

## **Analysis of the Relationship Between University and Industry from the perspective of Marketing Relationships with Structural Equations Approach**

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### **Extended Abstract:**

Creating and maintaining a relationship between university and industrial organizations leads to the creation of some values for beneficiaries. In this study, the relationship and cooperation of industrial companies and institutions with University of Sistan and Baluchistan is investigated using "relation-oriented marketing" to investigate the affective factors on establishing a relationship between university and the organizations that work on graduate students' internship. The statistical population includes the companies that have been working with the University of Sistan and Balochistan. In this company, 175 managers and associates and employees of related sections were identified. The sample size was calculated as 120 subjects using Cochran formula. The data were collected via researcher-made questionnaire and analyzed through PLS analysis. Eventually, a model of structural equation was developed and examined. The findings of the study suggest that communications is the basis of establishing a relationship and has a positive effect on the level of satisfaction of the relationship, trust and functional oppositions. Also, it was determined that trust and commitment, the level of cooperation with companies and universities; increase the level of companies' cooperation's with universities.

### **Introduction**

The purpose of doing this study is to deepen the perspective about the factors that constitute the relationship and cooperation between university (here, the University of Sistan and Baluchistan) and

organizations that work on graduates' internship programs. Therefore, the following six factors will be investigated in this study: communications, trust, satisfaction, functional oppositions, commitment and cooperation.

Specifically, research goals are as follows :First phase; the analysis of the role of communications as the basis of relationships and its effect on trust, satisfaction and functional oppositions, and in the second phase; the role of those variables in establishing higher commitment and cooperation between an organization and university is investigated.

### **Case study**

This research is performed to investigate and analyze the level of cooperation between industrial companies of Zahedan which is one of the cities of Sistan and Baluchistan and the Academic section of this province.

### **Materials and methods**

In this study, the data are gathered through questionnaires and research population includes all the companies which have been cooperating with the University of Sistan and Baluchistan. The research sample includes all the managers and associates and employees of research section and planning units and sections of these companies and sample size includes 120 subjects .Factor analysis, content validity and Cronbach's alpha were used for measuring the validity and reliability of variables. Overall, the overall reliability was calculated as 0/991 and it was calculated as 0/7 for each dimension. The applied scale in this study is the Lickert scale. In the present study, the divergent validity of the measured model has been assessed through utilizing Fornel and Locker (1981) criterion. The analysis has been done based on a two-staged method. SPSS 17.1 software was used for data analysis and the following six latent variables were considered: trust, satisfaction, commitment, functional oppositions, communications and cooperation which were measured by 23 manifest indicators.

### **Discussion and Results**

A two-staged approach is followed to evaluate the reference to structural model (Hair & et al, 2010). In the first phase, index repetition approach was used for calculating the latent variable for lower-level constitutes and in the second phase, observed variables are used in higher-level measurement model. A pls algorithm was ran in Smart PLS software for this matter. After that, the score for the latent variable was saved in an Excel file and then it is used as an index for higher-level constitute in the

second phase. Using the boot-strap method along with a second measurement calculates the path and measures the t-test for the relationships. Given the regression coefficients, the variables of communications and satisfaction, taken together, explain 59.3 per cent of the changes of trust variable, the variables of communications and functional oppositions, together, explain 48 per cent of the changes of the satisfaction variable and 32.3 per cent in the variable of functional oppositions. The variables of trust and satisfaction together determine 33.6 per cent of the changes of commitment variable. On the other hand, the commitment variable only expressed 13.1 per cent of changes in cooperation variable which is very weak. Eventually, of all the research hypotheses, hypothesis 1, 2, 3, 4, 5, 6 and 9 were confirmed and the hypotheses 7 and 8 were rejected.

**Conclusion:**

This study can have a considerable effect on investigating the relationships between university and industry and it could be considered as a factor that leads to increased cooperation and commitment between university and industry for implementing programs related to graduate students' internship. The weak interaction of these two institutions is goes back to their contradictory goals and procedures. The results suggested that oppositions are considered as functional when the relationship between these two organizations are improving, and not only is this opposition not harmful, but it's also beneficial. The results emphasize that satisfaction is a preamble to establishing commitment and trust in the relationships between university and industry. The research hypothesis based on the assumption that there is a positive relationship between functional oppositions and increased cooperation level was rejected. The existence of a direct relationship between satisfaction and cooperation was rejected in this study. It also confirms the results of the existence of a positive relationship between commitment and increased cooperation level. In addition to this, the existence of a direct relationship between satisfaction and cooperation has not been confirmed in this study. Satisfaction of the relationship between university and industry might not lead to increased cooperation in the aforementioned relationships.

**Keywords:** the relationships of university-industry, relation-oriented marketing, national innovation system