Impact of Marketing Strategy on Performance of Higher Education

Institutions

Dr. Zaid Yaseen Saud Al-Dulaimi

Al Iraqia University- Faculty of Economics and Business Administration

Corresponding Author: Zaid Yaseen Saud Al-Dulaimi Email: zaidyaseen610@yahoo.com

Abstract: This paper seeks to re-address the challenges education and especially higher education have faced in recent years, both at national and international levels. In this paper, we focus on higher education institutions with an economic profile in Iraq and we intend to identify, from a marketing point of view, the links between a series of elements that influence their proper functioning. This research aims to determine the marketing strategies influence of higher educational institutions with an economic profile influence and the influence of differentiation strategy implementation. The main problem that this research tries to solve is the gap between the existing marketing orientation adopted by the Iraqi higher educational institutions and the needs of both national and international labor markets. As part of this approach, the effects of labor market orientation components on the differentiation strategy and performance of a higher educational institution is considered. Several hypotheses are tested, such as: the relationship between student orientation and differentiation strategy is direct and positive, the relationship between the orientation towards competition and the differentiation strategy is direct and positive, the relationship between the inter-functional coordination and the differentiation strategy is direct and positive, the relationship between differentiation strategy and performance is direct and positive. The statistical analysis of the data aims to harness the collected data and to test the previously formulated hypotheses. In this regard, SPSS (IBM SPSS Statistics version 19) and AMOS (version 20) are used. Student orientation involves building an open relationship between them and college, so that their educational experience is as positive as possible. This should not lead to the conclusion that students' wishes should guide the entire educational process, or that their vision of what higher education means must be transformed into reality.

This approach can also lead to student retention, a favorable word-of-mouth advertisement, and an increase in the number of enrolled students. In this research, we have shown that market orientation has an important role and is positively associated with the differentiation strategy and we believe that the practical implications of this outcome are worth considering.

Keywords: Market orientation, Marketing strategies, Marketing mix, Higher educational institutions' performance.

Defining the research problem

Higher education institutions have witnessed a strong growth especially over the past 20 years, since Iraq has been through a transition period. This development was marked by the increase in the number of students and the emergence of the first private universities, but brought with it a series of changes and challenges for all those involved or connected to this sector (Engwall, 2007). There has also been a change in the way universities work (Maringe, 2006b), by taking over and applying the leadership models of large public or private corporations (Furedi, 2011).

According to this view, the research problem lies in the fact that the differences in implementing marketing strategies in the companies has an economic status and it differs from implementing these strategies in the context of higher educational institutions, because of the fact that the educational experience usually happens only once in a life time.

This research tries to solve the gap between the existing marketing orientation adopted by the Iraqi higher educational establishments and the needs of both of the national and international labor markets.

Do the implemented marketing strategies in both of the public and private universities meet the needs and requirements of the universities and their students all together?

Are the Iraqi universities assessing their educational programs in a continuous way in order to meet the needs and requirements of labor market and to provide it with the needed well qualified labor force?

Do the Iraqi universities have an updatable syllabus and curricula that are continuously updated based on the needs of the labor market?

Research objectives:

This research aims to determine the extent to which the marketing strategies of higher educational institutions with an economic profile influence the implementation of a differentiation strategy:

• Analyzing the elements of marketing mix that are implemented in the context of higher education institutions with an economic profile in Iraqi;

• Identification of the links between the components of the market orientation and the implementation of the differentiation strategy;

• Establishing the link between the marketing strategies represented by differentiation strategy and the performance of higher educational institutions with an economic profile.

Research questions:

On the basis of marketing strategies and especially the differentiation strategy, a series of research questions have been formulated according to the identified objectives:

• Are there marketing strategies implemented in the marketing activity of higher education institutions with an economic profile?

• Do the targeted marketing strategies have any influence on the performance of higher educational institutions?

• Does the implementation of a differentiation strategy have any effect on the performance of higher educational institutions?

• Can the performance of higher educational institutions be directly influenced by market orientation, or by implementing a differentiation strategy?

Formulation of research hypotheses:

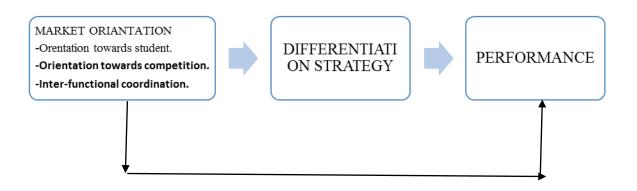


Figure 1: The proposed conceptual model

A number of research assumptions have been developed. As part of this approach, we considered the effects of market orientation components on the differentiation strategy and the performance of a higher educational institution.

H1: The relationship between student orientation and differentiation strategy is direct and positive.

H2: The relationship between the orientation towards competition and the differentiation strategy is direct and positive.

H3: The relationship between an inter-functional coordination and the differentiation strategy is direct and positive.

H4: The relationship between differentiation strategy and performance is direct and positive.

Marketing strategies

Is the marketing logic that the company hopes to achieve profitable relationships? By segmenting, targeting and positioning the market, the company determines which customers are using them and how, and defines the overall market. The company then splits it into smaller sectors and chooses the most promising sectors, focusing on customer

service. Jean-Jacques Lambin, (2009) defined the marketing strategy as "the market-driven program of the organization under an innovative policy for products and services for consumers and more value than competitors".

Differentiation strategy

The operationalization of this concept was based on the scales applied and tested in previous studies, but also on the adaptation of Porter's (1980) discussion of this strategy. The main aspect that Porter (1980) deals with when talking about differentiation refers to the development of new products, which are perceived as unique. This idea was unanimously adopted in the studies that analyze the differentiation strategy, being transposed into variables, within the tools developed by the authors. Thus, the first item within the scale is to diversify the educational offer and was built by adapting the proposals made by Homburg, Krohman and Workman Jr. (2004), Parnell (2011) and Voola and O'Cass (2010).

As Porter (1980) states, differentiation and the creation of a perception of uniqueness can be achieved in a wide variety of ways. The next items within the scale take this aspect into consideration and integrate different ways of differentiation, such as the brand of the institution or the quality of the service offered by it. Quality was regarded as an important aspect of differentiation by Frambach, Prabhu and Verhallen (2003) and by Voola and O'Cass (2010). Thus, the items used in the research reflect adaptations of those used by these authors.

The differentiation strategy requires a special focus on market research, to identify students' needs and desires, and to try to adapt the educational offer so that their expectations regarding the educational products and services offered are met. From this point of view, Homburg, Krohman and Workman Jr. (2004) propose an item that has been taken up and adapted to the scale used in this research, to illustrate this. The authors also include a price differentiation variable, which suggests that, given that this strategy provides added value, consumers will be less sensitive to price increases. Another way of differentiation suggested by Porter (1980) is building a strong brand among the public. Authors such as Homburg, Krohman and Workman Jr. (2004) or Parnell (2011) have taken this method into account in the tools used.

Market orientation

In this research, we adopted the narrative perspective proposed by Narver and Slater (1990), whereby the concept is viewed as an organization's attitude, marketing activities representing the result of an organizational culture.

Oplatka and Hemsley-Brown (2007) regard market orientation as a set of beliefs that put the interests of the students at the forefront but at the same time try to help educational institutions to become aware of the need to obtain information about competitors and to sets up inter-departmental activities to meet customer needs, all with the goal of gaining a competitive edge in a highly competitive global environment. The authors adopt the perspective suggested by Narver and Slater (1990) and regard the market orientation as being of the three dimensions, namely customer orientation, competition and inter-functional coordination. Customer orientation is transformed into student orientation, which is considered by authors as one of the most important categories of university audience. Starting from a study in which the concept of education is widely discussed (Oplatka and Hemsley-Brown, 2007), the authors propose to find a way to measure market orientation in higher education institutions and develop an instrument in this respect, validated in a pilot study (Hemsley-Brown and Oplatka, 2007).

In this research, we have taken this tool to measure market orientation, making some adaptations where appropriate.

Performance

The characteristic aspects of performance measurement are widely discussed in the literature (Parnell, 2011) and there is an increasing number of studies using subjective measurement criteria. Following the identification of similar studies and suggestions offered by Caruana, Ramaseshan and Ewing (1998) and by Homburg, Krohman and Workman Jr. (2004), we opted for the use of these criteria in this research.

In the field of applied marketing in the context of higher educational institutions, there was a group of authors who used this method of performance evaluation in a consistent manner (see Hammond, Harmon and Webster, 2007, p. 442). The authors adapted the tool proposed by Kohli and Jaworski (1993) to higher education, asking respondents to assess the overall performance of the institution and performance against competitors on a 7-point scale. The two items used by the authors were taken up in this research, with only adaptations to the time horizon analyzed. Initial items were intended to evaluate performance over the past year. Because the assessment of this situation for one year may seem insufficient, we headed for Caruana, Ramaseshan and Ewing (1998), which extended the range to five years. Due to the sharp changes in the educational environment and the speed with which they occur, we considered the best three years to measure performance.

Although Caruana, Ramaseshan and Ewing (1998) have only limited the introduction of the first item in their instrument, they have also taken into account the institution's ability to obtain funding from external sources. Along with this, we included in the research the increase in the number of students as an indicator of the performance of the institution (Mazzarol and Soutar, 2008).

Performance Measurement in Higher Educational Institutions

In recent years, the public sector has been increasingly focusing on performance management and measurement (Zangoueinezhad and Moshabaki, 2011), these activities being the first step in formulating any plan to improve activities (Sardana, 2008). For higher education institutions, performance measurement indicators have the role of promoting the quality of education, ensuring the maintenance of the university's operational standards and promoting competitiveness (Chen, Wang and Yang, 2009). However, Sarrico (2010) shows that evaluating the long-term impact of a service can often be difficult and require particular attention. The author has identified several dimensions on which performance can be assessed for services (Sarrico, 2010, p. 149-150):

• Efficiency - "do the right things" - probably the most important dimension of performance, is the relationship between the planned results and those achieved;

• Efficiency - "doing things well" - is the relationship between the results and the resources used to achieve them;

• **The economy** - "doing things at a minimum cost" - the relationship between the resources used and the minimum resources needed to achieve the same result;

• Equity - the principle of providing access to a service to all people who need it.

Sample size determination

The targeted population is the set of units that possess the characteristics and information sought by the researcher. Its determination depends on the subject of the investigation, the working hypothesis and the possibility of contacting its constitutive elements. To expand the population to include teachers with and without leadership functions, we defined the statistical population investigated in this study as consisting of teaching staff of the public and private faculties of economics - Baghdad, Almustansirya public universities and Alrafidien, Dijlah private university colleges, which are located within the geographical boundaries of Baghdad for the academic year of 2016-2017.

Regarding the actual progress of the study we have done, we have proposed to reach a higher response rate, taking also into account all the discussed issues. Thus, we have only obtained 402 questionnaires from the 1610 sent emails, which resulted in a 25% response rate comparable to those obtained in other studies in the field of higher education.

Data analysis plan

The statistical analysis of the data aims to harness the collected data and to test the previously formulated hypotheses. In this regard, we used SPSS (IBM SPSS Statistics version 19) and AMOS (version 20). The two programs were used to perform statistical processing in the category of descriptive and inferential techniques, as well as causal analysis, in the case of structural equations modeling.

Thus, we calculated the relative frequencies to describe the sample, depending on the respondent's genre, occupied position, seniority in the institution, etc. The next step was to test the reliability of each scale measurement using the Cronbach coefficient. Churchill (1979) states that this must be the first way researchers use in evaluating the quality of an instrument. This coefficient indicates high reliability, as its values are higher (Field, 2005). Nunnally (1978) indicated the threshold of 0.7 as acceptable to describe the reliability of a scale. Malhotra and Birks (2006) consider that a value of less than 0.6 indicates an unsatisfactory internal consistency of the test scale. In this research, we considered the threshold of 0.7 as an indicator of reliability for the used scales and, consequently, we eliminated the items that did not reach this threshold.

Sample description

Respondents were characterized by gender, position and seniority within the faculty and department in which they operate. We also took into our account the age of the respondent's institution, the number of students enrolled in the academic year 2016-2017 and the type of institution according to the sources of funding, namely state faculties and private faculties. The following table shows the structure of the sample according to these characteristics.

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	Table 1. Structure of the sample								
Position occupied	Preparator	1%	Age in the faculty	< 1 year	0.6%				
	Assistant	13%		1-5 years	12%				
	Lecturer	39%		6-10 years	25.4%				
	Lecturer	26%		11-20 years	45%				
	Professor	21%		> 20 years	17%				
The age of the institution	< 10 years	6%	Number of enrolled students	< 500 students	16%				
	10 – 50 years	67%		500-1000 students	25%				
	50 – 100 years	22%		1000-1500	13%				
		5%		> 1500 students	46%				
Public faculties vs. private	Public	70%		Yes	19%				
	Private	30%	> 100 years	NO	81%				

Table 1: Structure of the sample

A first characterization of the sample shows that most of the respondents occupy the position of lecturer (39%), followed by the lecturer (26%), the position of a professor being occupied by 20% and the assistant of 13% of respondents. The highest share is represented by the respondents who have been working for 11-20 years in college (45%), followed by those have been working for 6-10 years (25%), and the respondents with less than one year (0.6%).

Reliability of the measuring instruments used

Market orientation

This concept has been operationalized according to three dimensions, following the approach proposed by Narver and Slater (1990). The measuring instrument is structured on these three dimensions, adapted to that proposed by Hemsley-Brown and Oplatka (2010). Thus, the market orientation is characterized by 31 items, structured on the dimensions of student orientation, orientation towards competition and inter-functional coordination. In this research, we have adopted a multidimensional perspective on this concept, and the testing of reliability and validity has been done for each sub-scale in part.

Student orientation

Size Measurement Tool

Student orientation was made up of 18 items. The first step was to test the reliability of the scale using the CronbachA. The value of this coefficient was 0.937, indicating high reliability. Table 2 shows that removing the SO_14 variable would increase the value of the coefficient, but we have decided not to remove this variable because Cronbach will not increase significantly. Therefore, no variable was removed based on this criterion.

18	ble 2: Renability of the dimension	Student orientation
Variable	Cronbach a in case of variable deletion	Cronbach a final
SO_1	0,932	
SO_2	0,931	
SO_3	0,931	
SO_4	0,934	
SO_5	0,931	
SO_6	0,932	No variable has been removed
SO_7	0,934	No variable has been removed
SO_8	0,933	
SO_9	0,934	
SO_10	0,933	
SO_11	0,930	
SO_12	0,931	

 Table 2: Reliability of the dimension "Student orientation"

SO_13	0,932	
SO_14	0,939	
SO_15	0,932	
SO_16	0,937	
SO_17	0,936	
SO_18	0,937	

Orientation towards competition

This dimension has been operationalized with 7 variables. The value of the CronbachA coefficient for the five remaining variables was 0.850, indicating high scale reliability. As can also be seen from Table 3, removing any of the variables would lead to a decrease in the value of the coefficient and the reliability of the scale. Therefore, no variable was removed based on this criterion.

Table 5: Kenability of the unnension Focus on competition					
Variable	Cronbach a in case of variable deletion	Cronbach a final			
CO_1	0,824				
CO_2	0,823				
CO_3	0,835				
CO_4	0,834	No veriable has been removed			
CO_5	0,817	No variable has been removed			
CO_6	0,836				
CO_7	0,833				

Table 3: Reliability of the dimension Focus on competition

Interfunctional coordination

To measure this dimension, we used a scale of 6 variables. The CronbachA coefficient for this scale has a value of 0.896, indicating that the scale is reliable. No variable was removed because this would have led to a decrease in the value of the scale and the reliability of the scale.

Variable	Cronbach a in case of variable deletion	Cronbach α final				
IC_1	0,873					
IC_2	0,877					
IC_3	0,861	No variable has been removed				
IC_4	0,871	No variable has been femoved				
IC_5	0,890					
IC_6	0,882					

Table 4: Size Reliability Inter-Functional Coordination

Differentiation strategy

This construct has been operationalized according to 6 items. The reliability of the scale was tested using the CronbachA coefficient. It has a value of 0.756, which indicates a high reliability of the construct. From the following table, we can see that the DIF_5 variable negatively affects the value of the coefficient and the reliability of the scale. This variable was removed, the new Cronbach coefficient value becoming 0.848. In this case, the negative effect that the DIF_6 variable has on the value of the coefficient (column 3 of the table) is observed. We decided to remove this variable, Cronbach a recording at the value of 0.889.

Table 5: Reliability of the Measurement Scale for the Construct the Differentiation Strategy

variable		Cronbach A. in the case of the deletion of the variable (2)	Cronbach A. final
DIF_1	0,715	0,827	0,830
DIF_2	0,657	0,776	0,764
DIF_3	0,706	0,824	0,838
DIF_4	0,684	0,802	0,797
DIF_5	0,848	removed	removed

DIF_6 0,687	0,889	removed
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Performance

The performance scale included a total of 4 items. Cronbach α has a value of 0.815, which demonstrates the reliability of the scale. From Table 5 (column 2), it can be observed that the PERF_3 variable negatively affects the value of the coefficient and the reliability of the scale. Therefore, this variable was removed and the new CronbachA coefficient became 0.849. In this case, the negative influence of the PERF_4 variable on the coefficient value (column 3 of the table) is observed. Therefore, this variable was removed, CronbachA recording the value of 0.877. In the matrix of these interrelated correlations, the coefficients obtained do not exceed the value of 0.8. The value of the KMO coefficient for the two variables was 0.732 and that of χ^2 , resulting from the Bartlett spherical test, was 909.424 (p <0.05). Thus, we can say that there are significant correlations between the two variables, which can be investigated by factorial analysis.

Variable	Cronbach A. in the case of the deletion of the variable (1)	Cronbach A. in the case of the deletion of the variable (2)	Cronbach A. final
PERF_1	0,759	0,719	< 0,500
PERF_2	0,727	0,649	< 0,500
PERF_3	0,849	removed	removed
PERF_4	0,772	0,877	removed

Table 6: Reliability of the Measurement scale for the Performance construct

Hypothesis Testing:

The first hypothesis takes into account the direct effect of student orientation on the implementation of the differentiation strategy. The regression coefficient β recorded a value of 0.403, suggesting a relatively strong intensity link at a significance level p <0.05. Therefore, student orientation exerts a direct, positive and statistically significant effect at the level of the whole sample, and the H1 hypothesis is confirmed.

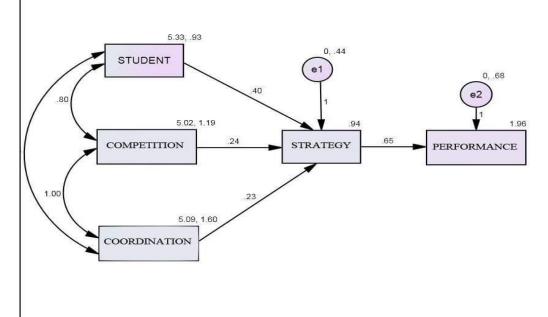


Figure 2: Test results for hypotheses H1-H4.

The H2 hypothesis aims to analyze the direct effect of the orientation towards competition on the differentiation strategy. Although this effect is lower than in student orientation ($\beta \approx 0,24$), it is directly, positively and statistically significant (p < 0,05). So the second hypothesis is confirmed.

The following hypothesis analyzed the link between inter-functional coordination and differentiation strategy. The coefficient β also recorded a lower value (b \approx 0.23), but the relationship between the two variables is direct, positive and statistically significant (p <0.05), which leads to the acceptance of the H3 hypothesis.

The last hypothesis in this set has been the link between the differentiation strategy and the performance of the higher education institutions (Table 7). The differentiation strategy exerts a direct, positive and statistically significant effect (p < 0.05) on performance. The intensity of this effect is strong (b0.65). Thus, the H4 hypothesis is confirmed.

			Estima	S.E.	C.R.	Р	label
STRATDIF	<	COMPETITION	.235	.045	5.259	***	
STRATDIF	<	COORDINATION	.229	.039	5.817	***	
STRATDIF	<	STUDENT	.403	.055	7.326	***	
PERFORMANCE	<	STRATDIF	.651	.033	19.660	***	

 Table 7: Regression coefficients of the variables included in the model

Practical implications

The results of this research provide a better understanding of how higher education institutions need to implement marketing strategies in their work to improve their performance, and to achieve superior performance. We believe that this study provides guidance in this respect by identifying steps to be taken to reach a certain level of market orientation, and to create an organizational marketing culture within the institution. Although marketing is present in most of the faculty's activities, we suggest that concentrating efforts in some areas will bring increased benefits. From this point of view, we have shown that student orientation is the most important feature of a market-oriented institution. This should not lead to the conclusion that students' wishes should guide the entire educational process, or that their vision of what higher education means must be transformed into reality. Student orientation involves building an open relationship between them and college so that their educational experience is as possible. This can lead to student retention, a word-of-mouth favorable advert of the institution, and an increase in the number of enrolled students. In this research, we have shown that market orientation has an important role and is positively associated with the differentiation strategy and we believe that the practical implications of this outcome are worth considering.

Future research directions

Future studies can focus on developing a specific tool to measure market orientation in higher education. Market orientation should be assessed differently from the context of the business environment. We also believe that it would be useful to try to identify new dimensions of the concept. We have shown that out of the three components, student orientation has the greatest impact on both the strategy and the performance of the institutions, but we suggest that there may be other components that can be identified by future research. Moreover, as higher education institutions develop relationships with a wide variety of stakeholders rather than student orientation. As far as performance is concerned, it has been assessed through subjective measurement criteria. We also support the development of performance indicators specific to higher education in future research. Last but not least, because in Iraq studies in market orientation and marketing strategy in higher education are just starting out, we consider addressing the issues discussed starting point for future research.

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