

Assessing the Role of Customer Knowledge Management on Sustainable Competitive Advantage, Case Study: Ceramic Industry

Seyedarash rootafi ^{*1}, Abolfazl javadiyan ²

¹ *master of business management, Islamic Azad University of the Rasht, Iran
Email : arashrootafi@yahoo.com

² master of business management, Islamic Azad University of the Rasht, Iran

Abstract - The aim of this study is to evaluate the role of customer knowledge management on the relationship between talent management and sustainable competitive advantage. This study examines the concepts of talent management, customer knowledge management and competitive advantage simultaneously which is the contribution of this research. In this study, the quality management and customer knowledge management questionnaire is utilized and then, Smart PLS software is used to test the related hypotheses. The data is gathered from a group of experts in Iran ceramic industry. The result of this research indicate that all factors including talent management and customer knowledge management have a significant relationship with sustainable competitive advantage. In the first hypothesis, talent management has a positive and meaningful effect on sustainable competitive advantage. Second hypothesis of talent management indicates that it has a positive and meaningful impact on customer knowledge management. Third, customer knowledge management has a positive and meaningful impact on sustainable competitive advantage. In the fourth hypothesis, customer knowledge management between talent management and sustainable competitive advantage plays a mediator role. The results of this study show that the proposed framework can be applied in different industries.

Keywords: talent management, knowledge management, customer knowledge management, competitive advantage.

1. Introduction

The competitive markets, having skillful labors is one of the competitive advantages in each industry. In the age of globalization and increasing progress of technology, human resource is the most important assets of the organization and the only factor for sustainable competitive advantage (Miller & Mehrotra 2015). In order to gain competitive advantage in the face of complex environment, organizations need the elites. In recent years, talent management has been considered as a key management activity prior to the past (King, 2016). Recent research focused on the most of the measures taken by organizational structure based on knowledge and strategy adaptation of knowledge management strategy. On the other hand, knowledge management tries to improve the mental and social capital of labors, but what is in addition to knowledge management for social capital (or the same employees of an organization) is capable of having competent and talented employees. Accordingly, organizations will be able to gain insights to recognize the strategic role of their human resources and have qualified human resources, knowledge - centered, qualified elite (Meyers et al., 2014). Organizations are now recruiting and retaining the best. Talented employees will be the biggest sustainable competitive advantage in the knowledge age, a competitive advantage that will not be easily replicated, and a trusted asset in today's turbulent world (Farahzadi and Garmabedri, 2015).

Therefore, using customer knowledge management, some talents can be discovered and managed in the organization, and it can bring the organization closer to competitive advantage. In general, customer knowledge management has an effective role in the organization for managing talents and competitive advantage.

Today, the economic and commercial progress of Iran is in the progress of manufacturing industry, along with other industries in the country as well as the ceramic industries of other developed countries. Currently, a high percentage of ownership of the industry is owned by the private sector, but with the advent of some new and nascent private companies, competition has begun to compete in this industry. However, it has a far - reaching distance with the global production level. The acquisition of competitive advantage requires improving services. Ceramic industry is of particular importance due to the competitive nature of its products and products and services provided by different companies, customer knowledge and its management. The careful adaptation to customers demand in the ceramic industry is the most important factor in consumer satisfaction, thus information that the customer in this industry will contribute significantly to enhancing the quality of service and enhancing customers' satisfaction (Rod et al., 2009).

Accordingly, in this research a new conceptual model is proposed in order to estimate the role of knowledge management on sustainable competitive advantage. Furthermore, the ranking of indicators related to sustainable competitive advantage is discussed. This model has been studied and evaluated in the Iranian ceramic industry and the results are analyzed. In the next section, the most important articles in this area are presented. In the section 3, the conceptual model of the research is presented. In section 4, the results of numerical analysis are presented. Finally, the conclusion of the study is presented in section 5.

2. Literature Review

Kireru (2019) carried out the research entitled "The Role of Integrated Management Processes and Competitive Advantage of Telecommunications in Kenya". This study is descriptive-survey-cross-sectional method, which has been used in both quantitative and quantitative methods. The data collection tool was semi - structured questionnaire and interview guide. A simple random sampling method was used to determine the size of 377. Reliability of the data is used with SPSS. To analyze the data from descriptive and descriptive statistics, the study showed that integrated management processes contribute to the competitive advantage of telecommunications technology. It also increases the organizational effectiveness of innovation in innovation. Haseeb and Hussain (2019) conducted a study entitled "Role of social and technological challenges in achieving a sustainable competitive advantage and sustainable business performance". Cronbach's alpha coefficient for talent management, employee participation, knowledge integration and sustainable competitive mobility generally varied at a high average level, respectively, 85.3, 82.3, 90.3, and 85.3 respectively. There is a significant relationship between knowledge integration and talent management and sustainable competitive advantage. Trejo et al. (2016) identified innovation as a key factor in increasing competitive advantage for businesses in a study entitled "Customer Knowledge Management and Innovation". The purpose of this research is to express the relationship between hidden effective factors between innovation and customer knowledge management. To achieve the results, a questionnaire was distributed among 500 executives in small and medium software sector organizations in Guadalajara, Mexico, among designers, manufacturers, and suppliers. In this study, Structural Equation Modeling as a quantitative approach was used to explore the fundamental relationships between relevant variables in innovation in customer knowledge management, with titles: Drivers of Innovation, Support, Other Knowledge Resources, Satisfaction, Experience and Performance with 15 indicators. . The research was analyzed using EQS software and concluded that innovation is a key factor in increasing competitive advantage in business. Customer knowledge management executives primarily focus on customer knowledge, rather than customer knowledge, as a characteristic of customer relationship management. Hosseinzadeh and Sattari (2015), proposed a study and examined the branches of talent management in General Electric. The statistical population of the study was employees of General Electric Company. Talent discovery activity and to some extent talent evaluation and matching activity within the company have been major concerns. They resolved recruiting with the help of two outsourcing teams. By studying methods that are more comprehensive, exploring organizational strategies, setting new goals and criteria, and using technology information systems, the two teams were able to tailor and customize the recruitment process, and to select people with the required qualifications and qualifications. Develop the necessary skills. They thus implemented the dimensions and characteristics of talent management in all areas of General Electric. Chaves et al. (2014) in a study entitled "A Framework for Customer Knowledge Management Based on the Social Semantic Web: A Hotel Sector Approach" proposed a framework for integrating knowledge from social websites to support customer knowledge management. The purpose of this study was to integrate customer knowledge management and web technologies, namely Social Semantic Web (SSW). S. S. W can be defined as a research area, which combines the combination of technologies, strategies, and methods of semantic Web and social web. This technology is currently a promising way of improving the competitive advantage of the organization. The study was conducted in restaurants and hotels. According to the Web context, this active role (client) is often expressed by views on social sites. These comments were related to the hotel and restaurant sector and could be very helpful. Such comments can be used to identify customers ' needs and wants and provide information for managerial decision - making. Nevertheless, the main challenge was that it was useful for managers and machines. Hotel information systems were rare with the use of Web social data. For example, many hotels rarely complete Twitter information forms (user ID). The visitor could share his views on staying at the hotel on Twitter or other social websites as well as on hotel checking sites. One problem for hotel managers was how to collect these data and then transform it into useful knowledge for business. Another major concern for hotel managers was how to process a large amount of information available on social sites. Li et al. (2013) in a research titled "How Entrepreneurial Orientation Influences the Enhancement of Customer Knowledge Management Competence" explores the impact of entrepreneurship by improving customer knowledge management. The aim of this study was to update the knowledge management mechanism in the face of customers and become a competitive customer management. The statistical community of this study was the company's entrepreneurs who expressed the relationship between entrepreneurial trends and customer knowledge through an empirical study in firms with high entrepreneurial orientation. Independence and the active competition of prominent entrepreneurial trends highlighted a significant positive correlation with the management of competitive customer knowledge, process management and the environment supported their capabilities and

capacities. As a result, the growth of competitive consumer knowledge management dynamics is essential that entrepreneurial firms need to effectively manage their authority and competitive status. Kim et al. (2012) conducted a study called “Effective employment brand equity through sustainable competitive advantage, marketing strategy”. Statistical population survey of hospitals in the city. Skilled and experienced nurses and staff can have a lasting competitive advantage. This is due to the appropriate level of service and the importance of the customers' position in the private sector in private hospitals.

Table 1 summarizes the closest literature related to the subject of the present study.

Table 1. Review the most important research on knowledge management and sustainable competitive advantage.

Authors	Customer Knowledge Management	Talent management	Sustainable competitive advantage	Research Subject
Kireru (2019)		✓	✓	The Role of Integrated Talent Management Processes in Competitive Advantage
Haseeb and Hussain (2019)	✓	✓	✓	Impacts of talent management, employee engagement and knowledge integration towards sustainable competitive advantage
Trejo et al (2016)	✓			Customer Knowledge Management and Innovation
Hosseinzadeh and Sattari (2015)		✓		Indicators of talent management
Chaves et al. (2014)	✓			A framework for managing customer knowledge based on the social semantic web
Li et al. (2013)	✓			How Entrepreneurial Knowledge Impacts on Improving Competitive Customer Knowledge Management
Kim et al. (2012)			✓	Investigate Sustainable Competitive Advantage
This research (2020)	✓	✓	✓	examines the concepts of talent management, customer knowledge management and competitive advantage simultaneously

According to the studies in literature and theoretical bases in this filed, three factors of talent management and customer knowledge management have not been studied simultaneously in the literature. As a novel contribution, in this research, the concepts of talent management, customer knowledge management and competitive advantage has been examined simultaneously in a case study of ceramic industry.

3. Methodology

In this study, three main variables of talent management, sustainable competitive advantage and customer knowledge management are investigated. The talent management as an independent variable, sustainable competitive advantage is considered as dependent variable and customer knowledge management is as a mediator variable.

In the present study, the main variables and their components are related to each other through the conceptual model which is presented as Figure 1. The main variables are identified as the hidden variables and their associated components are will be driven from the questionnaire.

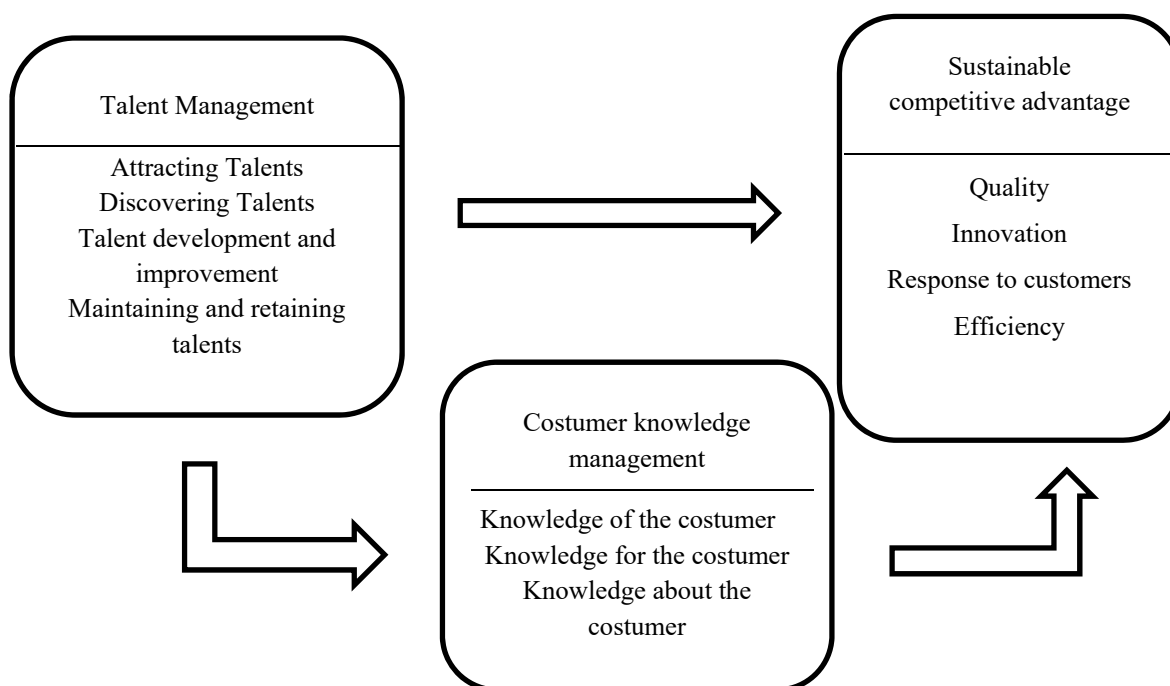


Figure 1. Proposed conceptual Model

Following the conceptual model, descriptive and inferential statistics are used to analyze the data. Descriptive statistics is used in SPSS software to examine the demographic characteristics of participants. Descriptive statistics is used to investigate the relationships between variables and research hypotheses using structural equation modeling with partial least squares method in Smart PLS software. Structural Equation Modeling (SEM) is applied to test the conceptual model and to show the relationship between the variables. Generally, models that assume how a set of variables define a structure and how these structures relate to each other can be tested in SEM.

As the questionnaire is one of the most common data gathering tools in descriptive-survey-cross research is a set of goal-oriented questions that measures a respondent's perspective and insights using various scales, In this study, a questionnaire was used to collect required data. The questionnaire is divided into four sections. The first section deals with demographic characteristics including gender, age, education, and work experience. The second part is the standard (Rofi, 2016) questionnaire for measuring talent management and includes the variables of talent acquisition, talent discovery, talent development and improvement, and talent retention. The third part is driven from (Jiebing, 2013) as Customer Knowledge Management Questionnaire and includes the dimensions of Customer Knowledge, Customer Knowledge and Customer Knowledge. Finally, the fourth part of questionnaire is driven from (Liao et al., 2017) and it measures the sustainable competitive advantage and encompasses variables of quality, innovation, customer responsiveness, and efficiency. The variables will be calculated using these statements. The value of each variable is obtained from the mean scores of its related items.

4. Numerical results

SEM using Smart PLS software is used to test the validity of the research theoretical model and calculate the impact of each variable. What makes SEM a powerful and widely used method among scholars is that in addition to its graphical appearance, that facilitates interpretation (Cooreia, 2006), it can provide a set of relationships between variables. Calculate the face simultaneously. Therefore, SEM is used to answer the main question of this research. Figure 3 shows the theoretical model of the research, which includes the relationships between the main variables, along with their components in the Smart PLS software.

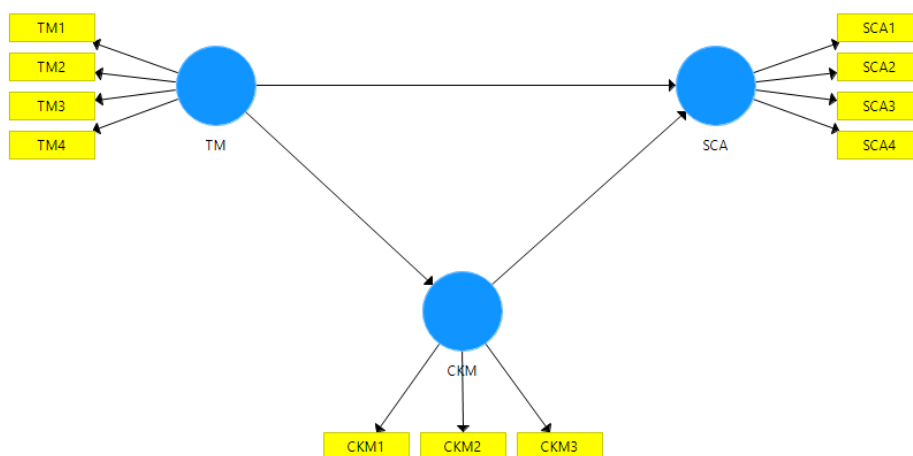


Figure 2. Theoretical model of research in Smart PLS software

4.1. Fitting the Model

In this section, to investigate the validity and reliability of the measurement model, factor loadings coefficients, Cronbach's alpha coefficients, and composite reliability and mean extracted variance are calculated as follows:

A. Factor loading

Factor loading is a numerical value that determines the severity of the relationship between a hidden variable and the corresponding explicit variable during the path analysis process. This indicator is presented as Table 2.

Table 2. Factor Loading Model Measurement Indicators

Main variable	Index	Factor loading
Talent management	Attracting Talents	0.888
	Discovering Talents	0.892
	Talent development and improvement	0.917
	Maintaining and retaining talents	0.916
Customer Knowledge Management	Knowledge of the customer	0.919
	Knowledge for the customer	0.905
	Knowledge about costumer	0.902
Sustainable competitive advantage	Quality	0.865
	Innovation	0.912
	Response to customer	0.897
	Performance	0.928

Factor loading greater than 0.5 is an indication of the suitability of an indicator in the measurement model. As can be seen in Table 2, all factor loadings of the measurement indices are greater than 0.5 indicating the suitability of the measurement model.

B. Cronbach's alpha

According to the data analysis algorithm in PLS, after measuring the factor loadings of the questions, it is time to calculate and report the Cronbach's alpha coefficients and the combined reliability, the results of which are presented in Table 3.

Table 3. Cronbach's alpha and combined reliability of the main model variables

Main variable	Cronbach's alpha coefficient (CA)	Combined reliability coefficient (CR)
Talent management	0.925	0.947
Customer Knowledge Management	0.895	0.934
Sustainable competitive advantage	0.922	0.945

Given that the appropriate value for Cronbach's alpha is greater than 0.7 and in accordance these criteria have reliable value for the main variables of the model and the reliability of the research measurement model can be confirmed.

C. Convergent Validity

Convergent validity indicates the mean extracted variance of each hidden variable with its own question (Feng et al., 2005). Convergent validity is obtained when all standardized factor loadings for each of the measured variables and the Average variance extracted (AVE) index value for each of the latent variables are greater than 0.5. This indicator is presented in Table 4.

Table 4. Mean extracted variance of the main model variables

Main variable	Average variance extracted(AVE)
Talent management	0.816
Customer Knowledge Management	0.826
Sustainable competitive advantage	0.811

Given that, the appropriate value for the AVE is greater than 0.5 and according to Table 4, this criterion has a good value for the main model variables and the validity of the research measurement model can be confirmed.

D. Divergent Validity

Divergent Validity shows the difference between the indices of one structure with those of the other structures in the model. The acceptable divergence validity of the model indicates that it is more inclined to ask questions in the model than the other dimensions. Divergent validity is established when the value of the AVE index for each construct is greater than the square of the correlation coefficients of that construct with other constructs. This indicator is presented in Table 5.

Table 5. Fornell-Larker Validity Values

	Talent management	Customer Knowledge Management	Sustainable competitive advantage
Talent management	0.904	-	-
Customer Knowledge Management	0.825	0.909	-
Sustainable competitive advantage	0.883	0.891	0.901

In Table 5, the values in diameter that represent the correlations of each variable's questions are larger than the other values, which show the correlation of one variable's questions to the other variable's questions. Therefore, the validity of the measurement model is confirmed.

4.2. Fitting the structural model

In this section, we examine the fitting criteria including t-value and R square, F-Square effect and Stone-geyser index (Q^2). These indicators and the results are presented as follows:

A. Statistical values (t-value)

t-value is used to examine the significance of the relationships between the main variables. Given the large sample size if these values are greater than 1.645, the relationship between the two variables at the level $\alpha=0.1$ is significant, If greater than 1.96, the relationship between two variables at the level $\alpha=0.05$ is significant, and if they are greater than 2.576, the relationship between two variables at the level $\alpha=0.01$ is significant. These coefficients for the relationships defined between the main variables in the conceptual model of research are presented in Table 6.

Table 6. t-values and significance level

Relation	t-value	p-value
Talent Management => Customer Knowledge Management	32.414	0.000
Customer Knowledge Management => Sustainable Competitive Advantage	10.452	0.000
Talent Management => Sustainable Competitive Advantage	9.046	0.000

As can be seen in Table 6, all relationships at the level $\alpha=0.01$ and also $\alpha=0.05$ are significant.

B. R² index

The second index to investigate the fit of the structural model in a study is the R² determination coefficients for the endogenous variables of the model. R² is a criterion indicating the influence of exogenous variables on an endogenous variable and three values of 0.19, 0.33 and 0.67 are considered as weak, moderate and strong values for this criterion. Table 7 shows the R² index for model endogenous variables.

Table 7 R² index for model endogenous variables

Main Variable	Coefficient of determination (R ²)
Talent management	-
Customer Knowledge Management	0.681
Sustainable competitive advantage	0.872

The values of R² in Table 7 are greater than 0.67 indicating strong structural fit of the model.

C. F² index

The F² index for an independent variable indicates the magnitude of changes in the estimation of the dependent variable when the effect of that variable is eliminated. Three values of 0.02, 0.15 and 0.35 are considered as weak, medium and strong values for this criterion. Table 8 shows the F² index for model endogenous variables.

Table 8. F² index for model exogenous variables

independent variable	dependent variable	Effect size
Talent management	Customer Knowledge Management	2.137
talent management	Sustainable competitive advantage	0.494
Customer Knowledge Management	Sustainable competitive advantage	0.600

The values of F² in Table 8 are greater than 0.35 indicating strong structural fit to the model.

D. Q² Index

This criterion specifies the predictive power of the model and if it obtains values of 0.02, 0.15 and 0.35 for an endogenous structure, it indicates the weak, medium, and strong predictive power of the structure or its exogenous structures. Table 9 shows the Q² index for each model variables.

Table 9 Q² index for model endogenous variables

main variable	Scale Q ²
Talent management	-
Customer Knowledge Management	0.533
Sustainable competitive advantage	0.656

The results of Table 9 show the good predictive power of the model for endogenous research structures and confirm the fitting of the structural model.

4.3. Overall Model Fitting

In structural equation modeling using the partial least squares method, there is a goodness of fit index (GOF) that considers both measurement and structural models and examines the performance of the overall model. The value of this index is between zero and one and values of 0.01, 0.25 and 0.36 are presented as weak, medium and strong values. . The index of the geometric mean of the average coefficient of determination $\overline{R^2}$ and the average of the shared values *Communality* it will be counted. Table 10 shows the coefficient of determination of the common index of the main variables of the model.

Table 10 Coefficient of determination and common index of main model variables

main variable	Coefficient of determination	Collective index
Talent management		0.631
Customer Knowledge Management	0.681	0.750
Sustainable competitive advantage	0.862	0.627
Average	0.772	0.611

Using the GOF formula, the goodness-of-fit index is 0.686. Therefore, the research model has good validity and quality.

4.4. Investigating the Path Coefficient

The path coefficient indicates the existence of a linear causal relationship and the intensity and direction of the relationship between the two variables. In fact, we see the standard regression coefficient in simpler models. This is a numerical coefficient between -1 and +1 which, if equal to zero, does not indicate a linear causal relationship between the two variables. In PLS, these coefficients can be obtained for two independent and dependent variables with and without the mediator variable, which compare to determine the effect of the mediator variable on the relationship. Table 11 shows these coefficients for the relationship between talent management and sustainable competitive advantage in the two cases.

Table 11. Path coefficients with and without the mediator variable effect

independent variable	dependent variable	Path coefficient	Mediator	Path coefficient
talent management	Competitive Advantage	0.642	Customer Knowledge Management	0.883

It can be concluded from Table 11 that in relation to talent management and the advantage of sustainable competition, the customer knowledge management variable as mediator variables significantly strengthens the relationship. Figure 4 shows the diagram of the research model with path coefficients, factor loadings, and determination coefficients.

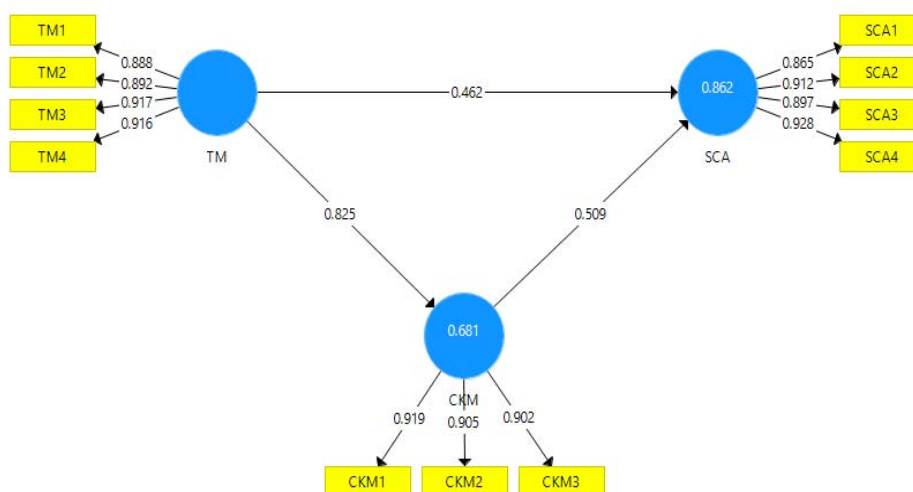


Figure 4. Proposed model with path coefficients, factor loadings, and determination coefficients

5. Conclusion

In this research, a new conceptual model in the field of knowledge management and sustainable competitive advantage is proposed by considering the role of talent management. After gathering relevant information from Iranian ceramic industry experts, the relevant model was fitted and the impact of various factors was evaluated. The theoretical model in the present study was validated after analyzing the observations with high confidence level, so in order to achieve sustainable competitive advantage as dependent variable; talent management as independent variable and customer knowledge management as mediating variable are effective. In the statistical tests, in order to be able to compete with other private companies in the dimensions of service quality, innovation, response to customers and performance, different aspects of talent management and customer knowledge management should be considered. In other words, a private enterprise needs special attention to its workforce as well as to its customers in order to achieve sustainable competitive advantage. Attracting talent, discovering talent, developing and improving talent, and retaining and retaining talent on the one hand, acquiring customer knowledge, acquiring customer knowledge, and acquiring customer knowledge, on the other hand, can create lasting competitive advantage. In addition, talent management will play a key role in the implementation of the customer knowledge management process.

References

- [1] Chaves, M. S., Trojahn, C., & Pedron, C. D. (2012). A Framework for Customer Knowledge Management based on Social Semantic Web: A Hotel Sector Approach. In *Customer Relationship Management and the Social and Semantic Web: Enabling Cliens Conexus* (pp. 141-157). IGI Global.
- [2] Cooreia, A.(2006). Knowledge Management key competences and skills for innovation and competitiveness, the technology and HRM conference on the dual interaction between technology and human Resource, pp. 19-21.
- [3] Farahzadi, A and A. Garmabedri. (2015). Investigation the relationship between knowledge management and talent management (Aspects in: export trading company of Tehran), The second International Conference on Management in the 21st Century, Tehran, 14 sep 2015.
- [4] Feng, T and J. Tian. (2005).Customer Knowledge Management and Condition Analysis of Successful CKM Implementation, Proceedings of the Fourth International Conference on Machine Learning and Cybernetics Guangzhou, Vol. 4, pp. 2239–2244.
- [5] Haseeb, M., Hussain, H. I., Kot, S., Androniceanu, A., & Jermisittiparsert, K. (2019). Role of social and technological challenges in achieving a sustainable competitive advantage and sustainable business performance. *Sustainability*, 11(14), 3811.
- [6] Hosseinzadeh Nojehdeh, S., & Sattari Ardabili, F. (2015). An overview on talent management in nursing. *Management Issues in Healthcare System*, 1, 4-17.
- [7] Jiebing, W. (2013). Customer Knowledge Management and IT-enabled business model innovation: A conceptual framework and a case study from China, *European Management Journal*, 31, 359-372.
- [8] Kim, K. H., B. J. Jeon, H. S. Jung, W. Lu and J. Jones. (2012). Effective employment brand equity through sustainable competitive advantage, marketing strategy, and corporate image, *Journal of Business Research*, Vol. 65, No. 11, pp. 1612-1617.
- [9] King, K. A. (2016). The talent deal and journey: Understanding how employees respond to talent identification over time, *Employee Relations*, Vol. 38, No. 1, pp. 94-111.
- [10] Kireru, C. (2019). Role of Integrated Talent Management Processes in Competitive Advantage of Telecommunication Firms in Nairobi City County, Kenya (Doctoral dissertation, JKUAT-COHRED).
- [11] Li, Z., Bo. Wu and Z. Yanhai. (2013). How Entrepreneurial Orientation Influences the Enhancement of Customer Knowledge Management Competence: An Explorative Empirical Study, 2nd International Conference on Science and Social Research (ICSSR 2013).
- [12] Liao, S. H., Chen, C. C., Hu, D. C., Chung, Y. C., & Yang, M. J. (2017). Developing a sustainable competitive advantage: absorptive capacity, knowledge transfer and organizational learning. *The Journal of Technology Transfer*, 42(6), 1431-1450.
- [13] Meyers, M., C. Woerkom and V. Marianne. (2014). "The Influence of Underlying Philosophies on Talent Management: Theory, Implications for Practice, and Research Agenda", *Journal of World Business*, Vol. 49, No. 2, pp. 192-203.
- [14] Miller, D., X. Xu and V. Mehrotra. (2015). When is human capital a valuable resource? The performance effects of Ivy League selection among celebrated CEOs, *Strategic Management Journal*, Vol. 36, No. 6, pp. 930-944.
- [15] Rod, M., N. J. Ashill, J. Shao and J. Carruthers. (2009). An examination of the relationship between service quality dimensions, overall internet banking service quality and customer satisfaction *Marketing Intelligence & Planning*, Vol. 27, No. 1, pp. 103 - 126.
- [16] Rofi Rofaidda (2016). Competitive Advantage through Talent Management. Universitas Pendidikan Indonesia Bandung, Indonesia.
- [17] Sajedifar, A., M. Esfidani and T. hasangholipour. (2010). Identify the most important aspects of quality electronic services in Brokerage organization by using the Shannon entropy, *Journal of marketingmanagement perspective*, Vol. 12, pp. 129-148.
- [18] Salonen, A., M. Gabrielsson and Z. Al-Obaidi. (2006). Systems sales as a competitive response to the Asian challenge: Case of a global ship power supplier, *Industrial Marketing Management*, Vol. 35, No. 6, pp. 740 – 750.
- [19] Sha, chen and su. 2006. Linking innovative product development with customer knowledge: a data mining approach.
- [20] Smollan, R, K. 2013. Trust in change managers: the role of affect. *Journal of Archive of SID*.
- [21] Sofianti, T. D., K. Suryadi, R. Govindaraju and B. Prihartobo. (2010). Customer knowledge co-creation process in new product development, *Proceedings of the World Congress on Engineering*, Vol. 1, pp. 1- 8.
- [22] Sulaiman, S., Ariffin, M. K. A., Esmailian, G. R., Faghihi, K., Baharudin, B. T. H. T., (2011), Customer Knowledge Management Application in Malaysian Mobile Service.
- [23] Tenenhaus, M., Amato, S., and Esposito V. (2004). A Global Goodness-of-Fit Index for PLS Structural Equation Modelling. In *Proceeding of the XLII SIS Scientific Meeting*, 739-742.
- [24] Trejo, J. M., Gutiérrez, J. S., & Guzman, G. M. (2016). The customer knowledge management and innovation. *Contaduría y Administración*, 61(3), 456-477.
- [25] Van Zyl, E.S., Mathafena, R.B., & Ras, J. (2017). The development of a talent management framework for the private
- [26] Wetzels, M., Odekerken-Schroder, G. and Van Oppen, C. (2009). Using PLS Path Modeling for Assessing Hierarchical Construct Models: Guidelines and Empirical Illustration, *MIS Quarterly*, 33(1): 177.
- [27] Yapp, M. 2009. Measuring the ROI of talent management, *Strategic HR Review*, Vol. 8, No. 4, pp. 5-10.
- [28] Yeung, A. H., V. H. Lo, A. C. Yeung and T. C. Cheng. (2008). Specific customer knowledge and operational performance in apparel manufacturing, *Int. J. Production Economics*, Vol. 114, No. 2, pp. 520– 533.
- [29] Zangouinezhad, A and A. Moshabaki. (2009). The role of structural capital on competitive intelligence, *Industrial Management & Data Systems*, Vol. 109, No. 2, pp. 262-280.