessary to develop a set of available skills and capacities. [5]. With the universities' approach to implement the E-learning system for developing educational services, the need for the management and organization of three principles of teacher, learner and knowledge bank in this system becomes more important. [6]. Rapid developments in technology, new training needs, potential and actual competitors require strategic planning and continuous evaluation of external and internal training system environment in order to quickly adapt it to the environment or show an appropriate reaction. [7]. In fact, the strategic planning is the process of the organization's achievement to the benefits arising from the use of organizational strategies [8]. Many approaches and techniques are used in the process of strategic management [9]. Among them, the analysis of the strengths, weaknesses, opportunities and threats (SWOT) is the most common [10]. SWOT analysis is used as a tool for the systematic analysis of the internal and external environments. [11]. Success of each organization depends on understanding internal and external environment and compiling appropriate strategies related to the above-mentioned environment. Comprehensive study of external environment, identifying environmental opportunities and threats and also internal assessment for revealing strong and weak point in this area is necessary for making strategic decisions and compiling strategies of E-Learning system of PNU. Thus, regarding to implemented studies, in the present study tried to in addition to studying effective key factors in E-Learning system of PNU in Iran (SWOT analysis), finally strategic situation of E-Learning system of PNU determined in order to provide a basic framework for compiling strategies of E-Learning system in Iran.

2. RESEARCH METHODOLOGY

The present research is of applied researches based on objective and of descriptive-analytic researches in terms of information collection method. Research universe consisted of managers and senior executives of the E-Learning system of Payam Noor University and Iran Who had the

necessary knowledge and experience to design and implement e-learning systems. Universe of the present research included 32 individuals. This research implemented in two qualitative and quantitative parts. In qualitative part, samples selected by purposive sampling method and they were 20 individuals. In quantitative part, they selected by full enumeration, they were 32 individuals. Data measurement tools in this study were prepared in the following two sections according to a study of books, articles, theses and holding targeted interviews and consultation meetings and also the opinions of E-learning experts: 1-personal information: this part included five questions which measured testable personal characteristics such as: gender, educational degree, work experience and post. 2-research made questionnaire: this part included research made questionnaire for identifying strong and weak points, threats and opportunities related to E-Learning system of Payam Noor University in Iran. In order to determine strong and weak points, threats and opportunities related to E-Learning system of Payam Noor University in the country, besides surveying documents and evidences, library and internet search, studying scientific articles related to research subject, using Delphi method and holding purposive interviews with 20 individuals of E-Learning experts and the country E-Learning executive directors who had required knowledge and experience about implementing , running and supporting the E-Learning system, by compiling a primary questionnaire, a preliminary list of major elements of the E-Learning consists of four elements: teacher, student, external and internal environments, and content in the country was extracted. Then, after receiving expert ideas of E-Learning professors and executive directors of Payam Noor University in order to collect required data, research questionnaire designed and tried to consider different technical, legal and educational dimensions of E-Learning system of Payam Noor University in its design. The above-mentioned questionnaire included four parts: 1-strong points (16 questions), 2-weak points (14 questions), 3-opportunities (17 questions) and 4-threats (15 questions). Then, after distributing and collecting filled questionnaire by research samples, factor load of all the elements that were more than 0.3 by confirmatory factor analysis, Bartlett's test and KMO. Hereof, Klain believed that "indices which their factor load is less than 0.3 or their statistic is less than 2 absolute value are weak and deleted from measurement model" [12]. Finally, final list of SWOT extracted and prioritized. In order to determine validity, research questionnaire distributed among 20 individuals of E-Learning system professors and confirmed by them. In order to calculate tool reliability, Cronbach's alpha method (0.81) and SPSS software (version 17) used. Descriptive statistics such as average, minimum, maximum, frequency, rate and standard deviation used for describing demographic variables and confirmatory factor analysis, Bartlett's test and KMO used for sampling adequacy, determining significant and prioritizing each item of SWOT. In order to determine strategic situation of E-Learning system of Payam Noor University, extracting and compiling strategies and determining SO, ST, WO and WT strategies the following methods used respectively: internal, external and internal-external evaluation matrices, SWOT analysis and two cases comparison.

3. RESEARCH FINDINGS

Research findings presented in three parts respectively: 1-findings related to demographic characteristics, 2-prioritizing major factors of effective performance of the system in the country

and 3-SWOT analysis for determining strategic situation and strategies for E-Learning system of Payam Noor University in the country.

Findings related to demographic characteristics of respondents presented in table 1.

Table-1. Respondents' description according to demographic characteristics

Variable	Grouping	Frequency	Frequency (%)
Gender	Male	22	68.75
	Female	10	31.25
Educational degree	Bachelor and less	0	0
	MA	8	25
	PhD	24	75
Work experience	Less than 5	6	18.8
	5-10	6	18.8
	11-15	8	25
	16-20	7	21.9
	More than 20	5	15.6
Post	Senior expert	5	15.6
	Instructor	4	12.5
	Assistant Professor	20	62.5
	Associate Professor	3	9.4

Before implementing factor analysis, researcher used KMO test for sampling adequacy and understanding that if questions number is enough for predicting each component or not. Also, Bartlett test used for determining if questions have significant relationship in order to provide a reasonable base for factor analysis.

Table-2. Results of Bartlett's factor analysis test and KMO questionnaire related to strong points

KMO index	Bartlett's test		
	Chi square	df	p
0.702	171.574	120	0.001

As results of above table show, since KMO coefficient is more than 0.7, therefore samples size is appropriate for factor analysis. Also, regarding to that amount of Bartlett test is less than 0.05, therefore items have a significant relationship in order to provide a reasonable base for factor analysis related to strong points. In other words, factor analysis is appropriate for identifying the structure of strong points factor model.

Table-3. Results of confirmatory factor analysis related to strong points (prioritization in terms of their factor load)

Strong points	Questions	Factor load
S1	Identity and mission of PNU As the only university of distance education and open learning in Iran	0.829
S2	Centers/units of Payam Noor University across the country as educational systems and training support	0.815

Continue

S3	Determined general orientations of the university in the development of E-learning	0.801
S4	Necessary experience of Payam Noor University in provinces in providing the E-learning services in Excellence/ Executive centers	0.773
S5	Scientific and technical infrastructure of Payam Noor provincial centers for the implementation of online classes simultaneously and sharing the synchronous and asynchronous courses	0.737
S6	Academic potential of university members and educational capacity for the development of E-Learning at all levels (Bachelor - Master - PhD)	0.736
S7	Possibility of producing interactive electronic content due to technical capacity, administrative and scientific	0.731
S8	Possibility of increasing the capacity at all levels of university admissions in E-Learning courses	0.719
S9	Having access of professors and students to the database, banks and major research networks	0.702
S10	Having the ability to perform common E-Learning courses with other universities and organizations	0.698
S11	Infrastructure of science, technology and software in order to implement the electronic research process	0.688
S12	Possibility of connecting the current educational comprehensive system with learning management system using Web Service Technology	0.622
S13	Implementation of technical workshops and courses in the Learning Management System	0.575
S14	Having the necessary experience of provincial Payam Noor universities in the performing electronic tests with the ability of validation.	0.572
S15	The ability of the educational Comprehensive system of university for distance and online services: registration, course selection, service management and educational planning as distance and online	0.565
S16	On-Line production of static e-content in the courses of E-learning system	0.312

Results of confirmatory factor analysis in above table show that item “identity and mission of PNU As the only university of distance education and open learning in Iran “with 0.829 factor load, is the most important item in this section.

Table-4. Results of Bartlett's factor analysis test and KMO questionnaire related to weak points

KMO index	**Bartlett's test**		
	Chi square	**df**	**p**
0.710	137.031	91	0.001

As results of above table show, since KMO coefficient is more than 0.7, therefore samples size is appropriate for factor analysis. Also, regarding to that amount of Bartlett test is less than 0.05, therefore items have a significant relationship in order to provide a reasonable base for factor analysis related to weak points. In other words, factor analysis is appropriate for identifying the structure of weak points factor model.

Table-5. Results of confirmatory factor analysis related to weak points (prioritization in terms of their factor load)

Weak points	Questions	Factor load
W1	Mismatch of the current structure of the university with its main mission (the development of distance education)	0.800
W2	Shortage of qualified proficient in the field of E-Learning in different branches of science requirement	0.787
W3	Centralized hosting of E-Learning management system at the central organization of university and then of course it, providing services of limited to students and professors.	0.754
W4	Inadequacy of financial resources and incentive systems for faculty participation in the production of Qualitative, standard and interactive e-content	0.734
W5	The lack of an integrated and stable network between the central organization of university and provincial centers/units of PNU	0.719
W6	The lack of coordination in E-Learning services between hub centers and executive centers/units of PNU	0.710
W7	Inadequate familiarity and lack of trained faculty members and administrative experts in the field of E-Learning for implementing of E-Learning and supporting E-Learning services	0.703
W8	The Lack of learning object repository in order to create learning paths tailored to students' ability levels	0.699
W9	Lack of help system (help), FAQ and online & offline support and online in electronic platform	0.678
W10	Lack of organized knowledge bank in different fields	0.639
W11	Lack of e-content production tool with simple functionality and quality output and standard	0.567
W12	Restrictions on the number of E-Learning rooms Excellence / Executive centers of PNU	0.544
W13	The lack of regulations and develop procedures for conducting a mid-term and final exams for all sections	0.484
W14	Changing the course sources and time consuming and costly process of changing the update e-content	0.332

Results of confirmatory factor analysis in above table show that item "Mismatch of the current structure of the university with its main mission (the development of distance education)" with 0.800 load factor is the most important weak point in this section.

Table-6. Results of Bartlett's factor analysis test and KMO questionnaire related to opportunities

KMO index	Bartlett's test		
	Chi square	df	p
0.709	192.123	136	0.001

As results of above table show, since KMO coefficient is more than 0.7, therefore samples size is appropriate for factor analysis. Also, regarding to that amount of Bartlett test is less than 0.05, therefore items have a significant relationship in order to provide a reasonable base for factor analysis related to opportunities. In other words, factor analysis is appropriate for identifying the structure of opportunities factor model.

Table-7. Results of confirmatory factor analysis related to opportunities (prioritization in terms of their factor load)

Opportunities	Questions	Factor load
O1	Attention of senior officials of the country, ministry of science and university to production of science and software movement	0.850
O2	University's reputation in the field of distance education	0.836
O3	Development of telecommunications infrastructure and Internet bandwidth in the country	0.830
O4	Increasing tendency and needs of people in order to the efficiency of new technologies and non-face tutorials and virtual	0.815
O5	Possibility of using the faculty members and E-Learning technological infrastructure other universities and scientific centers	0.796
O6	Statutes of the University as a support and an appropriate legal framework in order to develop distance education	0.786
O7	Application and development of learning object repositories	0.772
O8	Implementation of online specialized courses and credible workshops and finally storing and sharing them.	0.771
O9	Development of producing interactive e-content for technical courses and workshops	0.759
O10	Application and development of content management systems as a knowledge bank of centered teaching – learning such as blogs, wikis, social bookmarks, RSS systems and…	0.753
O11	Existence and development of the infrastructure and online interactive tools (synchronous and asynchronous)	0.737
O12	Having the free capacity in order to attract faculty members and students for E-Learning courses	0.698
O13	Application and development of learning management systems (LMS, VLE)	0.687
O14	Possibility of organizing all kinds of electronic tests with the ability to validate student	0.679
O15	Access to networks, databases and web-based research systems and the possibility of communication with other universities research systems	0.632
O16	Application and development of registration systems, web based selection of courses and related education processes	0.610
O17	the possibility of using the potential of IRIB for E-Learning	0.592

Results of confirmatory factor analysis in above table show that item "Attention of senior officials of the country, ministry of science and university to production of science and software movement" with 0.850 load factor is the most important item in this section.

Table-8. Results of Bartlett's factor analysis test and KMO questionnaire related to threats

KMO index	Bartlett's test		
	Chi square	df	p
0.704	156.999	105	0.001

As results of above table show, since KMO coefficient is more than 0.7, therefore samples size is appropriate for factor analysis. Also, regarding to that amount of Bartlett test is less than 0.05, therefore items have a significant relationship in order to provide a reasonable base for factor

analysis related to threats. In other words, factor analysis is appropriate for identifying the structure of threats factor model.

Table-9. Results of confirmatory factor analysis related to threats (prioritization in terms of their factor load)

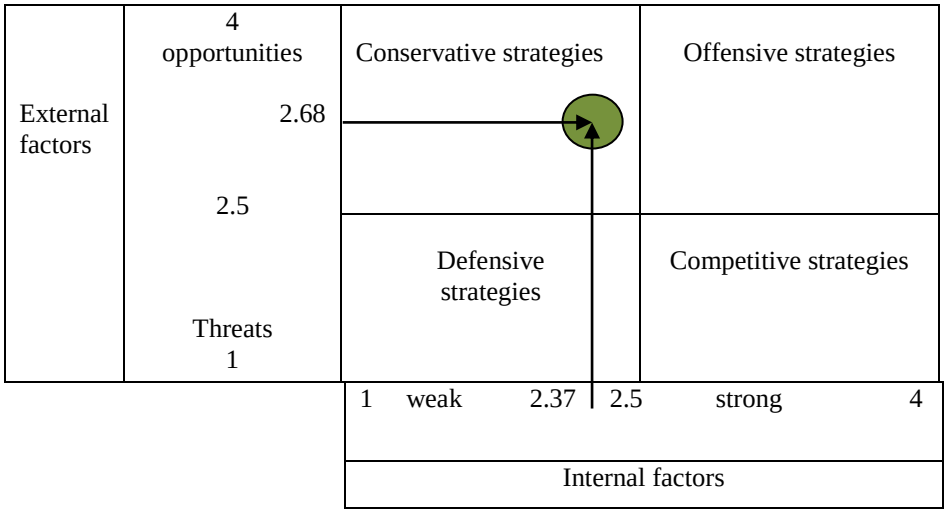
Threats	Questions	Factor load
T1	The development of E-Learning centers of universities as actual and potential competitors	0.809
T2	Instability of network technical infrastructure and low bandwidth of Internet	0.792
T3	The lack of a national plan in the field of higher education in order to the development of E-Learning	0.732
T4	Acceleration of technological change and the gap between academia and current technology space	0.727
T5	A kind of concern and distrust among the senior managers of the country, parents, prospective students about the effectiveness of E-Learning	0.697
T6	Inadequacy of formal and systematic training in the field of ICT	0.682
T7	Progress of science and necessity of updating of learning objects and current contents	0.671
T8	Distrust of industry sectors and executive boards of the country to E-Learning graduates	0.666
T9	The relative low level of IT literacy in the country and adverse propaganda about e-Learning	0.640
T10	The high cost of producing interactive e-content	0.593
T11	Non-cooperation of universities and research centers for sharing of e-content databases	0.592
T12	Movement of universities and companies towards the generation of static e-content	0.586
T13	Lack of scientific organizing at all different types of databases in cyberspace	0.558
T14	Inappropriate effects of synchronous and asynchronous online interaction approach of e-learning systems due to the lack of purposeful learning path	0.548
T15	Non-cooperation of faculty members of other universities to participate in E-Learning of PNU	0.539

Results of confirmatory factor analysis in above table show that item "The development of E-Learning centers of universities as actual and potential competitors" with 0.809 load factor is the most important item in this section which threatens E-Learning system of PNU.

-SWOT analysis in order to determine strategic situation of the E-Learning system of PNU in the country. Total scores of internal factors matrix of E-Learning system of PNU in the country were less than 2.5 (2.37), this shows that E-Learning system of PNU has problem for effective development. In other words, weak points of E-Learning system of PNU preponderate on strong points. Total scores of external factors matrix of E-Learning system of PNU in the country were more than 2.5 (2.68), this shows that in spite of some threats, E-Learning system of PNU encounters serious opportunities in external environment. Internal and external matrices used in order to determine the situation and type of appropriate strategy for E-Learning system of PNU in

the country. Typically, matrices selected in terms of organization area in one cell of four cells of internal and external matrix (SO, ST, WO, WT).

Figure-1. Determining strategic situation E-Learning system of PNU in Iran



According to figure (1), results show that E-Learning system of PNU in Iran puts in internal and external matrix and conservative region in terms of strategic situation. In other words, it shows that in addition to internal weaknesses, major foreign opportunities exist. Therefore, in order to compile an appropriate strategy, conservative strategies should be considered for shift and improvement of available situation. It should be mentioned determining the present situation doesn't mean that E-Learning system of PNU in Iran only restricted to one cell of this model (WO). But the value of SWOT analysis is that by comprehensive understanding of situation, adjusts required strategies by means of other cells. In the strategy selection, it's worthy we don't stick out a given point in one cells of quartet matrix and instead of emphasizing on one strategy, different strategies adjust synchronously. This action brings out strategies of one-dimensional state and decreases error probability in selection of appropriate strategies greatly. Regarding the above-mentioned issues, [13] emphasized on WO strategies for determining and compiling required strategies for E-Learning system of PNU and moreover in terms of available conditions ST, SO and WT strategies used.

-Strategies of E-Learning system of PNU in Iran

Corresponding strategies to items extracted by means of SWOT matrix analysis method. In this stage, 4 WO strategies, 2 SO strategies, 2 ST strategies and 1 WT strategies and totally 9 strategies compiled.

4. DISCUSSION

The purpose of the present research which implemented by descriptive-analytic method, researcher questionnaire and usage of E-Learning experts, professors and executive masters' ideas was compiling an appropriate strategy of E-Learning system of PNU in Iran. The PNU was established to develop educational programs in open learning systems and distance education. The

main goal of this University was to participate in the Mass higher education and promote the scientific community [1]. Findings of this research in the section related to strong points of E-Learning system of PNU showed that: "identity and mission of PNU As the only university of distance education and open learning in Iran" with load factor 0.829 and "Centers/units of Payam Noor University across the country as educational support systems" with load factor 0.815 and also "future identify orientations in the development of E-learning" with load factor 0.801 and etc. respectively are of effective variables.

Also, findings of the present research in the section related to available opportunities for E-Learning system of PNU in Iran showed that: "Attention of senior officials of the country, ministry of science and university to production of science and software movement" with load factor 0.850, "University's reputation in the field of distance education" with load factor 0.836, "Development of telecommunications infrastructure and Internet bandwidth in the country" with load factor 0.830 and etc. considered as variables which provides the development of E-Learning system of PNU in Iran. These findings are in line with results of implemented research by [14].

Research findings in the section related to weakness of E-Learning system of PNU in IRAN showed that (table 5): " Mismatch of the current structure of the university with its main mission (the development of distance education) " with load factor 0.800, "Shortage of qualified proficient in the field of E-Learning in different branches of science requirement" with load factor 0.787, "Centralized hosting of E-Learning management system at the central organization of university and then of course it, providing services of limited to students and professors. " with load factor 0.754 and etc. respectively considered as important and effective factors which PNU doesn't possess them in order to development E-Learning system. This finding is in line with results of the implemented researches by [15]. As results of this research show (table5), Inadequacy of financial resources and incentive systems for faculty participation in the production of qualitative, standard and interactive e-content, the lack of an integrated and stable network between the central organization of university and provincial centers/units of PNU, the lack of coordination in E-Learning services between Excellence / Executive centers of PNU with load factors: 0.734, 0.719 and 0.710 respectively are of basic weak points which causes difficulties in E-Learning services and increase the risk of rejecting or not accepting E-Learning system. In the area of E-Learning system of PNU threats in Iran, the development of E-Learning centers of universities as actual and potential competitors, instability of network technical infrastructure and low bandwidth of internet, the lack of a national plan in the field of higher education in order to the development of E-Learning and etc. respectively considered as important threats for E-Learning system of PNU. This finding is in line with results of the implemented researches by [14-16]. As presented in diagram 1, in the matrix of situation assessment, E-Learning system of PNU Iran is in the conservative situation. In other words, it shows that in addition to domestic weaknesses, various and major foreign opportunities exist. Therefore, in order to compile an appropriate strategy, defensive and preventative strategies should be considered for shift and improvement of available situation. It should be mentioned determining the present situation doesn't mean that hosting the events in Iran only restricted to one cell of this model (WO). But the value of SWOT analysis is that by comprehensive understanding of situation, adjusts required strategies by means of other cells. In

the strategy selection, it's worthy we don't stick out a given point in one cells of quartet matrix and instead of emphasizing on one strategy, different strategies adjust synchronously. This action brings out strategies of one-dimensional state and decreases error probability in selection of appropriate strategies greatly.

5. CONCLUSION

In the present study, each of the SWOT items by using confirmatory factor analysis prioritized and an appropriate basis (load factor) to prioritize each of the strong and weak points, threats and opportunities of E-Learning system of PNU created. In addition, Regarding the Internal and external matrices, emphasized on WO strategies for determining and compiling required strategies for E-Learning system of PNU and moreover in terms of available conditions ST, SO and WT strategies used that consisted of 1-Re-engineering the structures of PNU with the development approach of E-Learning, 2- Provincial distribution of E-Learning system hosting in order to develop educational services and support E-Learning, 3- Recruiting and organizing faculty members with the functionality of E-Learning, 4- Using E-Learning capacity in other academic centers for courses and the lack of scientific and technical capacity in PNU, 5- Providing a legal contexts for the development of E-Learning academic courses at all levels and disciplines, 6- Creation and development of Excellence / Executive centers, 7- Creating a favorable environment for the promotion of technical and scientific faculty members and experts, 8- Reforming production approaches of electronic contents, 9- Adaptation of authority and promotion system with E-Learning system.

REFERENCES

[1] Broadcasting Site of Payam Noor University (Statute of PNU), Available http://www.pnu.ac.ir.

[2] O. Mirbaha, *National standard of E-learning with national number 10000*: Institute of Standards and Industrial Research of Iran, Annual Journal of Standard, vol. 3, pp. 8, 2008.

[3] A. Hamidieh, *National standard of E-learning in field of schools education with national Number 10335*: Institute of Standards and Industrial Research of Iran, Annual Journal of Standard, vol. 3, pp. 9, 2008.

[4] J. Boticario and E. Gaudioso, "Adaptive web site for distance learning," *Campus-Wide Information Systems*, vol. 17, pp. 120 – 128, 2000.

[5] A. McMeekin, "Flexible learning and teaching and IT." Available http://www.monash.edu.au/groups/flt/1998/papers/almcmeek.pdf, 1998.

[6] J. M. Alfonso, M. A. Sicilia, and B. Lamb, *From content management to E-learning content repositories (Ed.), Content management for E-learning*. New York: Springer, 2011.

[7] Y. Poorbagheri, "Compiling strategies of malek ashtar university of technology with educational approach," MA. Thesis, Payam Noor University, 2012.

[9] O. Dincer, *Strategy management and organization policy*. Istanbul: Beta Publication, 2004.

[10] T. Hill and R. Westbrook, "SWOT analysis: It's time for a product recall," *Long Range Planning*, vol. 30, pp. 46-52, 1997.

[11] R. Stewart, S. Moamed, and R. Daet, "Strategic implementation of IT/IS projects in construction: A case study," *Automation in Construction,* vol. 11, pp. 681-694, 2002.

[12] R. B. Kline, *Principles and practice of structural equation modeling*, 3rd ed. New York: Guilford Press, 2010.

[13] Abtahi Seyyed Hossein, *Strategies of managing human resources*. Tehran: Pouyand Publications, 2009.

[14] S. Razaghi, "Evaluation of effective factors the development of virtual universities in Iran and its strategic status," MA Thesis, University of Tehran, 2006.

[15] S. Hoseini, "Compiling strategies of Quran and Hadith University, Research project, Quran and Hadith University," 2009.

[16] G. Montazer, "Challenges and solutions of information development the higher education in Iran," The Paper Collection of the National Conference of E-Learning, Zanjan University, 2006.

BIBLIOGRAPHY

[1] A. Aliahmadi, M. Fathollah, and I. Tajeddin, *A comprehensive attitudinal on strategic management*. Tehran: Tolid Danesh Publications, 2001.

[2] J. Woollard, Psychology for the classroom: E-learning. New York: Routledge Publication, 2011.