

**IMPACT OF STRATEGIC ORIENTATION ON ACADEMIC ENTREPRENEURSHIP
AN EMPIRICAL STUDY OF HIGHER EDUCATION IN IRAQ**

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ABSTRACT

This era is characterized by an age of change and environmental uncertainty, Which is affecting all sectors and different trends, and perhaps higher education is at the forefront of these sectors, which requires a strategic solutions able to adapt to this change, and able to raise the educational efficiency and achieve the desired academic entrepreneurship. Accordingly, this study aims to analyze whether the strategic orientation significantly influences the academic entrepreneurship of the universities. To achieve this objective, a questionnaire is applied on a sample of Iraqi professors, Thus, each phase of the questionnaire was measured using a Likert scale of 1 to 5. Conceptual framework was formulated and testing using simple and multiple regression as well as the structural equation modeling. The results show that using strategic orientation positively influences academic entrepreneurship.

Keywords:

Customer Orientation, Competitor Orientation, Technology Orientation

INTRODUCTION

Management of university education is increasingly becoming one of the most critical elements of human practice in many countries around the world, due to its direct socioeconomic and political impact on society's quality (Blackburn, 2012). Consequently, investment in a good higher education plan is significant for the evolution of future societies and generations, and requires extraordinary effort from management in the strategic planning as well as execution phases of education (Nauffal & Nasser, 2012). In this regard, the conceptual idea of strategic orientation plays a key role in the development of the Iraqi educational process, and many researchers have explored it as a critical tool that prepares institutions of higher learning to respond to future scenarios and educational needs (Young, M., & Muller, 2010).

Business leadership requires that an individual possess the quality of being a planner through the processes of strategic orientation (Rothwell, 2010). Entrepreneurs who have adopted this approach have found it easy to meet various economic, socio political and cultural challenges in the production, marketing and distribution of services within the market place. Analyzing different research works, the general observation to the conclusions that defining the concept of strategic orientation is a difficult and complex process which any person venturing into business must go through to ensure that his or her business remains relevant in the future (Avci et al., 2011). Hence, all organizations should take strategic orientation seriously by understanding the variables to consider.

The question of academic entrepreneurship is focused primarily on the economic and social dimensions of this phenomenon (Holienska, 2014). It is believed to play major role in resolving the problem of unemployment but it also contributes to creation of other jobs (Skowron et al., 2016). The academic entrepreneurship however apart from typical features of entrepreneurship involves additional and distinctive element. It is essentially correlated with university employees and students.

The link between strategic orientation and quality of outcomes in educational service delivery has not been adequately addressed with a special focus on Iraqi educational establishments. In particular, few studies particularly focus on the success factors associated with effective strategic orientation of university education in Iraq. Many stakeholders have long argued that many universities in the country do not take the issue of strategic orientation seriously as a tool for improvement of the quality of educational services as well as performance and entrepreneurship. Consequently, the primary goal of the present research paper is to highlight the impact of strategic orientation on academic entrepreneurship.

2. literature review**2.1.Strategic Orientation**

Strategic orientation is considered an important part of the organizational culture, it defines the different organizational cultures that place the client at the center of the strategic and operational thinking of the company. Likewise, it has an impact on salespeople through job satisfaction and customer orientation (Mavondo, 1999). The evolution of the strategy approach, within what is considered strategic management, starts from the business schools to the theories of resources and capabilities, continuing with the competitive strategies and ending in the complexity of the current world where the concept of strategy is addressed. with studies of flexible and dynamic factors and variables (Ho & Huang, 2007).

There are different approaches to how strategies have been studied, starting with generic Ansoff strategies in which it includes market penetration; product development; market development and diversification. Following with Porter -whose approach has found a wide acceptance in the strategic administration oriented to the way a company raises its activities and its way of competing in an industrial sector. it uses strategies that it also calls generic: cost leadership, differentiation and focus (Ansoff et al.,2018). Other approaches have focused their vision on the capabilities of the company and the way in which resources allow to apply and create a competitive advantage .

For Linares and Acevedo (2006), strategies can be divided into corporate, global, business, functional and technological. Another typology of strategies focuses on the concepts of functional strategies, of which there are as many as functions or business areas exist in a company. According to Morgan and Strong, the term strategic orientation has been used as a competitive strategy, strategic predisposition, strategic adjustment, strategic push and strategic alternative. The strategic orientation can be defined "how the organization uses the strategy to adapt and / or change aspects of its environment to achieve a more favorable adjustment". These authors classify the strategic orientation into dimensions as aggressive, analytical, defensive, futuristic, proactive and risky.(Domínguez et al.,2008). For Aragón and Sánchez (2005), strategic orientation typology, suggested in 1978, has had one of the most widespread effects because it is considered unique and considers the organization as a complete and integrated system in dynamic interaction. with its environments. This typology is constituted by three premises:

1) Successful companies develop a systematic method of alignment with their environment, while responding to the adaptive cycle.

2) Four strategic orientations can be identified in each industry: defensive, prospective, analytical and reactive.

3) Defensive, prospective and analytical strategies can lead to satisfactory performance, while the reactive one can not due to its lack of internal consistency.

Also Brouthers et al. (2007) conceptualize strategic orientation as a continuous variable whose extremes are, on the one hand, proactive or very aggressive strategies and, on the other, defensive or less aggressive strategies. Kohli and Jaworski (1990) consider that market orientation has a consumer focus and that it is its central element. The more traditional point of view involves obtaining information from consumers about their needs and preferences. In addition, they refer to market orientation as the one in charge of the organization of generation, dissemination and responsible for market intelligence. They define market orientation as the generation, throughout the entire organization, of market intelligence relevant to the present and future needs of consumers, the dissemination of that intelligence through the departments and the responsibility to achieve it.

Due to the above, it is possible to argue that there are different components of the strategic orientation based on which the organizational strategies or functional strategies of the organization are established, which in the end serve to create a competitive advantage depends on: customer orientation, competitor orientation and technology orientation. As it shown in figure 1.

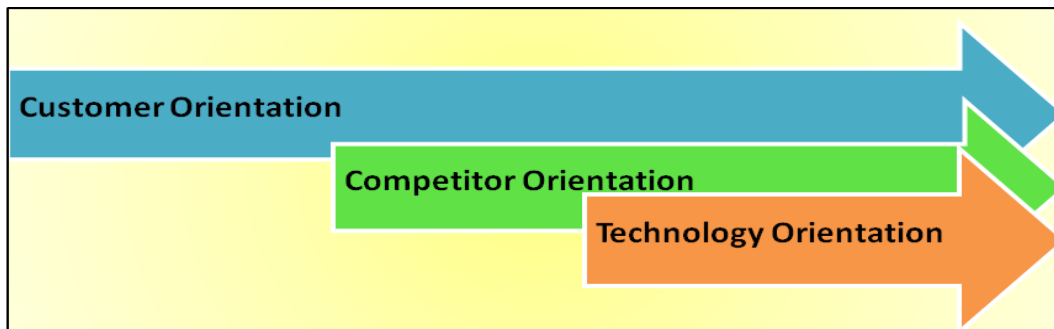


Figure: 1 dimensions of strategic orientation

Many literatures refer to that strategic orientation needs to follow elements as steps to achieve desired performance these elements are (safety, respect, quality, integrity, profitability and performance), As it shown in figure 2.

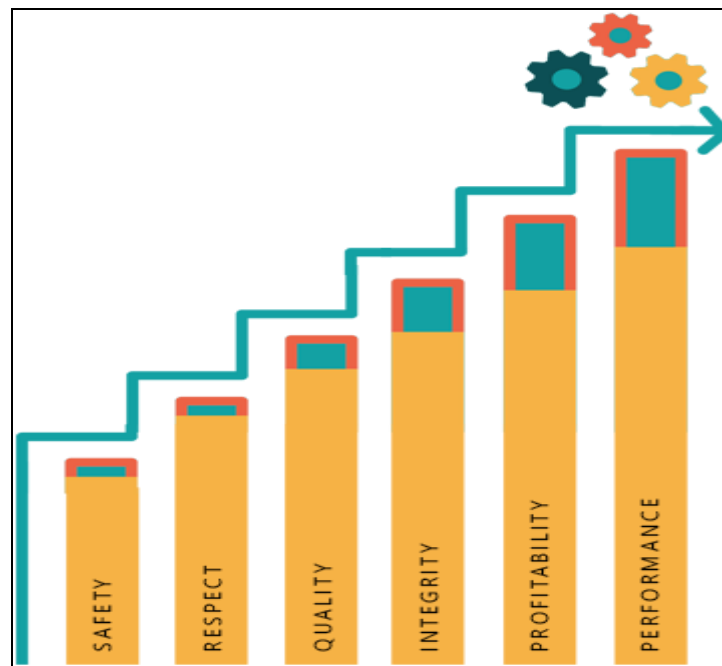


Figure: 2 Steps for strategic orientation to achieve desired performance

2.2. Customer Orientation

The customer orientation is sometimes referred to as a new philosophy in management thought, they may also be referred to as a management strategy within a rigorous quality framework or from a marketing perspective (Tajeddini, 2010). All viewpoints can be accepted that successful organizations establish a strategic approach to their customers. Customer orientation refers to the degree of organization's emphasis and focus on meeting customer needs and expectations towards quality of service (Blocker et al., 2011).

It is a strategic process planned to take care of the customer and his needs, desires and expectations, which is the real input to the success of the organizations in performing their tasks. It is the process of seeking the customer and giving him the opportunity to define the objectives of the organization and meet its needs and achieve customer satisfaction (Tajeddini, 2010). Here, the customer-oriented strategy requires cooperation between the organization's components to meet the needs and desires of customers.

2.3. Competitor Orientation

A company should not devote all its time to concentrate on competitors. We can distinguish two types of companies: those focused on competitors and those focused on customers. (Jones & Rowley,2011) A company focused on competitors sets its course by: Situation: it analyzes the different competitors and the type of position in which each one is. Reaction: applies a measure for each situation analyzed. The positive thing about this type of company is that it trains the marketing people. so that it is always ready, it is aware of the weakness of the competitors (Lewrick et al.,2011).

Competitive orientation refers to competitive action that re-evaluates strengths and weaknesses compared to other competitors. Performance assessment includes production efficiency, pricing, delivery schedules, customer satisfaction, innovation, retention of staff and market share(Jones & Rowley,2011).

The orientation towards competitors gives organizations a broader understanding of the characteristics of the market. The orientation towards competitors refers to proven organizational technology in the short-term understanding of the strengths and weaknesses of the organization and the long-term understanding of capabilities and leadership of current and potential competitors(Ozkaya et al.,2015).

2.4. Technology Orientation

Technology includes all the ways in which the organization can create value for stakeholders. (Chen et al.,2014),With the technological development that is taking place in the world recently, we can not hide the impact of modern technology on the performance of organizations and institutions, as these advanced technological industries carried the character of innovation, sophistication and flexibility in dealing (Lawrence,2012).This development has helped many institutions and organizations to manage different departments and levels In the company better, and most of the institutions have adopted all of their management strategies on technology, so that each organization lagging behind to cope with this huge development, it will noticed after a period of time that it began to decline and decline at all levels especially on the quality and marketing level. The trend towards technology suggests that consumers prefer superior products and services and superior technology(Chen et al.,2014). Technology orientation represents the ability and willingness to acquire significant technological knowledge and use in the development of new products, as well as the use of advanced technology in the development of new products, the rapid integration of technology into work, the development of new technology and the creation of new ideas proactively.

2.5. Academic Entrepreneurship

The academic entrepreneurship is a relatively new concept in the management science. The so called entrepreneurial university was described for the first time in 1983 by Etzkowitz in the discussion on the application of American academic science in commercial environment.(Barcik et al.,2017) Since then, the concept has been developing in various countries and is now a significant part of a modern economy (Bağ 2016). The entrepreneurial activity is an area of study that is currently in full development, there is still no agreed theoretical framework that serves as a reference for the analysis of this phenomenon and, therefore, one of its main protagonists the entrepreneur (Veciana,2007).

In recent years, it has been studied as a multidimensional phenomenon at the individual level, business, regional, sectoral and national. However, the different studies carried out have included, almost exclusively, variables of an economic nature, which has prevented explaining part of the transformation in entrepreneurial activity (Uhlener & Thurik, 2007). A society entrepreneurship stands out because entrepreneurship and knowledge are considered as driving forces to achieve economic progress, job creation and competitiveness in the global markets. Also a key element for economic growth and competitiveness of emerging countries is the creation of new companies (Moscoso & Botero, 2013). The entrepreneurial initiative is one of the main drivers of innovation, competitiveness and vity and economic and social development, In the academic sphere, entrepreneurship has been described as an emerging field, as a discipline in the construction stage(Monsalve, 2013).

The education system can contribute to stimulate the creation of the entrepreneurial culture, from the school and including the research community and the university environment through of an integrated and coherent framework (Navarro and Torregrosa, 2012). Accordingly, academic entrepreneurship also known as the university's third mission. It is about boosting the economic value of processes of transfer. According to (Nakagawa et al.,2017),to achieve academic entrepreneurship it has to make a balance between university and industry as it shown in figure 3.

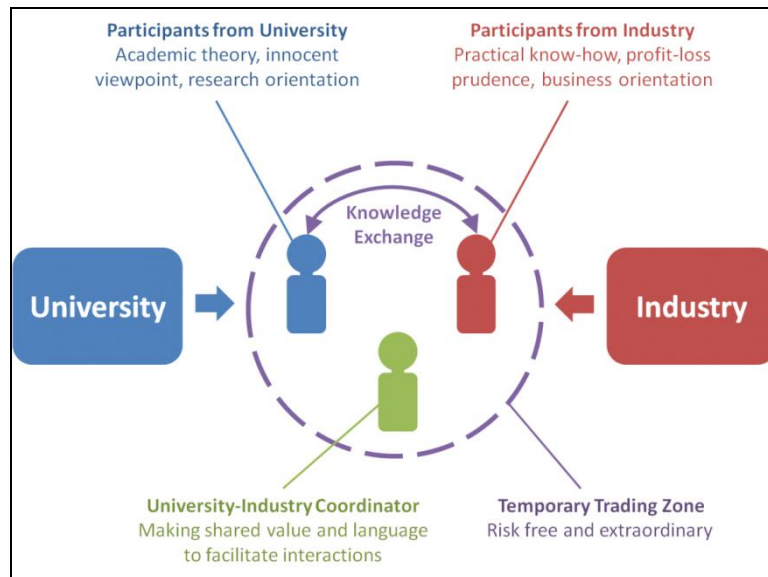


Figure: 3 Entrepreneurship through university-industry collaboration

3. Research Methodology

3.1. Sample

The research used quantitative research method, the conceptual framework attempts to explain an integrative view of strategic orientation and academic entrepreneurship. This survey study was conducted in university of Kufa in middle of Iraq, the study population was composed of university professors, in total, 117 professors composed the study sample. The data were collected using a questionnaire. The questions could be responded on a 5-point Likert scale from (completely agree to completely disagree).

3.2. Conceptual Framework

A conceptual framework is designed to illustrate causal relationships between variables. The independent variable (strategic orientation) is composed of three basic dimensions (customer orientation, competitor orientation, technology orientation) with 15 items, the dependent variable (academic entrepreneurship) with 10 items, as shown in figure 4.

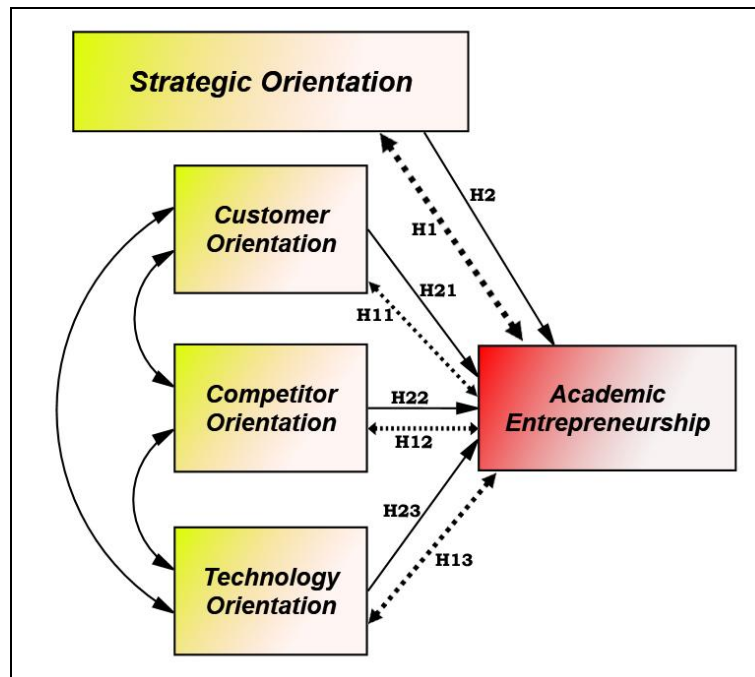


Figure:4 Conceptual Framework

3.3. Research Measurements and Coding

Table 1 shows the research measurement and coding.

Table: 1 Research measurement and coding

Factor	Code	No. of items	Measurement
Strategic Orientation	SO	15	(Cheng & Huizingh, 2014) (Ferraresi et al., 2012) (Liu & Xue, 2011)
Customer Orientation	CUO	5	
Competitor Orientation	COO	5	
Technology Orientation	TEO	5	
Academic Entrepreneurship	AE	10	(Siegel & Wright, 2015)

3.4. Research Hypothesis

In order to achieve the objectives of the study, the following hypotheses were formulated:

- H1 : Strategic orientation positively correlated with academic entrepreneurship.
- H11 : Customer orientation positively correlated with academic entrepreneurship.
- H12 : Competitor orientation positively correlated with academic entrepreneurship.
- H13 : Technology orientation positively correlated with academic entrepreneurship.
- H2 : Strategic orientation positively affect academic entrepreneurship.
- H21 : Customer orientation positively affect academic entrepreneurship.
- H22 : Competitor orientation positively affect academic entrepreneurship.
- H23 : Technology orientation positively affect academic entrepreneurship.

4. Findings

4.1. Reliability

The variables consider a set of items previously validated in previous research, measured on a Likert scale of 1 to 5, and correspond to the essential source for the questions used in the questionnaire administered during the data collection. For each case, the reliability of the variables and measures is measured according to the Cronbach's Alpha calculation. These variables, measures and indices are presented in Table 2.

The dimensions CUO is measured by 5 items (Cronbach's Alpha = 0.718); the COO is measured by 5 items (Cronbach's Alpha = 0.709); and the TEO is measured by 5 items (Cronbach's Alpha = 0.813). the independent variable SO is measured by three dimensions with 15 items (Cronbach's Alpha = 0.799). regarding dependent variable AE it is measured by 10 items (Cronbach's Alpha = 0.827). also the whole questionnaire measured by 25 items (Cronbach's Alpha = 0.821). however, all these results were acceptable.

Table: 2 Cronbach Coeficent

<i>Factor</i>	<i>No. of items</i>
SO	0.799
CUO	0.718
COO	0.709
TEO	0.813
AE	0.827
All Items	0.821

4.2. Normality Test

Table 3,4 shows the result of the normality test of the data of both SO and AE , it refer to the skewness and kurtosis which was acceptable value , the acceptable value condition refer to (+1.96,-1.96) which was achieved , so the result indicate that all data follow the normal distribution.

Table: 3 Normality test for strategicorientationdata

<i>Variable</i>	<i>min</i>	<i>max</i>	<i>skew</i>	<i>c.r.</i>	<i>kurtosis</i>	<i>c.r.</i>
ItemX_15	1.000	5.000	-.898	-4.649	.667	1.727
ItemX_14	1.000	5.000	-1.190	-6.162	1.345	3.483
ItemX_13	1.000	5.000	-1.325	-6.866	1.926	4.989
ItemX_12	2.000	5.000	-.848	-4.395	-.015	-.038
ItemX_11	2.000	5.000	-.848	-4.395	.058	.150
ItemX_10	1.000	5.000	-1.183	-6.130	1.738	4.502
ItemX_9	1.000	5.000	-1.037	-5.372	.490	1.268
ItemX_8	1.000	5.000	-.987	-5.112	1.215	3.147
ItemX_7	2.000	5.000	-.917	-4.752	.395	1.023
ItemX_6	1.000	5.000	-1.248	-6.463	1.617	4.188
ItemX_5	2.000	5.000	-1.061	-5.495	.323	.838
ItemX_4	2.000	5.000	-1.187	-6.149	.731	1.894
ItemX_3	2.000	5.000	-.835	-4.323	-.122	-.316
ItemX_2	2.000	5.000	-.740	-3.832	-.252	-.653
ItemX_1	3.000	5.000	-.727	-3.765	-.459	-1.188
Multivariate					105.467	29.629

Table: 4 Normality test for academic entrepreneurship data

Variable	min	max	skew	c.r.	kurtosis	c.r.
ItemY_10	2.000	5.000	-1.018	-5.274	.884	2.290
ItemY_9	2.000	5.000	-.832	-4.308	.269	.696
ItemY_8	2.000	5.000	-.832	-4.308	.269	.696
ItemY_7	2.000	5.000	-1.159	-6.004	1.217	3.151
ItemY_6	2.000	5.000	-1.108	-5.741	1.144	2.963
ItemY_5	2.000	5.000	-.871	-4.512	.218	.566
ItemY_4	1.000	5.000	-1.165	-6.036	1.636	4.238
ItemY_3	2.000	5.000	-.918	-4.756	.498	1.289
ItemY_2	2.000	5.000	-.664	-3.441	-.176	-.457
ItemY_1	2.000	5.000	-.656	-3.400	-.291	-.753
Multivariate					209.542	85.812

4.3.Hypothesis Testing

4.3.1.The relationship between strategic orientation and academic entrepreneurship.

The results of table 5 indicate that there is a significant correlation between SO and AE in total. The correlation coefficient value is (0.782) and this value is significant because the T-calculated is greater than the tabular value, And that the value of the significance level indicates an acceptable result which was smaller than (0.05). This result supports H1 hypothesis.

As for the sub dimensions, the result indicated that there was a significant correlation between CUO and AE. The correlation coefficient value is (0.657) and it is positive and significant because the value of T-calculated was greater than the tabular value. In addition, the value of the significance level (Sig) is acceptable and less than (0.05). This result supports the H11 hypothesis. Also the results refer to a positive correlation between COO and AE , this correlation coefficient is (0.709) and significant because the value of T-calculated was greater than the tabular value. In addition, the value of the significance level (Sig) is acceptable and less than (0.05). This result supports the H12 hypothesis.

Finally, the correlation between TEO and AE, The correlation coefficient value is (0.663) and this value is significant because the T-calculated is greater than the tabular value, And that the value of the significance level (Sig) indicates an acceptable result which was smaller than (0.05). This result supports the H13 hypothesis.

Table: 5 Correlation Coefficient Results

Variable	CUO	COO	TEO	SO	AE
CUO	1	0.660**	0.527**	0.831**	0.657**
T					10.990
Sig. (2-tailed)		0.000	.000	0.000	0.000
COO	0.660**	1	0.680**	0.908**	0.709**
T					12.687
Sig. (2-tailed)	.000		0.000	.000	0.000
TEO	0.527**	0.680**	1	0.855**	0.663**
T					11.169
Sig. (2-tailed)	0.000	0.000		0.000	0.000
SO	0.831**	0.908**	0.855**	1	0.782**
T					15.817
Sig. (2-tailed)	0.000	0.000	0.000		0.000
<i>T-t (0.05)=1.66 T-t (0.01)=2.364</i>					

4.3.2. The impact of strategic orientation on academic entrepreneurship.

The regression analysis was carried out to test the dependence of each one of the causal relationships posed by the model in figure 4. The results of table 6 show that there is a significant effect of the variable SO on AE. The value of the effect constant ($\alpha=0.984$) and the regression slope value ($\beta=0.784$) and the explanatory power of the model reached ($R^2=0.432$). These values are statistically significant, the value of the F-calculated is greater than the tabular value, and the value of the significance level is within the acceptable value smaller than ($\text{Sig}<0.05$). This result supports H2 hypothesis. and the regression equation can be formulated as follows:

$$Y = \alpha + \beta X$$

$$AE = 0.984 + 0.784 SO$$

For the Sub-dimensions, the variable CUO has a significant positive effect on AE. The value of the effect constant ($\alpha=1.635$) and the regression slope value ($\beta=0.619$) and the explanatory power of the model reached ($R^2=0.432$). These values are statistically significant, the value of the F-calculated is greater than the tabular value, and the value of the significance level is within the acceptable value smaller than ($\text{Sig}<0.05$). This result supports H21 hypothesis. and the regression equation can be formulated as follows:

$$Y = \alpha + \beta X1$$

$$AE = 1.635 + 0.619 CUO$$

Regarding to COO, it is clear that there is significant positive effect on AE. The value of the effect constant ($\alpha=1.904$) and the regression slope value ($\beta=0.580$) and the explanatory power of the model reached ($R^2=0.503$). These values are statistically significant, the value of the F-calculated is greater than the tabular value, and the value of the significance level is within the acceptable value smaller than ($\text{Sig}<0.05$). This result supports H22 hypothesis. and the regression equation can be formulated as follows:

$$Y = \alpha + \beta X2$$

$$AE = 1.904 + 0.580 COO$$

Finally, there is significant positive effect of TEO on AE. The value of the effect constant ($\alpha=1.934$) and the regression slope value ($\beta=0.568$) and the explanatory power of the model reached ($R^2=0.440$). These values are statistically significant, the value of the F-calculated is greater than the tabular value, and the value of the significance level is within the acceptable value smaller than ($\text{Sig}<0.05$). This result supports H23 hypothesis. and the regression equation can be formulated as follows:

$$Y = \alpha + \beta X3$$

$$\underline{AE=1.934 + 0.568 TEO}$$

Table: 6 Regression Coefficient Results

Variable	α	β	R2	F	Sig
CUO	1.635	0.619	0.432	120.741	0.000
COO	1.904	0.580	0.503	160.961	0.000
TEO	1.934	0.568	0.440	124.747	0.000
SO	0.984	0.784	0.611	250.17	0.000
$F-t(0.05)=2.680 \quad F-t(0.01)=3.949$					

Regarding multiple regression table 7 and figure 5 show that there is positive and significant affect in the model with the variables of SO which indicated F-calculated more than tabled, the impact of CUO is positive with regression coefficient of value ($\beta=0.277$), and positive impact of COO with regression coefficient of value ($\beta=0.261$), also positive impact of TEO with regression coefficient of value ($\beta=0.254$).

Table:7 Multiple Regression Results

Var.	B0	B1	R2	F	Sig
CUO	0.973	0.277	0.612	82.411	0.000
COO		0.261			0.000
TEO		0.254			0.000
$F-t(0.05)=3.92 \quad F-t(0.01)=6.851$					

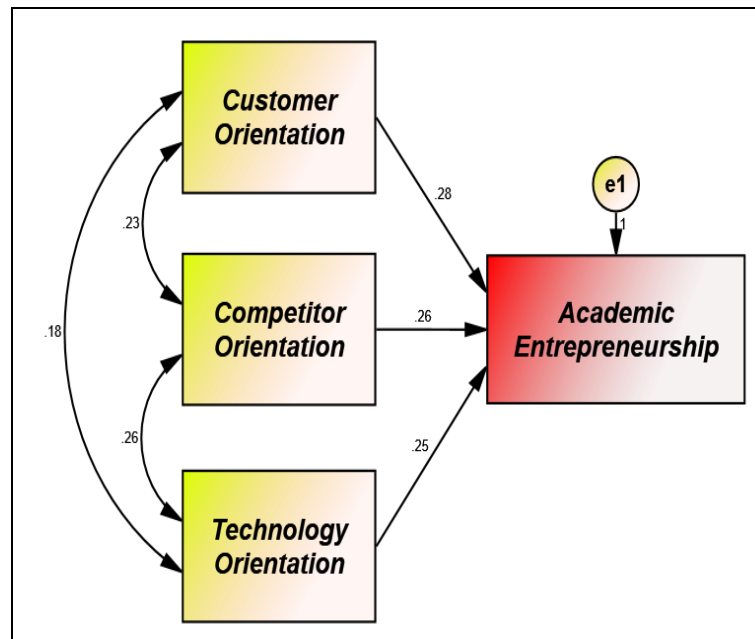


Figure: 5 Multiple Regression According to (SEM)

5. Discussion and conclusion

The results showed that the strategic orientation played a key role in achieving academic entrepreneurship. The main elements of the strategic orientation have become influential and clear. The most influential factor is the influence of customer orientation on academic entrepreneurship. This result is consistent with the study of (Tajeddini,2010) which have proved that there is a significant impact on customer orientation in improving quality and entrepreneurship. And then came the impact of technology orientation on academic entrepreneurship, and this result is supported by several studies such as study of (Chen et al.,2014), which indicated the positive and great impact of technology in academic entrepreneurship. And the smaller effect is the impact of competitor orientation on academic entrepreneurship, and studies have proved, including the study of (Jones & Rowley,2011) that the impact of competition and direct and large in entrepreneurship.

From the above , it is clear that there is great importance to employing the elements of the strategic orientation to achieving the academic entrepreneurship of the universities.

Academic entrepreneurship plays and will play an important role in steering of national economies of countries. According to theoretical and practical part of following article, academic entrepreneurship means promotion in academic environment entrepreneurial behaviors among employees and students, who develop their own businesses and become young entrepreneurs. Academic entrepreneurship is relevant area of activity of modern university, as a subject creating knowledge and new technologies for the economy.

Following factors can stimulate development of academic entrepreneurship at universities:

1. Proper infrastructure: career office, center of technology transfer.
2. Motivating of academics and students to intellectual growth, improving quality of knowledge at university.
3. Development of research and lab infrastructure and intensification of cooperation with external units, like scientific-technological parks, other universities, clusters.
4. Creating of law and organizational conditions for employees and students to engage in business.
5. Effectiveness of university in applying for external funds.
6. Economy's demand for knowledge, basic product of university.

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