E-ISSN: 2676-6167 | P-ISSN: 2538-5100

Journal of Applied Research on Industrial Engineering

www.journal-aprie.com

J. Appl. Res. Ind. Eng. Vol. 8, Spec. Issue. (2021) 1–17.

Paper Type: Research Paper

Providing a Model for Identifying the Impact of Market-Centric on Organizational Performance by Emphasizing the Value Chain

Parviz Banafshi[1], Soleyman Iranzadeh [1,*], Houshang Taghizadeh[1]

[1] Department of Industrial Management, Faculty of Management, Tabriz Branch, Islamic Azad University, East Azerbaijan, Iran; pbanafshi59@gmail.com; dr.iranzadeh@yahoo.com; taghizadeh46@yahoo.com.

Citation:

Banafshi, P., Iranzadeh, S., & Taghizadeh, H. (2021). Providing a model for identifying the impact of market-centric on organizational performance by emphasizing the value Chain. *Journal of applied research on industrial engineering, 8* (Spec. Issue), 1-17.

Received: 08/02/2021 Reviewed: 30/03/2021 Revised: 08/06/2021 Accepted: 03/07/2021

Abstract

The business process turbulence and the increasing competition among business firms have made the environment around organizations much different than before. Knowing the future business paths and moving in their direction in a way that benefits the organization indicates the necessity of marketing research and concepts such as market-centric. This study aims to evaluate the impact of market-centric on organizational performance by emphasizing the mediating role of organizational innovation in the value chain and provide a model for it. This research is a descriptive-survey study. Confirmatory Factor Analysis (CFA) technique has been used to evaluate the significance of regression weight (factor loading) of different constructs of the questionnaire in predicting the relevant items. LISREL statistical analysis software has been used to test the research hypotheses and analysis of structural equations. The statistical population of the study is all managers and employees working in the value chain of poultry industry in Kurdistan province, which 205 samples have been selected based on Cochran's formula. The results of data analysis indicate that the relationship between customer-centric and inter-task coordination with organizational innovation as well as the relationship between pivotal competition and organizational innovation with the financial performance of the organization was confirmed. There is no significant relationship between pivotal competition and organizational innovation, as well as between customer-centric and inter-task coordination with financial performance of the organization. Finally, some suggestions have been made to improve the performance of the poultry industry.

Keywords: Market-centric, Innovation, Organizational performance, Value chain, Decision-making.

1 | Introduction

Today, international trade has made it possible to buy products on a large scale. Since production and consumption often take place over a long geographical distance from each other, the expansion of the business paradigm of tasks and the possibility of dividing and dispersing activities between different firms located in geographical regions of the world have led to the creation of global value chains. Increasing global competition, shortening the product life cycle and constraints for entering many industries have made continuous innovation and increasing efficiency through value chain entry necessary [1]. The best way for firms is the right use of the promotion techniques in order to deliver better products, create more efficiency and move towards value-added activities.

Corresponding Author: dr.iranzadeh@yahoo.com

http://dx.doi.org/10.22105/jarie.2021.272427.1251

As global competition has been intensified for industries, it is essential to have an effective competitive strategy in an industry to achieve more market share. The number of enterprises and new production methods has made the use of resources more and faster [2]. Competition between industries to achieve more resources has increased more than ever, so a competitive advantage should be created by reducing production costs and making more profit (added value) in the production process. One of the models used to calculate the amount of added value of production is the Porter's value chain model. In this model, important areas of work are identified and classified. Porter's value chain model helps to obtain a more accurate analysis of organizations and industries that have the potential to create value and competitive advantage [3] and [18].

In this research, a model has been presented to identify the impact of market-centric on organizational performance. To present the proposed conceptual model, it is first necessary to know the elements of this model well. The following is a summary of each of the elements of the research model.

1.1 | Market-Centric

Market-centric has been in the marketing literature since the 1980s. The market-philosophy, which was seriously proposed and evaluated by Zarei et al. [4]. Since the 1990s, significant progress has been made in developing the market-centric concept, and much analytical efforts have been devoted to defining, conceptualizing, and operationalizing it. Among these studies, two basic concepts, culture-based interpretation by Narver and Slater [25] and information-based attitude proposed by McGivern and Tvorik [5], have obtained the most support. From a cultural perspective, Narver and Slater [25] defined market-centric as marketing culture that effectively and efficiently creates behaviors that are necessary to create more value for customers and thus improve the company's market-centric performance. The dimensions of the market-centric include the following:

1) Prioritizing the customer 2) Production of knowledge and information 3) Dissemination of knowledge and functional and inter-sectoral coordination 4) Knowledge (logical) accountability and implementation.

1.2 | Organizational Performance

Organizational performance refers to how organization's missions, tasks and activities are done and what the results of their performance are.

The effectiveness of various organizations, including organizations related to food and medicine in attracting new customers, maintaining relationship with intermediaries and sales growth compared to the past, have been used as performance measurement indicators [1]. Therefore, in the poultry industry, factors such as customer satisfaction, increasing market share compared to competitors, providing desirable and high-quality services, higher income and profits are considered as performance criteria for poultry farms.

1.3 | Factors Affecting Organizational Performance

There are two main factors in performance evaluation: an economic perspective that emphasizes the importance of external market factors such as competitive position, and an organizational perspective based on behavioral and sociological perspectives and their adaptation to the environment. Also in relation to strategy evaluation, Kulkarni and Malhotra [6] emphasized both economic and organizational factors as factors affecting performance. McGivern and Tvorik [5] listed the factors affecting performance as follows:

- *Alignment of organizational elements with the organizational environment is an effective factor in improving organizational performance.*
- *An organization needs to adapt its capabilities to its changing environment if it is to achieve the best performance.*
- *The results of studies show that seventeen to twenty percent of the variability in financial performance is due to membership in an industry.*
- *Rare, valuable, and unimaginable organizational resources play a crucial role in gaining an organization's competitive advantage.*
- *Organizational loyalty to the long-term vision is a key factor in the success of building internal consensus and the desire for innovation and change.*

1.4 | Innovation

Bhatt and Emdad [7] considered innovation to be the creation of a new business using new materials or components and the introduction of new processes and the creation of new markets or the use of new organizational institutes. Innovation is the process by which entrepreneurs turn opportunities into marketable ideas. It is through this tool that they accelerate change [2].

1.5 | Value Chain

The value chain was first introduced by Porter [26] .He described the activities that a company performs from the starting point, the supply of raw materials until the final product reaches the end consumer, as a value chain; so that during each of these steps or activities, value is added to products or services. Porter [26] believed that the value chain determines the strategically related activities through which a company runs its business. Value chain is a tool by which it is possible to systematically deal with all areas of work of a firm, and by analyzing the behavior of these areas of work, each area can be evaluated in relation to competitive and functional advantages (reducing costs and improving output quality) in the whole organization.

Researchers divide the activities involved in manufacturing organizations into two parts of primary and support. The primary activities are those activities that add to the value of the product. The value chain approach in the analysis of intra-organizational activities is an effective tool in identifying strengths and weaknesses and making decisions about each of these activities [10]. It can also be used to implement long-term programs, including quality improvement programs. The concept of value chain can be defined according to value-adding activities and represents all the activities that play a role in adding value for the service. Accordingly, all value-adding activities can be classified based on their role and impact on the value chain of the organization [11].

As mentioned, in this research, using the concept of value chain, a conceptual model is presented to identify the impact of market-centric on the performance of the organization. This model has been implemented in the poultry industry of the country and especially in Kurdistan province in the following and in the second section, the research background is presented. The conceptual model of the research and its details are presented in the third section. The research methodology is presented in the fourth section, the results of the performed analyzes on the model are described in the fifth section, and finally, the summary and conclusion are presented in the sixth section.

2 | Literature Review

Bahreini and Houshangi [13] , in a study used the human resources approach to quality management in three dimensions of top management leadership and commitment, Plans of promoting competences of employees and Customer-Oriented to examine the impact of people-oriented factors of quality management in constructing the knowledge management value chain in the organization. From results of literature review and case study of research, at all of factors in quality management, it was concluded that

quality management has significant relation with knowledge management value chain activities. In analysis of correlation coefficient between variables of quality management and knowledge management value chain activities, the highest coefficient was between customer-oriented in plans of organization and knowledge management value chain activities, and plans of promoting competences of employees and top management leadership and commitment were in later steps.

Ghaffari et al. [3] in a study concluded that paying attention to quality from the perspective of patients is an important aspect in the development and improvement of health services in the value chain. Therefore, it is necessary to pay serious attention to the quality of services from various dimensions, including: care and support services and any approach that can comprehensively cover the factors affecting the provision of desirable services to patients is considered as an effective tool in the value chain of health services.

Hosein Zadeh [14] in a study presented an appropriate strategy for value chain development using the ANP method to improve it. The results of prioritizing the following criteria affecting the value of poplar wood in West Azerbaijan province showed that access to wooden raw materials is the most important criterion, and then, the sustainability of raw materials supply, machinery and equipment, human resources, proximity to domestic markets, expertise and skills and financial resources, respectively, were the other important criteria in the development of the poplar wood value chain.

Porbar et al. [9] in a study concluded that since Kurdistan province is one of the poles of poplar tree plantation so it has a high capacity to create the value chain of poplar wood processing and has a good marketing potential. In this chain, the most effective link in the value chain is the production of fiberboard and the most profitable link is the production of cellulose, wood chips and paper.

Zarei et al. [4] in a study presented a conceptual model to examine how innovation capability affects the market-centric and entrepreneurship. In this study which was conducted in Tehran Hamburger Food Company, the results showed that entrepreneurship has a direct impact on financial performance and an indirect impact on competitive advantage.

Farfan [11], in a study concluded that developing countries have few opportunities to sustain long-term revenue growth by connecting to the global economy through exports of products and they can be able to obtain opportunities for development and globalization only by constructing the value chain in the processes of primary industries and by diversifying technological skills.

Wiengarten et al. [8] examined the impact of e-business software used in the supply chain on the level of operational performance (including: cost, quality, delivery and flexibility). Their research showed that the preparation level to do e-business, among key suppliers in the supply chain, is able to moderate and strengthen these relationships.

Rahimpour et al. [17] have also evaluated the performance of the organization using data envelopment analysis. In this study, units of operation, warehouse, design and manufacturing, production planning, quality assurance and education, laboratory and law enforcement became efficient and their efficiency ranks were identified with the use of AP method. Units of design and manufacturing, production and planning, quality assurance and education, operation, and laboratory were respectively ranked from first to fifth place and the rank of warehouse and law enforcement units were not identified. Also, the intensity of input effects on the organizational commitment was included customer capital, structural capital, and human capital.

Ho et al. [21] in a studied the effects of market-centric on value chains in Vietnam and collected data from 190 active factors in the value chain of beef production and processing and evaluated the relationship between market-centric and innovation. The results showed that there was no significant relationship between market-centric and financial performance, but customer-centric and inter-

functional coordination had a positive and significant relationship with innovation and there was a positive and significant relationship between innovation and financial performance. This study outlined the relationships between market-centric, innovation, and financial performance in value chains in emerging economies.

Ajripour et al. [19] have presented a model for managing the performance of the organization using decision making methods. In this paper, organization performance management is evaluated using criteria derived from Balanced Scorecard. The purpose of this paper is to prioritize alternatives related to manager(s) performance in an organization using multi-criteria decision-making, i.e. PROMETHEE, ELECTRE, and TOPSIS and provide a model for it. Mean Maximum-Minimum Square Ranks method is proposed to combining the results obtained from applying multi-criteria decision-making methods. Also, roadmaps are presented for alternatives with higher priority for the organization. The proposed model provides the possibility of solving issues related to the organizational performance by analyzing various alternatives and criteria for organization manager(s). To evaluate the efficiency of the proposed approach, the model is implemented in a petrochemical company, which its final products are used to make fibers.

Hassanzadeh and Asghari [20] have studied the factors influencing sales and operations. The purpose of this study is to identify the affecting factors of the implementation of the S&OP Process and determine the significance of each of them, as well as the ranking of the implementing department of this process by using the fuzzy AHP and fuzzy TOPSIS. Data collections in this research, by 10 experts of different planning and production departments of Kalleh dairy production company in 2018 have been conducted. To identify the factors, research findings and expert opinion have been used and the required data have been collected through the designed questionnaires. The validity of the questionnaire has been confirmed by the experts in this area, and its reliability has been analyzed using the incompatibility rate of the AHP method. The data analysis in this study was done using coding in Eecel software.

Hamelink and Opdenakker [16] answered the question of how an innovative business model can affect company performance. The researchers, who were looking for an answer to this question in the energy storage equipment market, studied the dimensions of this issue by studying the companies present in this market. Researchers stated in their findings that improvements in innovative business models had a direct impact on customer satisfaction. Environmental issues can also be well placed in this type of models. *Table 1* summarizes the various studies.

Table 1. Summary of research literature.

Researcher	Year	Subject of Study	Tools and Methods	Results
Bahreini and Houshangi [13]	2009	The role of quality management in creating the value chain of knowledge management.	Field research	The highest correlation was obtained between customer-centric and knowledge management value chain, and employee competency promotion programs and senior management commitment and leadership were in the next ranks.
Hosein Zadeh [14]	2015	The role of value chain in improving the quality of health services.	ANP method	Access to wood raw materials is the most important criterion in improving quality.
Porbar et al. [9]	2017	Prioritization Of Poplar Wood Processing Industries In The Kurdistan Province.	Field research	The most important loop in the value chain of the wood industry is fiber production.
Zarei et al. [4]	2019	The effect of market-centric on financial performance with emphasis on the role of organizational entrepreneurship.	Structural equations	Entrepreneurship has a direct impact on financial performance and an indirect effect on competitive advantage.

Table 1. (Continued).

Researcher	Year	Subject of Study	Tools and Methods	Results
Minbashrazgah et al. [12]	2019	Valuation of marketing capacities with emphasis on entrepreneurship and market-centric.	Structural equations	Market-centric is also a customer-based approach and the task of the organization is to focus on the customer.
Bahreini and Houshangi [13]	2009	The role of quality management in creating the value chain of knowledge management.	Field research	The highest correlation was obtained between customer-centric and knowledge management value chain, and employee competency promotion programs and senior management commitment and leadership were in the next ranks.
Ho et al. [21]	2018	Examining market-centric, innovation, and financial performance in the value chain.	Field research	Customer-centric and inter-task coordination have a positive and significant relationship with innovation.
Hamelink and Opdenakker [16]	2019	Investigating the impact of innovative business model on organizational performance.	Field research	Improvements in innovative business models have a direct impact on customer satisfaction.
Lotfi et al. [24]	2017	Determination of start times and ordering plans for two-period projects with interdependent demand in project-oriented organizations.	two-period newsvendor problem	Results show that the proposed model with interdependent demand provides a better solution than independent demand.
Lotfi et al. [23]	2020	A robust time-cost-quality-energy-environment trade-off with resource-constrained in project management.	Robust nonlinear programming (NLP)	Result of the research, with regard to the time-cost, time-quality, time-energy, and time-pollution charts, as uncertainty increases, the cost and quality will improve, and pollution and energy will decrease.
Lotfi et al. [22]	2021	A robust optimization model for sustainable and resilient closed-loop supply chain network design considering conditional value at risk.	Two-stage mixed-integer linear programming model	The results revealed that the robust counterpart provides a better estimation of the total cost, pollution, energy consumption, and employment level compared to the basic model.
This research	…	Providing a model for identifying the impact of market-centric on organizational performance by emphasizing the value chain.	LISREL statistical analysis software	There is no significant relationship between pivotal competition and organizational innovation, as well as between customer-centric and inter-task coordination with financial performance of the organization.

As can be seen in *Table 1*, there are many approaches to examining the impact of market-centric on organizational performance. But the most important research gap is in presenting a model with mediating role of organizational innovation. Therefore, the main innovation of this research is to present a conceptual model based on structural equations to investigate the impact of market-centric on organizational performance by considering the role of organizational innovation.

3 | Conceptual Model of Research

In the present study, the common market-centric approach of Narvar and Slater [26] has been used, which refers to variables of customer-centric, pivotal competition and inter-task coordination, and also the financial performance of the organization refers to the amount of profit. This study seeks to provide a model to identify the impact of market-centric on organizational performance by emphasizing the mediating role of organizational innovation in the value chain. Therefore, based on the approach

presented in various studies, the customer-centric, pivotal competition and inter-task coordination can be mentioned as the components of market-centric which are independent variables. This issue is inspired by Andrews [15]. Innovation is also a mediating variable that is a dependent variable relative to market-centric variables but an independent variable relative to organizational performance. This point is adapted from Lotfi et al. [22]. Considering the performance of the organization as a key variable has been inspired by various studies such as [19] and [12]. By using this model, the effect of dependent variable change (organizational performance) per unit of change is examined on independent variables (customer-centric, pivotal competition, and inter-task coordination) and innovation. Finally, the conceptual model of the research is expressed in *Fig. 1*, which is based on a combination of the latest studies in this field.

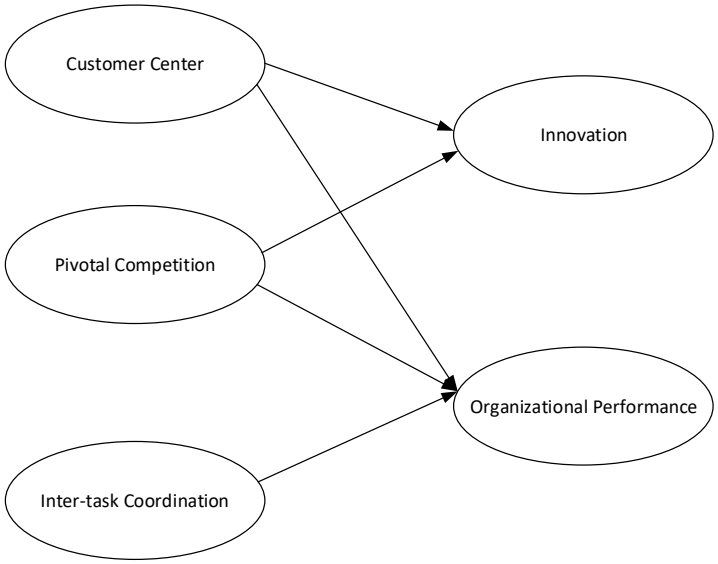

Fig. 1. Conceptual model of research.

4 | Research Methodology

To conduct this research, descriptive research method and survey research have been used. In descriptive research method, the aim is to describe the conditions or phenomena under study and survey method is used as one of the subdivisions of descriptive research method to examine the distribution of the characteristics of the statistical population. In survey method, the researcher tries to report "what is" without any logical interpretation and obtains objective results from the situation [6].

In this study, the researcher examines and presents a model to identify the impact of market-centric on organizational performance with emphasis on the mediating role of organizational innovation in the value chain (Case study: Poultry industry in Kurdistan province), so the most appropriate method for this study is descriptive and survey because the researcher has collected non-manipulated data in a descriptive way, and the research is specifically descriptive-analytical with a case study. The case study is the poultry industry of Kurdistan province. This research used statistical inference and also used field research in terms of data collection, which in this research the field method is based on questionnaires. This research seeks to find the market-centric benefit in the value chain of agricultural products in an emerging economy. Data were collected from 7 active units in the poultry value chain of Kurdistan province. The statistical population of this study includes 439 managers and employees working in the value chain of poultry industry in Kurdistan province as described in *Table 2*.

Table 2. Number of companies in the research statistical population.

Row	City	Name of the Unit	Number of Employees
1	Sanandaj	Sanandaj chicken slaughterhouse	85
2	Sanandaj	Iman Poultry Company	160
3	Sanandaj	West Seed Company	65
4	Sanandaj	Fertilizer processing company	8
5	Dehgolan	Saral Poultry Supplements Company	30
6	Kamyaran	West Seed Company	50
7	Baneh	West Seed Company	41
Sum			439

The selection of appropriate technique for sampling in this research is very important considering the role of each loop of the value chain in the reliability and validity of the study. Therefore, according to the number of activists in each loop of the value chain, stratified sampling method was used and the sample was selected non-randomly and the people who had the necessary knowledge and information about the research variables were questioned. The statistical population of this research is 439 active people in the value chain and 205 people were selected as the sample by using Cochran formula. In this research, the relationship between market-centric and innovation and financial performance of the organization is studied. Therefore, a questionnaire was designed and the activists in the poultry industry value chain (poultry feed production units, suppliers of food and pharmaceutical supplements, poultry farms, freezing and maintenance tunnel, slaughterhouses and chicken meat supply stores) were questioned. In this questionnaire, variables such as customer-centric, pivotal competition, inter-task coordination and innovation have been evaluated. In designing the questionnaire, two main issues are studied, which are: 1) General information and perception of respondents about the importance of the effects of concentration on customer, concentration on competitors, inter-task coordination and innovation on value chain performance. 2) 5-Point Likert Scale has been used to measure the importance of these variables on value chain performance.

In order to justify the respondents and increase the amount of accuracy of responding to the considered data, first a meeting was held for managers and employees of active units in the value chain and the research variables were explained; then the research data were collected by referring to respondents and face-to-face interview and completion of the questionnaire. The data were collected at the appropriate time according to the research schedule. During this process, 45 questionnaires were completed and collected in the poultry feed production unit, 25 questionnaires in suppliers of food and pharmaceutical supplements, 50 questionnaires in poultry farms, 45 questionnaires in slaughterhouses and 40 questionnaires in chicken meat supply stores.

LISREL statistical analysis software (8.80 LISREL) has been used to test the research hypotheses and structural equation analysis. Before evaluating the structural model, it is necessary to examine the significance of regression weight (factor loading) of different constructs of the questionnaire in predicting the relevant items in order to ensure the suitability of measurement models and the acceptability of their indicators in measuring constructs .This has been done using the Confirmatory Factor Analysis (CFA) technique and LISREL 8.80 software. In CFA, it is first necessary to ensure the normality of the collected data. Kolmogorov-Smirnov test is used for this purpose. In the CFA section, the relationship between the indicators or the questions of the questionnaire with the constructs is examined, and in the section of path analysis or structural model, the relationship of the studied factors with each other are considered to test the hypotheses. To evaluate the CFA model, the indicators of x2, the mean difference between the data and the matrix of Standardized Root Mean Square Residual (SRMR), Goodness of Fit Index (GFI), Incremental Fit Index (IFI), Comparative Fit Index (CFI) and the most important index of Root Mean Square Error of Approximation (RMSEA) are used.

4.1 | Measurement Tool Test: Validity of the Questionnaire

The concept of validity answers the question of how well the measurement tool measures the particular concept in question. Without knowing the validity of the measurement tool, the accuracy of the data obtained cannot be guaranteed. The validity of all the questions of the questionnaire regarding market-centric and innovation has been confirmed by previous studies and the questionnaire is standard and is taken from valid studies that have been localized in this research. In this questionnaire, three areas including customers, competitors and coordination between firm units have been compared. The variables of customer-centric, pivotal competition and inter-task coordination have already been tested and validated in study of Holt and Kechen [27]. In the case of agricultural products in developing countries, a large part of the innovation aims to increase the productivity and value of the products. Innovation generally means accepting and implementing new technologies with new production methods. In this research, innovation is examined through items affecting the performance of the poultry value chain.

Reliability is one of the technical features of measurement tools. This concept deals with the issue that to what extent the measurement tool gives the same results under the same conditions. Therefore, the range of the reliability coefficient usually changes from zero (no correlation) to +1 (total correlation). The reliability coefficient indicates the extent to which the measurement tool measures the test subject's stable features or its variable and temporary features.

Various methods are used to calculate the reliability coefficient of the measurement tool. One of them is Cronbach's alpha method, which is used to calculate the internal consistency of the measurement tool, such as questionnaires or tests that measure different features. In such tools, the answer to each question can have different numerical values. To calculate the Cronbach's alpha coefficient, first the variance of the scores of each subset of questions of the questionnaire (or subtest) and the total variance should be calculated. Then, by using the following formula, the value of alpha coefficient is obtained.

$$r_a = \frac{j}{j+1}\left(1-\frac{\sum S_j^2}{S^2}\right). \quad (1)$$

Where in

j = Number of subsets of questions of the questionnaire or test.

S_j^2 = variance of subtest j.

S^2 = total variance of the test.

A value of zero for this coefficient indicates unreliability and +1 indicates complete reliability. Normally values greater than 0.7 for this coefficient can confirm the reliability of the questionnaire.

Table 3. Evaluation of the reliability of the questionnaire.

Factors	Number of Questions	Cronbach's Alpha
Customer-centric (A)	5	0.893
Pivotal competition (B)	6	0.800
Inter-task coordination (C)	4	0.805
Innovation (D)	4	0.813
Financial chain performance (F)	5	0.914
The whole questionnaire	24	0.903

The results obtained in *Table 3* show that since the value of Cronbach's alpha coefficient in all factors of the questionnaire is greater than 0.7, therefore the factors of the questionnaire are at a very good level in

terms of reliability. Therefore, the reliability of the questionnaire factors and all the questions of the questionnaire are confirmed.

5 | Research Findings

Before evaluating the proposed structural model, it is necessary to examine the significance of regression weight (factor loading) of different constructs of the questionnaire in predicting the relevant items to ensure the fitness of measurement models and the acceptability of their indicators in measuring constructs. This was done using the CFA technique and LISREL 8.80 software.

Given that the purpose of this study is to "provide a model to identify the impact of market-centric on organizational performance by emphasizing the mediating role of organizational innovation in the value chain", the normality test should be performed for the collected data in order to use the appropriate test to examine the hypotheses. After examining the normality of Skewness and Elongation of data distribution, the Kolmogorov-Smirnov test is used to ensure the normality of the data.

Table 4. Normality test results for research variables.

Name of variable	Number	Test statistic Kolmogorov-Smirnov	Significance Value of Kolmogorov-Smirnov test	Skewness	Elongation
Customer-centric (A)	205	0.149	0.000	-0. 382	-0.340
Pivotal competition (B)	205	0.89	0.000	-0.213	-0.191
Inter-task coordination (C)	205	0.79	0.004	-0.103	-0.480
Innovation (D)	205	0.95	0.000	0.75	-0.648
Financial chain performance (F)	205	0.118	0.000	-0. 373	-0.433

The results in *Table 4* show that the assumption of normality for all research variables is confirmed. The reason for this analysis is that the significance amount of Kolmogorov-Smirnov test is very sensitive to the sample size, or the significance of this test decreases with increasing the number of samples; so to ensure the normality of the variables, Skewness and Elongation are examined.

Statistically, if the values of Skewness and Elongation are within the interval of (-2 and 2), the hypothesis test of data normality for the variables is confirmed. Therefore, according to the table above, the values of Skewness and Elongation for all research variables are within the interval of (-2 and 2), in other words, according to these results, the hypothesis test of data normality for these variables is confirmed. Therefore, parametric tests are used to examine the research hypotheses.

In CFA or measurement model, the relationship between indicators or the questions of the questionnaire with constructs is examined. In other words, it is determined in CFA whether the questions of the questionnaire measure variables well or not. Therefore, before examining the general model, the measurement model or CFA for the research variables are examined.

Table 5 contains all the relationships between the variables in the CFA model. All relationships between variables and related questions are significant. Because the path coefficient or Beta is greater than 0.3 and also the T-Value is greater than 1.96.

Table 5. Values of beta and T-Value of confirmatory factor analysis.

Research Variables	Related Questions	Path Coefficient or (beta) (β)	(T-Value)
(A) Customer –centric	S1	0.76	12.40
	S2	0.93	17.14
	S3	0.78	13.03
	S4	0.85	14.80
	S5	0.61	9.31
(B) pivotal competition	S6	0.79	13.02
	S7	0.83	14.05
	S8	0.44	6.28
	S9	0.28	3.81
	S10	0.75	12.16
	S11	0.80	13.18
(C) Inter-Task Coordination	S12	0.62	9.09
	S13	0.83	13.38
	S14	0.79	12.45
	S15	0.61	9.02
(D) Innovation	S16	0.56	8.22
	S17	0.84	13.89
	S18	0.62	9.41
	S19	0.90	15.17
(F) Financial chain performance	S20	0.92	17.07
	S21	0.92	16.95
	S22	0.76	13.05
	S23	0.73	11.88
	S24	0.75	12.42

Table of correlation between research variables. After examining the normality of different variables, their correlation coefficient is studied. The results of this section are summarized in *Table 6*.

According to *Table 6*, the correlation coefficients between the research variables are significant in all cases because the significance value is less than 0.05. As a result, all variables within the model are related. The higher the correlation coefficient, the higher the correlation between the variables will be.

Structural equations of the research conceptual model. After the validation of the measurement model and the validity calculations of the constructs and diagnostics in this stage, the relationships between the research constructs can be tested. Therefore, the desired model was implemented in LISREL software.

Non-standardized coefficient model. *Fig. 2* is related to the structural equations and the model proposed by the researcher. The following model shows the non-standard path coefficients. All path coefficients between variables are significant.

Standardized coefficient model. *Fig. 3* is related to the structural equations and the model proposed by the researcher. The following model shows the standardized path coefficients. All path coefficients between variables are significant.

Table 6. Coefficients of correlation between research variables.

Research Variables		Customer -Centric	Pivotal Competition	Inter-Task Coordination	Innovation	Financial Chain Performance
Customer – centric	Pearson's correlatin coefficient	1.000	0.353	0.312	0.358	0.223
	Significance Value		0.000	0.000	0.000	0.001
pivotal Competition	Pearson's correlatin coefficient	0.353	1.000	0.462	0.260	0.550
	Significance Value	0.000		0.000	0.000	0.000
Inter-Task Coordination	Pearson's correlatin coefficient	0.312	0.462	1.000	0.353	0.362
	Significance Value	0.000	0.000		0.000	0.000
Innovation	Pearson's correlatin coefficient	0.358	0.260	0.353	1.000	0.314
	Significance Value	0.000	0.000	0.000		0.000
Financial chain performance	Pearson's correlatin coefficient	0.223	0.550	0.362	0.314	1.000
	Significance Value	0.001	0.000	0.000	0.000	

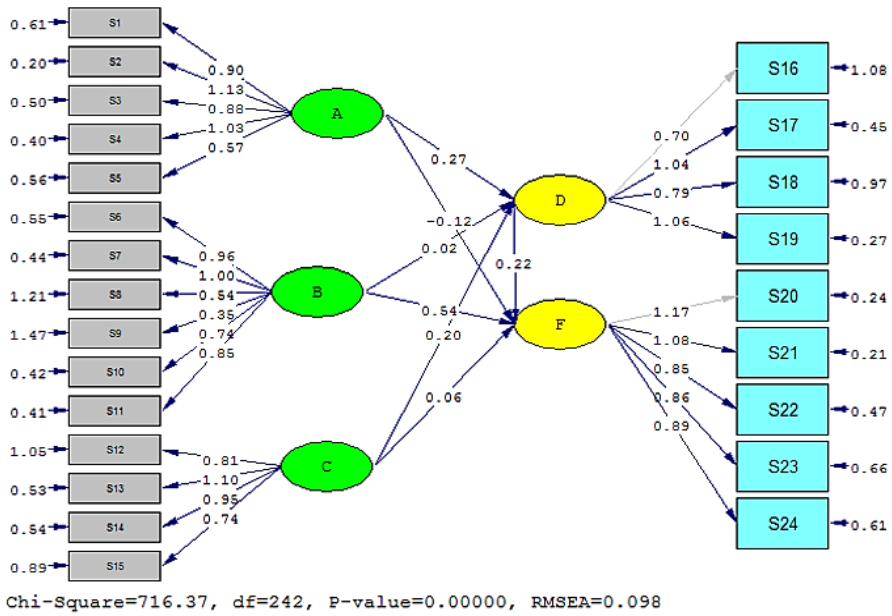

Fig. 2. Non-standardized coefficient model of structural model.

Model of significant coefficients. *Fig. 4* deals with the structural equations and the model proposed by the researcher. In the following model, significant coefficients between variables or research factors are presented. All coefficients of significance or T-Value between variables are greater than 1.96 and significant.

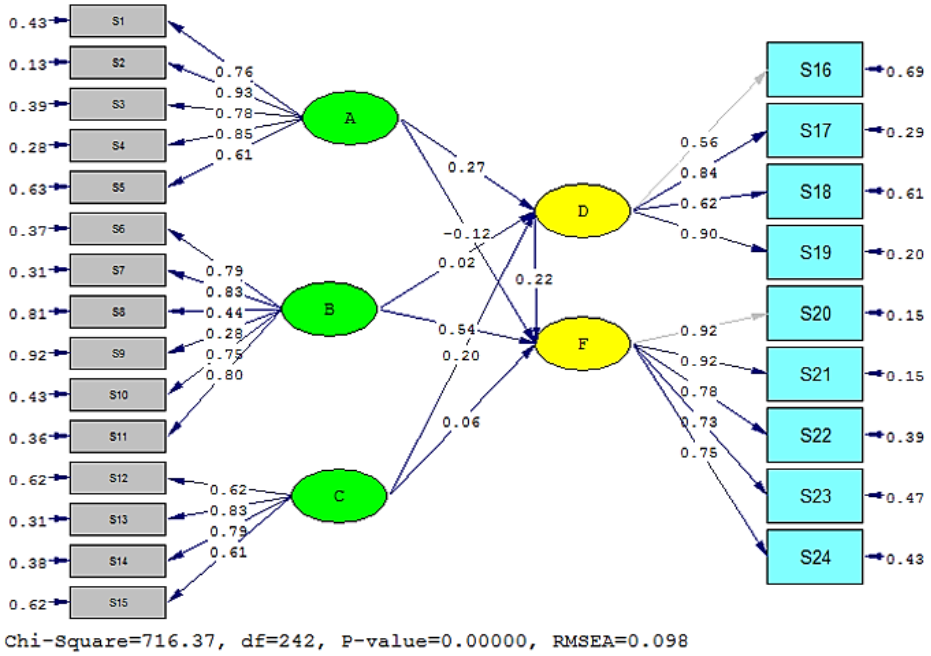

Fig. 3. Standardized coefficient model of structural model.

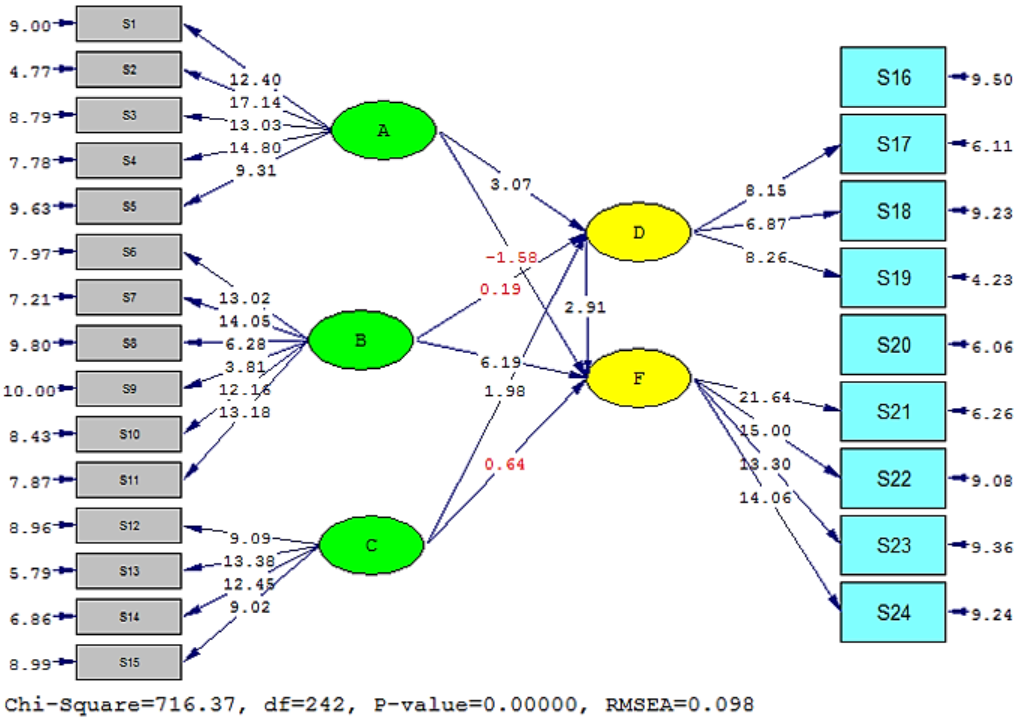

Fig. 4. Model of significance coefficients of structural model.

Fit indices *Table 7* deals with the significance of the model and examines whether the model relationships are significant in general or not. This significance is evaluated based on various indicators in structural equations, which their desired values and existing values are presented in *Table 8*.

Table 7. Fit indices of research structural model.

Fit indices	RMSEA	Chi -square/df	SRMR	GFI	NFI	CFI	IFI	RFI
Desired Value	≥0.08	≥3.00	.≥0.08	≤0.9	≤0.9	≤0.9	≤0.9	≤0.9
Existing Value	0.098	2.960	0.080	0.77	0.88	0.92	0.92	0.87

As can be seen in *Table 7*, the amount of Chi-squared test statistic divided by the degree of freedom is less than 3, which means total significance. According to the table, the fit indices have been studied. As can be seen in most cases, the fit indices are desirable and this indicates that the structural equation model is not rejected. Now, considering that the fit indices of the structural model are confirmed and the CFA showed that the questions of each variable explain the variable well, the research hypotheses are examined based on the structural equation diagram.

6 | Conclusion

In this research, a new conceptual model in the context of the impact of market-centric on organizational performance with the mediating role of organizational innovation was presented. In this regard, first the required information was provided through interviews with a group of research experts and then the results were obtained by analyzing the structural equations.

In summary, according to the final results, the impacts confirmed by the model can be expressed as the following cases.

- *Customer-centric has an impact on organizational innovation in the value chain.*
- *Inter-task coordination has an impact on organizational innovation in the value chain.*
- *Competitor-centric has an impact on the financial performance of the organization in the value chain.*
- *Organizational innovation has an impact on financial performance of the organization in the value chain.*
- *Given that the path coefficient (Beta) is positive in these hypotheses and also the significance coefficient (T-Value) is more than 1.96, so the relationships between the variables are confirmed.*

Also in the hypotheses:

- *Pivotal competition has an impact on organizational innovation in the value chain.*
- *Customer-centric has an impact on financial performance of the organization in the value chain.*
- *Inter-task coordination has an impact on financial performance of the organization in the value chain.*

Given that the significance coefficient (T-Value) is less than 1.96, so the relationships between these variables cannot be confirmed.

All of these impacts are summarized in *Table 8*.

Table 8 contains all the relationships in the model. According to the table, more than 50% of the relationships between the main variables of the research are significant because the path coefficient or Beta is positive and also the coefficient of significance (T-Value) is more than 1.96.

Table 8. Values of Beta and T-Value of the structural model.

Independent Variable	Dependent Variable	Path Coefficient or (beta) (β)	(T-Value)	Result
(A) Customer-centric	(D) Innovation	0.27	3.07	Confirmation of relationship
(A) Customer-centric	(F) Financial chain performance	-0.12	-1.58	Rejection of the relationship
(B) Pivotal competition	(D) Innovation	0.02	0.19	Rejection of the relationship
(B) Pivotal competition	(F) Financial chain performance	0.54	6.19	Confirmation of relationship
(C) Inter-Task Coordination	(D) Innovation	0.20	1.98	Confirmation of relationship
(C) Inter-Task Coordination	(F) Financial chain performance	0.06	0.64	Rejection of the relationship
(D) Innovation	(F) Financial chain performance	0.22	2.91	Confirmation of relationship

According to this research, the following suggestions are presented.

I. Given that the first hypothesis or the impact of customer-centric on innovation has been confirmed, it can be said that in a competitive market, the reason for customer-centric is the increase in revenue and profit. What drives today's organizations towards customer-centric is the existence of intense competition in the business. Neglecting this issue can eliminate an organization from the field of competition forever. Therefore, prerequisite for competing in the market is the existence of innovation in product or innovation in services in such a way that it can be distinguished from other competitors. Therefore, it is suggested that companies should seek to maintain their existing customers, as well as increase customers and improve better service to them. Given that the customer understands the difference, so, the company must be innovative in order to be able to be different from others.

II. Considering that the second hypothesis or the impact of pivotal competition on innovation has not been confirmed, it can be said that nowadays companies look at science, technology and innovation as key sources for achieving competitive advantage as well as a fundamental tool for improving people's living standards. Because many variables such as: capital, technology level, skill differences among the workforce, differences in production capabilities, entrepreneurship, etc. affect competitiveness, so it is recommended that companies related to the value chain of the poultry industry in Kurdistan province should pay more attention to these variables. In other words, they should improve their existing technology and use skilled workforce to be able to improve their production capabilities and create innovation.

III. Considering that the third hypothesis or the impact of inter-task coordination on organizational innovation in the value chain has been confirmed, it can be said that the use of professional and highly skilled workforce can be very effective both in producing better products and providing better service in each of the loops of value chain. Therefore, while the related companies in the value chain of Kurdistan Poultry Industry have paid attention to this important issue, it is recommended that they improve the knowledge level of their workforce by using in-service training classes or other means to improve their workforce coordination.

IV. Given that the fourth hypothesis or the impact of customer-centric on the financial performance of the organization in the value chain has not been confirmed, it can be said that successful companies are the ones that create more value for their customers; thus, creating value for customers creates competitive advantage. Since the related companies in the value chain of Kurdistan Poultry Industry have not paid attention to this important issue, so it is recommended that they consider factors such as: innovation in product design, paying attention to accurate production quality, maintaining average price and quality, efficient supply chain management and finally, paying more attention to customer satisfaction.

V. Considering that the fifth hypothesis or the impact of pivotal competition on the financial performance of the organization in the value chain has been confirmed, it can be said that the competitive environment of the industry and the intensity of competition between companies in an industry can have a significant impact on the financial performance of organizations, also the poultry industry as a separate industry has a path of evolution full of ups and downs. Therefore, it is recommended that the related companies in the value chain of Kurdistan Poultry Industry maintain their competitive path in order to obtain more customer satisfaction, and adopt the appropriate strategy to maintain customers, gain more customers, and improve themselves; so that they can provide better services to customers and create value for their customers in a competitive environment by creating new ideas.

VI. Considering that the sixth hypothesis or the impact of inter-task coordination on the financial performance of the organization in the value chain has not been confirmed, and considering that the variables affecting inter-task coordination are: mutual coordination and participation, increasing creativity, reducing conflicts and access to information throughout the chain, so it can be said that the poultry industry of Kurdistan province has performed poorly in these areas. Therefore, it is suggested that in order to improve, creativity should be increased through the production and sharing of new ideas by active units. Also, conflicts within the organization should be minimized as much as possible and the required information should be available throughout the value chain so that value chain members can make more use of the required information.

VII. Considering that the seventh hypothesis or the impact of organizational innovation on the financial performance of the organization in the value chain has been confirmed, it can be said that when existing markets are disrupted due to the introduction of new products and services, wealth is created through innovation. Since the companies related to the value chain of Kurdistan Poultry Industry have had an acceptable performance in the field of the impact of innovation on financial performance, so while maintaining the current situation, it is recommended to create new opportunities by improving processes and developing new products; so that they can be different from other companies and achieve a competitive advantage.

References

[1] Abzari, M., & Ranjbarian, B., Fathi, S., & Ghorbani, H. (2009). The impact of internal marketing on market-centric and organizational performance in the hotel industry. *Journal of management perspective*, *31*, 25-42. (**In Persian**). http://ensani.ir/fa/article/19920/

[2] Saeedi Kia, M. (2010). *Principles and foundations of entrepreneurship*. Kia Publications. **(In Persian).** https://www.adinehbook.com/gp/product/9648256179

[3] Ghaffari Darab, M., Yarmohammadian, M. H., Khorasani, E., & Alaghmandak, H. (2004). The role of value chain in improving the health care quality. *Health information management journal. 11*(6), 799-811. **(In Persian).** http://him.mui.ac.ir/index.php/him/article/view/1822

[4] Zarei, A., Feyz, D., Zangian, S., & Akbarzadeh, M. (2015). The effect of market-centric on financial performance with emphasis on the role of organizational entrepreneurship. *Journal of business management perspective, 14*(25), 117-132. **(In Persian).** https://jbmp.sbu.ac.ir/article_96220.html

[5] McGivern, M. H. & Tvorik, S. J. (1997). Determinants of organizational performance. *Management decision*, *35*(6), 417-435. https://doi.org/10.1108/00251749710173797

[6] Kulkarni, M., & Malhotra, V. (2015). A study on Disclosure of Intangible assets in 5 star hotels in Bangalore. *Atna journal of tourism studies*, *10*(2), 17-31.

[7] Bhatt, G. D., & Emdad, A. F. (2001). An analysis of the virtual value chain in electronic commerce. *Logistics information management*, *14*, 1/2, 78-85. https://doi.org/10.1108/09576050110362465

[8] Wiengarten, F., Fynes, B., Humphreys, P., Chavez, R. C., & McKittrick, A. (2011). Assessing the value creation process of e-business along the supply chain. *Supply chain management: an international journal*, *16*(4), 207-219. https://doi.org/10.1108/13598541111139035

[9] Porbar, S., Hoseinzadeh, O., & Hajjarian, M. (2017). Prioritization of poplar wood processing industries in the Kurdistan province with the aim of poplar wood value chain upgrading. *Iranian journal of wood and paper science research*, *32*(2), 181-192. **(In Persian).** DOI: 10.22092/ijwpr.2017.109576

[10] Chaminade, C., & Vang, J. (2008). Upgrading in Asian clusters: rethinking the importance of interactive learning. *Science, technology and society*, *13*(1), 61-94. DOI: 10.1177/097172180701300103

[11] Farfan, O. (2005). *Understanding and escaping commodity-dependency: a globalvalue Chain Perspective', prepared for the investment climate unit international financecorporation*. Retrieved from http://www.cggc.duke.edu/pdfs/093005_Farfan_Commodity_Dependency_Uma_WB.pdf

[12] Maleki Minbashrazgah, M., Amini Khiabani, G., & Khansari, Y. (2019). Value creation for marketing capacities; articulating entrepreneurship orientation and market orientation interactions: the mediating role of innovative approach. *Journal of business management*, *11*(1), 87-104. **(In Persian).** https://jibm.ut.ac.ir/article_69943_52e290e0c4fb9f999fa6c39f64db615c.pdf

[13] Bahreini, K., & Houshangi, M. (2010). Investigating and analysis the role of quality management in constructing knowledge management value chain in organization. *Journal of management futures research* (journal of management research), *20*(83), 99-120. **(In Persian).** https://www.sid.ir/en/journal/ViewPaper.aspx?ID=220915

[14] Hosein Zadeh, O. (2015). Analysis of poplar process value chain in western Azerbaijan province aims to upgrading. *Iranian journal of wood and paper industries*, *6*(1), 41-52. http://www.ijwp.ir/article_12527.html?lang=en

[15] Andrews, K. R. (1971). The concept of corporate strategy. In P. McKiernan (Ed.), *The concept of corporate strategy* (pp. 18-46). Richard d Irwin.

[16] Hamelink, M., & Opdenakker, R. (2019). How business model innovation affects firm performance in the energy storage market. *Renewable energy*, *131*, 120-127. https://doi.org/10.1016/j.renene.2018.07.051

[17] Rahimpour, K., Shirouyehzad, H., & Karbasian, M. (2016). The evaluation of the organization unit performance based on the intellectual capital and the organizational commitment with DEA: case study of a manufacturing company. *Journal of applied research on industrial engineering*, *3*(1 (4)), 1-14. **(In Persian).** http://www.journal-aprie.com/article_42094.html

[18] Porter, M. E. (2011). *Competitive advantage of nations: creating and sustaining superior performance*. Simon and Schuster.

[19] Ajripour, I., Asadpour, M., & Tabatabaie, L. (2019). A model for organization performance management applying MCDM and BSC: a case study. *Journal of applied research on industrial engineering*, *6*(1), 52-70. http://www.journal-aprie.com/article_83034.html

[20] Hassanzadeh, R., & Asghari, H. (2020). Identification and ranking of affecting factors on sales and operations planning (S&OP) process implementation by using fuzzy AHP and fuzzy TOPSIS approach (case study: dairy industry). *Journal of applied research on industrial engineering*, *7*(1), 57-78. http://www.journal-aprie.com/article_106125_0.html

[21] Ho, K. L. P., Nguyen, C. N., Adhikari, R., Miles, M. P., & Bonney, L. (2018). Exploring market orientation, innovation, and financial performance in agricultural value chains in emerging economies. *Journal of innovation & knowledge*, *3*(3), 154-163. https://doi.org/10.1016/j.jik.2017.03.008

[22] Lotfi, R., Mehrjerdi, Y. Z., Pishvaee, M. S., Sadeghieh, A., & Weber, G. W. (2021). A robust optimization model for sustainable and resilient closed-loop supply chain network design considering conditional value at risk. *Numerical algebra, control & optimization*, *11*(2), 221.

[23] Lotfi, R., Yadegari, Z., Hosseini, S. H., Khameneh, A. H., Tirkolaee, E. B., & Weber, G. W. (2020). A robust time-cost-quality-energy-environment trade-off with resource-constrained in project management: a case study for a bridge construction project. *Journal of industrial & management optimization*. *18*(1), 375-396. DOI: 10.3934/jimo.2020158

[24] Lotfi, R., Nayeri, M., Sajadifar, S., & Mardani, N. (2017). Determination of start times and ordering plans for two-period projects with interdependent demand in project-oriented organizations: a case study on molding industry. *Journal of project management*, *2*(4), 119-142. DOI: 10.5267/j.jpm.2017.9.001

[25] Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. *Journal of marketing*, *54*(4), 20-35.

[26] Porter, M. E. (2001). The value chain and competitive advantage. In D. Barnes (Ed), *Understanding business processes* (pp. 50-66). Routledge.

[27] Hult, G. T. M., Ketchen Jr, D. J., & Nichols Jr, E. L. (2002). An examination of cultural competitiveness and order fulfillment cycle time within supply chains. *Academy of management Journal*, *45*(3), 577-586.