



The relationship between learning and CRM with the company's performance

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ABSTRACT

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The key purpose of this essay is to investigate and scrutinize the relationship between influence of orientation of organizational learning on customer relationship management and scrutinization of the function and the possible relations between these three factors among the tile and ceramics companies in Yazd province. In order to measure the various aspects of these factors a 27-item questionnaire based on the likert5-point scale is being used. In the time of research the statistical universe of the research consists of forty (40) companies. In order to determine the sample volume Morgan table was used. Based on this table the sample volume which was under study was determined as forty (40) companies. The research questionnaires were being responded by the high-ranked managers of each company. To scrutinize the pivotal indices and the scatteredness of the research variables and in order to analyze the research data and hypotheses the structural equations modeling based on PLS method (partial least square method) has been used. After scrutinization and analysis of the research hypotheses the existence of a meaningful and positive relationship among them all in all was approved; that is the influence of the orientation of organizational learning on customer relationship management is positive. The management of customer relationship has a positive but the orientation of organizational learning has no positive and meaningful influence on the function but the orientation of learning has a weak influence on the variable of function indirectly and throughout the moderator variable of the management of customer relationship.

1. Introduction

In management literature, it is always insisted that the rate of leaving the service, is indicative of undesirable

Learning is a strategic tool for permanence, effectiveness and revival of organization in different levels. Organizational learning is a method that firms create, accomplish and organize the knowledge and procedure of activities and also will increase the efficiency of firm with workforce skills. Focus of organizational learning is based on behavioral changes (recognition and enforcement) and creation of knowledge.

Organizations that look to the customer relationship management (CRM) in investment point of view, satisfaction and customer retain are very important to them and also, with teaching personnel in customer issues, emphasis on technologies of customer satisfaction. With these mentioned point such organizations stress on learning and CRM could increase profitability and market share from its competitors surpass.

Accordingly, this study examines the impact of organizational learning orientation on CRM and enterprise performance of ceramic and tile companies.

Nowadays, organizational learning has very high importance between firms that are interested in competition advantage, innovation and efficiency. Many Scientists

define the organizational learning as a significant source of superior performance (Gooch, Elliott, Keown, 2012; Sinkula Nvrdivyr, 1997 and Slater and Narver, 1995).

Learning through the new goods, services and business methods, focuses on perception and effective satisfaction of hidden and visible needs of customers. Finally, learning must be leaded to the superior results like successfully of new product, retaining of customer and profitability (Slater and Narver, 1995). Investigations show that learning orientation is composed of various factors: such as management commitment, vision of system, opening and testing, knowledge transfer and integration (Akgun, Keskin, Arne, 2007), commitment to learning, common vision, open-mindedness and share organization knowledge (Calantone and Zhao, 2002), creative thinking, improve the creative team (Lee and Tsai, 2005), testing, risk taking, interaction with the external environment, dialogue, and participatory decision making (Alegra and Chiva, 2008).

Orientation learning refers to the activities of firms from creation and use of knowledge of customer needs, market changes and competitive actions in order to gain competitive advantage (Clanton et al. 2002). Orientation learning represents a set of firm's value that usually is correlated to enterprise learning, including: commitment to learning, common vision and open-mindedness. CRM

meaning creation and relationship management of closeness with customers that researcher and managers have considered to this subject.

Because frequently it is seen that customers retain could lead to dramatic improvements in performance of firms (Boulding, Staelin and Johnston 2005; Rynartz, Kraft, Hoyer, 2004).

Firms spend the most of their benefits to recognize loyalty customers and they are constantly seeking to improve long-term relations with customers (Day and Van den Bulte, 2002). So far they are not attempted to evaluating the effects and importance of both of learning orientation and CRM at the same time on competitive performance of their firms. Also role of potential mediator of CRM between learning orientation and performance of firm is not considered.

So for empirically testing of this model, in this research are used from perception of learning orientation, CRM and enterprise performance of ceramic and tile companies in Yazd province. Till after evaluating answer to the questions:

1. What is the impact of learning orientation on the CRM in firms?
2. What is the impact of CRM on performance of firms?
3. What is the simultaneous impact of both learning orientation and CRM on the performance of firms?

The main purpose of this study is modeling and testing the relations between organizational learning, CRM and performance of ceramic and tile companies in Yazd province.

Literature review

Mahtep et al. (2011) have studied about mediator impact of learning orientation on leadership method for performance of firms. Results of their research showed that dimension of learning orientation (commitment to learning, common vision and open-mindedness) has mediator impact on task-oriented and relationship-oriented leadership methods of firm's performance.

U. Zeynep Ata et. al (2012) have studied about impact of CRM methods on customer satisfaction and performance in business markets. The results showed that there is an affirmative and significant relationship between CRM and customer satisfaction and performance. Mostafa Butoor (2013) in a research has studied about simultaneous impact of organizational learning and CRM on performance of 180 companies in UK country. The results showed that there is an affirmative and significant relation between organizational learning and CRM. Also showed that organizational learning has a significant indirect effect on performance through the CRM.

Fethi Calisir et al (2013) in their research have evaluated impacts of learning orientation on innovation performance of products of 150 companies in Turkey. The results showed that open-mindedness is a dimension of learning orientation that is only predictor of innovation of product and productivity.

Management Department of Rahab (2013) in a research evaluated innovation model in small and medium firms based on market oriented and learning oriented. Purpose of their study is analysis of mutual relationships between market oriented, learning oriented and innovation. Results showed that firm's innovation has positive effects on firm's

performance and learning oriented of firm has positive effects on firm's innovation and also market oriented of firm has positive effects on learning oriented of firm. Learning oriented of firm is mutual relation between market oriented and innovation of firm.

Ferid M Ghavasme et al. (2013) in a research have attempted to evaluate the dimensions of organizational learning and its impact on organizational performance in Jordan's telecommunications company. The results showed that there is a positive and significant relation between dimensions of organizational learning and organizational performance.

Salevati et al. (2011) have done a research called "examination of effects of knowledge management on CRM in Refah bank in Iran" and in this study statistic society is 180 employment of Refah bank in Kordestan province. The results of theirs research showed that knowledge management has positive and significant impact on different aspects of CRM (including customer satisfaction, customer loyalty, customer attraction and customer interaction) through the knowledge sources. According to the obtained results the most effectiveness of knowledge management is on customer satisfaction and the rest of aspects are as follows respectively, loyalty, attraction and customer interaction.

Gholami-Evati et al. (2011) have studied about effect of customer knowledge management on CRM. The results showed that customer knowledge management is able to representing the right and on-time information about customers of organization which this is a reason of suitable communication with the customers.

Fethi Calisiret et al. (2013) in their study scrutinized the innovation model in the small-sized and moderate-sized companies based on the orientation of market and learning. The purpose of this study is to analyze the interrelations of market orientation, learning orientation, and innovation and the results indicated that the innovation of the company has a positive influence on the function of it. Orientation of market and company has a positive influence on the orientation of learning. Orientation of learning for the intermediate company is the relationship between market orientation and the innovation of the company. Farid M.Qawasmeh et al. (2013) in their study scrutinized the aspects of organizational learning and their influence on the organizational function in the telecommunications company of Jordan. They realized that there is a positive and meaningful relationship between aspects of organizational learning and the organizational function.

Methodology of the research

This study in terms of research strategy, purpose and approach is an applied model, description and inductive, respectively. Also this research in terms of investigation, analysis and view of the time is a correlation, singular and cross-sectional, respectively. The data of the research is an interval type and are used from five-point Likret scale to answer to the questions.

Statistical society

The Statistical society of the research is formed from 45 ceramic and tile companies in Yazd province and Morgan table is used for determining the sample size. Based on this table sample size of this research is estimated 40 companies

and senior manager of each company is considered to answering to the questions.

Data collection method

The needed data for this research is collected in field and also is used from questionnaire. The questionnaire includes 3 sections; the first section is allocated to operating the variable of organizational learning oriented and includes 3 main dimension and 11 questions. The section 2 is concern about evaluating the variable of CRM and includes 2 main dimension and 10 questions. The third section of questionnaire is allocated to measuring the variable of organizational performance and includes 2 main dimension and 6 questions. In this study, for measuring each structure of the research model, some questions as a questionnaire are designed. The validity of designed questionnaire will be evaluated and for designing the questions, is attempted that whole dimensions and components of concern structure be covered. Also these questions are close type and are five-point Likret scale.

Statistical analysis method

After gathering data of research, a mix of descriptive and inductive statistics for the analysis of research data will be used. Descriptive statistic will be used for evaluating of central index and dispersion of the variables as tables and diagrams. Also inductive statistic will be used for analysis of hypothesis of the research and evaluating the represented model. According to the research model that is a structural

equations will be used from confirmatory factor analysis for evaluation of validity of research structure with using PLS software. So in this study, SPSS and PLS software are used for analysis of data.

Variables of the research

- A- The independent variable: in this research, organizational learning oriented variable is the independent variable.
- B- The dependent variable: in this research, performance variable is the dependent variable.
- C- The mediator variable: in this research, CRM variable is the mediator variable.

Hypothesis of the research

CRM in company has a significant and positive impact on its performance.

Hypothesis analysis

In this research for testing of hypothesis, structural equation modeling with partial least squares method and smart PLS software are used. The case of using of this method is when sample size is small or distribution of variables is not normal. In PLS models, there is two type of test.

Factor loading of indices or questions of the questionnaire

In the present research model as it is evident from table No.1, all the coefficients of the factor loading of questions are above 0.4 which indicates that this criterion is proper and none of the questions will be omitted.

Table No.1-factor loading of questions (indices)

Construct	Number of question In the questionnaire	Factor loading	Construct	Number of question In the questionnaire	Factor loading
OLO1	1	0.442	CRM4	15	0.424
OLO2	2	0.573	CRM5	16	0.699
OLO3	3	0.615	CRM6	17	0.695
OLO4	4	0.478	CRM7	18	0.847
OLO5	5	0.416	CRM8	19	0.784
OLO6	6	0.593	CRM9	20	0.854
OLO7	7	0.783	CRM10	21	0.704
OLO8	8	0.528	Per1	22	0.817
OLO9	9	0.444	Per2	23	0.803
OLO10	10	0.595	Per3	24	0.709
OLO11	11	0.401	Per4	25	0.528
CRM1	12	0.748	Per5	26	0.802
CRM2	13	0.439	Per6	27	0.795
CRM3	14	0.649	-	-	-

Z-score significance level (t-value amounts)

To scrutinize the fit structural equations model of the research several factors are being used which the first and the most pivotal factor is the z-score significance level. Fit of structural equation model by means of coefficients of (t) is in this manner that these coefficients should be more than 1.96 until their significance level can be approvable in the significance level of %95. Of course it should be noted that t scores just show the accuracy of relations and it is impossible to measure the intensity of relationships among these constructs. If the amount of t-value gets more than

2.58 the path coefficient with a significance level of %99 is meaningful. Path coefficient was scrutinized under the framework of internal model of hypotheses and the path of structural model was assessed.

Each path is equivalent to one of the hypotheses of the model. Testing each hypothesis is through scrutinizing the sign, size, and the significance level of path coefficient (β) between each variable with dependent variable. The higher the amount of path coefficient, the more the influence of latent variable will be in comparison with the dependent variable.

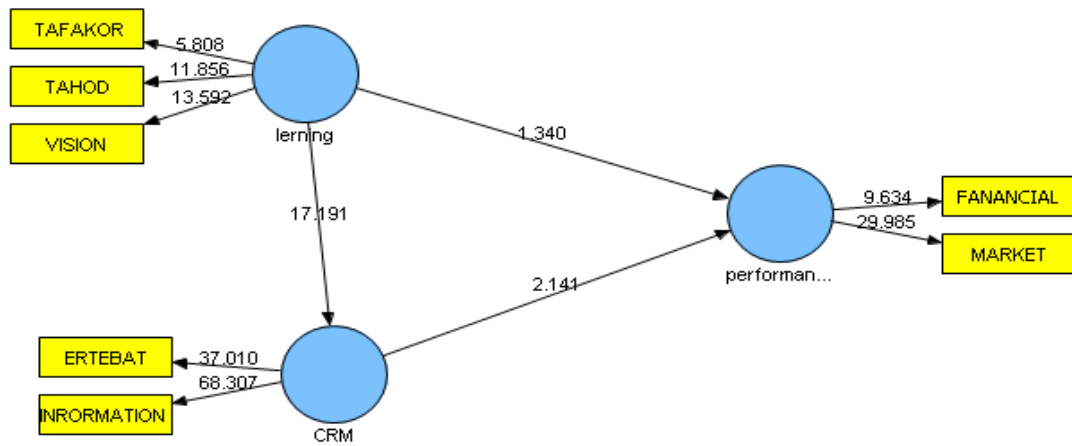


Diagram1.Model in the significance manner of numbers (t-value)

The numbers which exist on the paths indicate the amount of t-value for each path. To scrutinize the significance level

of path coefficients it is necessary that the amount of each pat(t) be more than 1.96.

Table 2-Z-score significance coefficients(amount of t-value)

Path	T
Customer relationship management→function	2.141
Orientation of learning→customer relationship Management	17.191
Orientation of learning→function	1.340

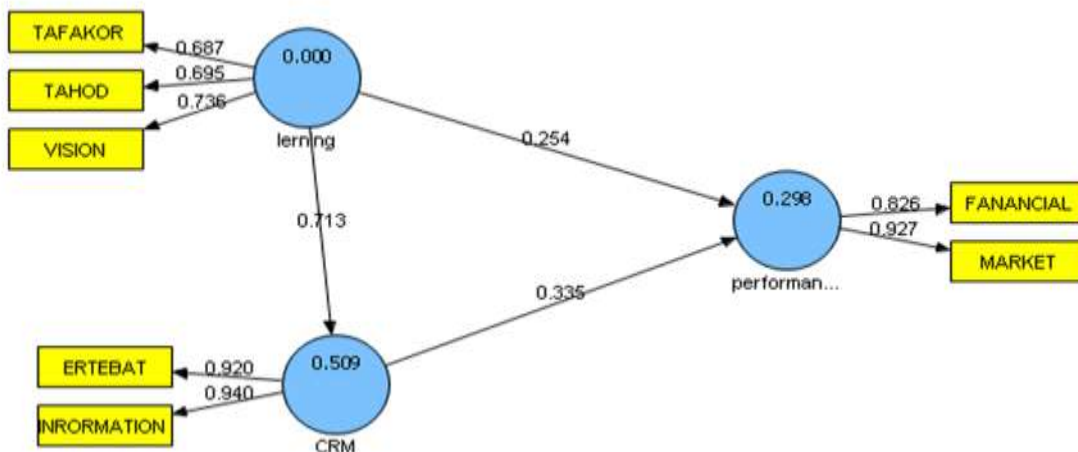


Diagram2.Path coefficients case of model

Considering table No.2, in this analysis the statistical t-value for all the paths except for the path for the learning

orientation over function was more than 1.96 and as a result it is meaningful in %95 level of significance.

Table3-Results of scrutinizing the fit of structural equation model of the research with bootstrapping method

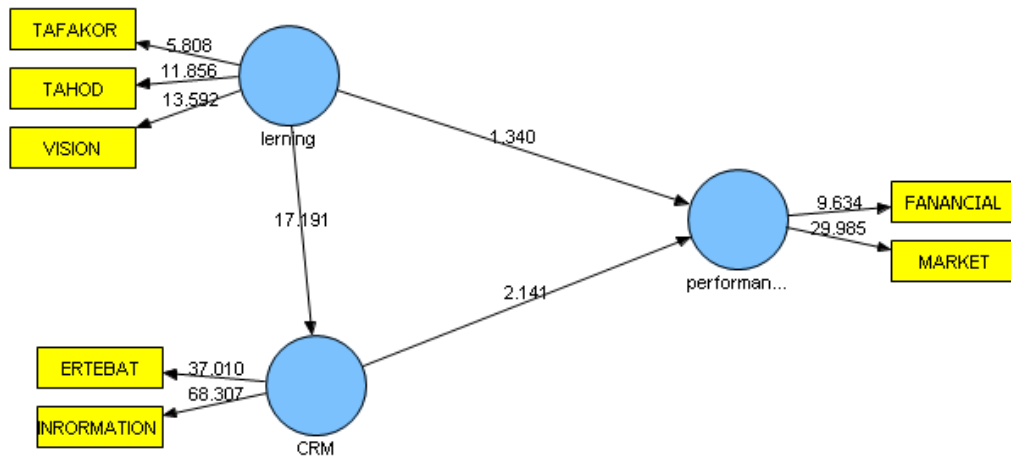
Path	Beta	Average	Standard Error	Resampling t-value		
				200	400	800
Customer relationship management>function	0.335	0.340886	0.152491	2.388	2.124	2.542
Learning orientation> Customer relationship management	0.713	0.719533	0.042862	19.233	19.315	19.257
Learning orientation>performance	0.254	0.491346	0.100564	1.44	1.249	1.213

Significant coefficients of Z (values of t- value)

For examining the fit of structural model of research, some criteria are used that the first and basic criterion is significant coefficients of Z. the fit of structural model with using coefficients of t must be bigger than 1.96 till these

value standing in confidence level of 95%. Another thing is that t numbers just show the accuracy of relations and can not evaluate the intensity of relation between structures (Davari and Rezazade, 2012, p 143-145). If the amount of t-value be more than 2.58, the coefficient is significant at 99% confidence level (same reference, p 90)

Diagram (3): model in significant numbers (t-value)



The numbers above the each path are showing the amount of t-value. For examination of significant of path coefficient, t-value must be more than 1.96.

Table (4): significant coefficient of Z (values of t- value)

T	Path
2.141	CRM ← performance
17.191	Learning orientation ← CRM
1.340	Learning orientation ← performance

Diagram (4): model in path coefficient mode

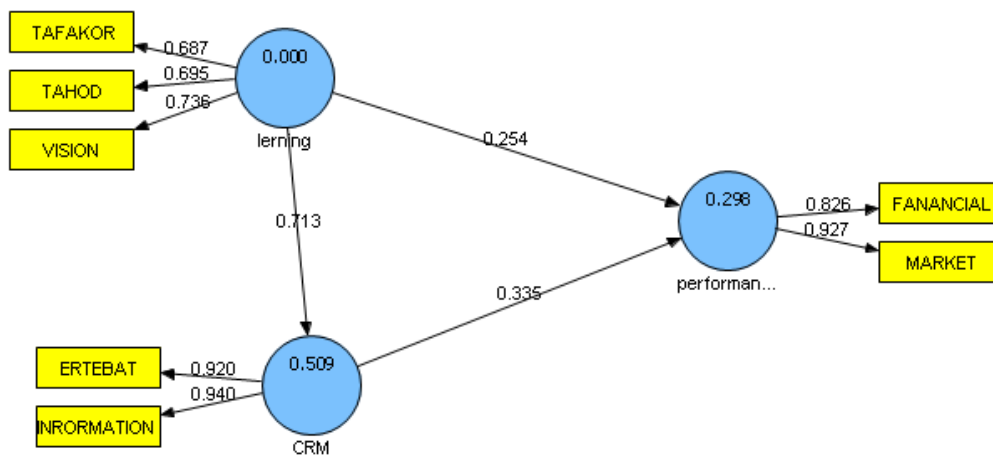


Table (5): the results of fit of structural model with Boot Straping method

t-value of sampling			Standard Error	Average	Beta	path
800	400	200				
2.542	2.142	2.388	0.152491	0.340886	0.335	CRM <-Performance
19.257	19.315	19.223	0.042862	0.719533	0.713	Learning orientation <-CRM
1.213	1.249	1.144	0.100564	0.491346	0.254	Learning orientation <- Performance

In this analysis, amount of t-value for all paths except path of impact of learning orientation on performance is more than 1.96 so they are in significant coefficient level of 95%.

Assessing the overall fit of the model

Examination of total model of research is done by using GOF (Goodness of Fit) criterion.

GOF criterion

In modeling of structural equations with using PLS method unlike the covariance-oriented method, there is no index for evaluation of total of the model but index called "goodness of fit" is proposed by Tenenhaus et al. (2005). This index considers both model of measuring and structural and is used as a criterion for evaluation of total performance. Also this index is square of multiply of two amounts: first, average of common values, second, average of coefficient of determination and limit of this index is between zero and

one. Wetzels et al. (2009) have introduced 3 amounts of 0.01, 0.25 and 0.36 as weak, medium and strong values for GOF, respectively; meaning that if GOF was calculated about 0.01 in a model, we can conclude that total fit is weak value and the relations between structures of model must be

revised; similarly about two rest of amount of GOF (0.25: total fit of medium and 0.36: total fit strong) this instruction is confirmed (Davari, Rezazade, 2012). Table of calculating amount of GOF is represented as follows.

Table (6): GOF criterion

$GOF = \sqrt{\frac{\overline{\text{communality}}}{*rsquare}}$	$\frac{\overline{\text{communality}}}{*rsquare}$	$\overline{\text{communality}}$	$\overline{rsquare}$	GOF Criterion
0.535689	0.286962	0.711747	0.403335	

According to the table 3 value of GOF is calculated 0.535 and it shows that the model has strong total fit. After evaluation of fit of measurement models, structural model and total model, can evaluate and test the hypothesis of research and reach to the results. This section has two parts Table (7): results of hypotheses testing

as following: based on table 7, according to the significant coefficient of each path if modulus of t-statistic be less than 1.96 the zero hypothesis is concluded and provided modulus of t-statistic be more than 1.96 the hypothesis zero will be rejected so in this section we will testing the hypotheses of the research.

result	Significant level	The coefficient of determination	t-statistic	Path coefficient	Hypotheses of the research
accepted	0.05<	0.298	2.388	0.335	CRM←performance

Hypothesis (1): CRM has positive and significant impact on firm performance.

H0: CRM has not positive and significant impact on firm performance.

H1: CRM has positive and significant impact on firm performance.

According to the table 4 modulus of t-statistic is equal 2.388 and more than 1.96, so hypothesis zero is rejected meaning that in 95% confidence level, CRM has positive and significant relation on firm performance.

applied suggestions

According to the results, it is specified that CRM with path coefficient of 0.335 and t-statistic of 2.141 has impact on performance. So with verification of this hypothesis, it is suggested to the managers of ceramic and tile companies to amplify the relations with customers and also update the modern technologies for collecting customers' information; these suggestions are caused of promotion and growth of market performance and increasing of sell and market share. Also it is suggested that organizational structure be designed flexible to answering customers' needs as soon as possible. Another suggestion for such companies is usage of suitable facilities and modern technologies for creation of good information exchange with customers. One more suggestion is better focus on key customers or changing in firm's strategy for empowerment of these types of companies.

In this research, information of customers are used as a dimension of CRM so it is suggested to managers of ceramic and tile companies to use special techniques (including internet, Email and phone contact) and customer longevity information because these types of techniques are caused of amplification and promotion of performance.

Results

The hypothesis of the research claims the existence of a positive and meaningful orientation of learning on function. The results indicated that the orientation of learning does not have a positive and meaningful influence on function. According to the results of this research the direct influence of orientation of learning on function was not approved. But the results of the study indicated that the orientation of learning bears an indirect influence throughout CRM on function. This finding means that to achieve more profit than the rivals one learning organizations does not suffice. In return the attempt of the company should be directed toward changing learning into the specific capabilities of the company. Thus, organizations that put emphasis on learning should learn and after that act according to it to be influential but the difference lies in this point that the results of investment lie in the ability to learn; that is as the managers translate and render learning to actions that lead to the competitive privilege. The results of this research is compatible with the researches by Holt et al.(2004), Santos-Wijand et al.(2005), and Mustafa Butoor.(2013).

Applicable and directorial recommendations

As the results of the research indicated it became evident that the orientation of learning parallel to the path coefficient (0.713) and the t-value (17.191) influences the customer relationship management. Thus, considering the highness of the coefficient and the mentioned value and approval of the intended hypothesis for the managers of the tile and ceramics companies to sustain the aspects of organizational learning and providing the necessary facilities, sharing the knowledge between staff and the organizational units and at the same time establishing a fertile field for exploiting the knowledge it is recommended that it would be possible to increase the share of establishing and developing the relationship management to an ultimate

level. Having enough information concerning resources, customers, and the business contributes the companies in establishing a successful customer relationship management. Establishment of processes to enhance the knowledge of the staff about customers by considering the requirements and needs of them in all the sections of the company is recommended until the level of knowledge and its application in the company increases. Also, by considering that in this research from a common perspective commitment to learning and open thinking have been mentioned as aspects of the orientation of learning, thus we recommend the managers of tile and ceramics companies to design the prospect of the company in a way that it can be tangible and understandable for the staff until they can easily match themselves with it.

Suggestions for future works

According to the results of the research and considering this point that every research has some limits, and we can not cover all sides of a problem, so couple of suggestions are presented as follows:

1. Evaluation other impact of CRM on performance.
2. Presentation of a model for evaluating and ranking tile and ceramic companies in Yazd province based on impact of organizational learning orientation on CRM and performance.

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