



Providing a social media marketing model to increase return on investment in the Tehran dairy industry

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ABSTRACT

Through the use of a mixed (qualitative-quantitative) approach, this study aimed to provide a social media marketing model to increase return on investment in the Tehran dairy industry. The statistical population in the qualitative part of the study included experts of Tehran dairy industry. Targeted sampling was used as sampling method in this part, which continued till theoretical saturation was achieved. In the quantitative part, the statistical population included the customers of Tehran dairy Industry, who were 384 people and were selected using Cochran's formula. Semi-structured interview and Likert scale questionnaire were used to collect data. For data analysis in the qualitative part, grounded theory was used to identify the indicators of the social media marketing model through MAXQDA software. Then, the initial model was designed using structural-interpretive modeling and MICMAC software. Structural equation modeling and LISREL software were used to validate and present the final model. The research findings indicated that the components of knowledge management, customer needs' assessment and customer engagement are the underlying components of the model that affect strategic marketing, competitive advantage, financial and non-financial performance as well as the return of the investment and lead to media effectiveness and customer loyalty.

Keywords

Social Media Marketing, Digital Marketing, Customer Engagement, Increased Return on Investment, Tehran Dairy Industry

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1. Introduction

Recent technological advances in the Internet and social media impelled the business owners to use social media to interact with their customers. Social media has presented new marketing tools to improve the efficiency and effectiveness of a corporate's return on investment. The social networks of corporates have changed into an important tool for social marketing and have created new challenges for the attraction and retain of customers (Zhang et al., 2017). Social media marketing is one of the new marketing methods which is within the field of digital marketing. In recent years, the use of digital marketing tools experienced rapid growth in the field of marketing. Many attempts have been carried out to produce and provide digital content to customers through social media. Social media marketing tries to maximize customer trust and engagement with the corporate's brand (Carlson et al., 2020).

Currently, the significance of using social media and marketing formed within its context has been increasing for organizations. Through social networks, companies seek to interact and communicate directly with end users. As a matter of fact, marketing activities through social networks has become a powerful platform for fast and effective access to a large number of potential customers (Jafari, 2019). Marketing activities through these media results in the production of information among users, which enable the user to predict the future of the business and consider the buying behavior of customers through the change of content produced (Raiat, et al., 2015). Therefore, it seems that in an age where there is ubiquitous internet access, presenting digital content to users through social media is on the agenda of companies. By providing this digital content through personal computers, smartphones, and social networks, businesses connect with their end users and invite them to a two-way communication (Seo and Park, 2018).

Social media based marketing is a process in business which produces and distributes pleasant and compelling content so that to attract the attention of specific target audience and engage them with the aim of motivating profitable actions in customers (Khaleghi et al., 2019). Although this method has had a significant growth in recent years, its roots go back to a paper entitled "Content is King". This paper was presented by Microsoft co-founder Bill Gates in 1996, in which Gates predicted that the future of business would be in content production (Müller and Christandl, 2019). In fact, nowadays marketing moves towards content production. Companies produce informative and useful content as they did in the past, but now the attempts are done to provide this content as fun within social media context (Parker et al., 2019).

The use of attractive content allows companies to build non-business relationships with customers. This marketing strategy, which is content marketing, is highly compatible with today's social media (Nouhi and Shakouri, 2019). The underlying idea of content marketing is also to communicate with potential consumers and existing customers in a non-business and friendly way. This approach means informing and encouraging users to use content in order to increase their awareness and change their perceptions about the product or brand (Sadrana et al., 2019). Calculating return on investment (ROI) in the social media is one of the most attractive parts of organizational marketing, which is regarded as a warning to marketing professionals so that to organize advertising and its related processes more effectively and create the required reviews in advertising content and processes. Therefore, marketing specialists should develop specific methods. The first step in calculating ROI is to plan for data collection and predict indexes as well as other things used during the process. Having a good perception of study requirements helps individuals to have a proper plan for calculating ROI. Given the complexities of measuring educational effectiveness and calculating ROI, developing a coherent program in data collection is very important since holding pre-tests and post-tests, receiving customer feedback, and etc. must be done at an appropriate time period (Mohamadpor Zarandi & Taghavi Fard, 2014).

Due to users' welcome of sites providing channels and services online, today one of the most effective and optimal methods in terms of low cost, efficiency and user engagement is the use of social media marketing (Yu and Hu, 2020). Generally, different studies show that many companies have entered the field of social media marketing, and digital marketing has become a new competitive arena for businesses. This is also true in Tehran's dairy industry and there is an intense competition between the companies of this industry within the context of social networks. On the other hand, it is necessary for the companies working in Tehran dairy industry to have a tool through which to differentiate their own

brand in the digital and online business environment so that they can succeed in this competitive field. Digital marketing provides companies with many tools and facilities. Social media marketing is one of these tools. For this purpose, through identifying the underlying categories and the causal relationships within them, the efforts will be made to provide a comprehensive model for the use of social media marketing to increase return on investment in Tehran dairy industry so that to turn consumers into loyal and permanent customers.

This study has two innovations. The first of which, according to the Oslo Manual includes four types of innovation: product innovation, process innovation, marketing innovation and organizational innovation. Marketing innovation has been used to promote the use of milk through social media marketing, which includes the implementation of new marketing methods or major changes in product design and packaging (introducing the product with a new look, shape and taste), position (methods and channels of new product sales), promotion (application of different techniques, media and brand) or pricing (use of new pricing strategy) (Fuzuni et al., 2017). Here, calculating the return on investment to evaluate the effectiveness of marketing and advertising in the given industry is mandatory. The second innovation is to identify the dimensions of social media marketing using three variables of effective antecedents, determining dimensions and effective consequences in the form of paradigm. Here, the financial and non-financial performance are in the strategies' section and actions and return on investment are within social media marketing implications.

2. Theoretical framework

To increase investment, make more profit and survive in a competitive market, big companies either invest in various projects or participate in various tenders corresponding to their organizational structure, which is definitely very important to choose the most economical project for both investment and bidding. Making a better decision and choosing the best project depends on many factors including current capital, short-term or long-term project, return on investment, etc. Each of which can be examined in terms of certainty and uncertainty and provided the results to the management. Since one of the most frequently used techniques in the economic evaluation of projects for decision making is the net present value method and its calculation base depends on ROI, hence the ROI should be analyzed in conditions of uncertainty so that to achieve more reliable results in decision making process (Salehi, 2020).

Social media marketing can be introduced as a new and evolving field in business including goods marketing, services, information and ideas through social media. These activities attract new customers, create awareness, increase sales, bring customer loyalty, and save time. In other words, it will be possible to make a financial investment with low cost and high output (Arman and Javid, 2016). Nowadays, the use of social media to perform marketing activities is an unquestionable requirement. In an age where individuals are learned to neglect traditional marketing messages, content marketing focuses on delivering meaningful messages, innovative content to provide a vision for the future, and helping the customer make informed decisions. Successful content marketing can help the consumer to take away the chaotic of marketing and thus make the consumer loyal to itself in the long run. Content marketing in the digital environment affects the time management of consumer and consequently shifts the corporate's net income level (Danaei and Moin, 2017).

Although the theoretical and field studies highlight the significance of social media marketing, the early studies indicate that it has not yet been properly investigated by researchers and a framework for its application has not been provided due to its novelty and infancy. One of the requirements for the effective implementation of marketing in the context of digital commerce is to identify its underlying categories, which requires an in-depth knowledge and analysis of this field (Shareef, et al., 2019). Generally, social media marketing is a relatively new topic in the field of marketing that refers to the importance of valuable and relevant content in the marketing process. On the other hand, the growth of digital media content on social networks and the development of multimedia content production tools by users has increased the attention to user-generated content. The existing trends and conducted studies emphasize the importance of studying and providing a framework for content marketing in the field of digital businesses (Chen and Lin, 2019).

According to statistics 2018, around four billion people use the Internet, which means that more than half of the world's population has access to the Internet. Meanwhile, Africa has the highest growth among Internet-connected users, experiencing nearly 20 percent growth year-to-year.

Table 1: The statistics of Internet and cyberspace users

Indicator	World population	Internet users	Social networks users	Mobile users	Mobile social networks users
No. (Billion)	7.593	4.021	3.196	5.135	2.958
Percentage	-	53%	42%	68%	39%

The number of Internet users in 2018 will be equal to 4.021 billion, which will experience 7 percent annual growth. The number of social media users in 2018 will be 3.196 billion, which is equivalent to an annual growth of 13 percent. The number of smartphone users in 2018 amounted to 135.5 billion with 4 percent growth year to year. The largest growth in digital statistics in 2018 will be related to the use of smartphone internet and mobile data internet; more than two-thirds of the world's population own a smartphone. Social networks are still one of the most important digital marketing trends in 2018, in a way that more than 3 billion users access social networks monthly and 9 out of 10 people access social networks via mobile (Kemp, 2018).

In the meantime, the increase in the growth of e-marketing compared to Internet marketing should also be considered. E-commerce is growing and will challenge many traditional business practices in the future. The changing and non-static environment requires the development of effective strategies to pave the way for the evolution of this phenomenon in our country. The statistics of e-market organization, from research institutes working in the field of e-commerce in collaboration with the United Nations, indicate that while North America is the pioneer of e-commerce, the growth rate of these exchanges in East Asia is far higher than anywhere else in the world. The volume of e-commerce transactions in North America (Canada, Mexico and the United States) by increasing about 14 percent reached to \$365 billion last year. While East Asia experienced a 33 percent growth to reach \$332 billion. Last year, 167 million people in the United States, or 53 percent of the population, shopped online. It is expected that this value reach 192 million or 56 percent of the US population by the end of 2018 (Shaltoni, et. al., 2018).

The growing trend of e-commerce within Iran can also be seen. Based on the statistics of the Central Bank, in 2015 a total of 52 thousand billion Tomans, equivalent to 17 billion dollars, online shopping has been done in the country. This number is related to purchases that have been made for both goods selection and payment via the Internet. According to global statistics and given the volume of e-commerce transactions, Iran is currently ranked 100th and its share of this e-commerce revenue in the worldwide has been less than 1.5 percent (Mohammadi, 2017). Thus, it seems that the importance of digital marketing in general, and content marketing in particular, has not yet been properly explained to in-house businesses. Therefore, in this study, the content marketing has been addressed as an effective.

3. Research Method

This study is a basic research aiming to validate the effective model of social media marketing in Tehran diary industry with a mixed approach. It is also a cross-sectional research based on data collection procedure.

The population and sample in the qualitative section and model design

The statistical population in the qualitative section included experts in Tehran diary industry. Generally, the interview process in qualitative analysis continued until theoretical saturation is reached (Ranjbar et al., 2012; Jalali, 2012; Alvani and Budlaei, 2012). The experts were theoretical experts (university professors) and experimental experts (managers of Tehran diary industry). The criterion to select experts was having at least ten years' experience in Tehran diary industry as well as having scientific writings in the relevant field in the form of books and papers. The sample was selected using targeted Sampling and snowball method. Sampling was continued till theoretical saturation was obtained and 13 eligible individuals participated in this study.

The population and sample in the quantitative section and model validation

The statistical population in the quantitative section included customers of Tehran diary industry. Using the Cochran's formula for indeterminate populations, 384 people were selected as sample size. Cluster and convenience sampling methods were used for sampling.

Data collection tools in the qualitative section

The main tools to collect data in the qualitative section were in-depth and semi-structured interviews. Four quantitative criteria were used to evaluate credibility, transferability, validity and reliability: Holstein coefficient, Scott's pi coefficient, Cohen's kappa coefficient and Krippendorff's alpha (Wang, 2011; Abedi, et al., 2011; Rangriz et al., 2017).

With the calculation of Holstein coefficient or percentage of agreement observation (PAO), the correlation of the experts' point of view was estimated to be 0.79. Given the drawbacks of the Holstein method, Scott's pi coefficient was also calculated, which was 0.68. The fourth index to assess the validity of qualitative research was Cohen kappa coefficient which was 0.64 in this study. Finally, Krippendorff's alpha was which was estimated to be 0.81.

Table 2: validity and reliability of data collection tools

Row	Quantitative Criteria	Standard Numeric Value	The Resulting Numerical Value	The Power Of Agreement
Good	Holstein coefficient	0.7 Greater than	0.79	Good
Medium	Scott's pi coefficient	0.6 Greater than	0.68	Medium
Medium	Cohen kappa coefficient	0.6 Greater than	0.64	Medium
Excellent	Krippendorff's alpha	0.8 Greater than	0.81	Excellent

Data collection tools in the quantitative section

The main tool to collect research data in the quantitative section was a questionnaire whose validity was confirmed by the calculation of AVE. Cronbach's alpha of the whole questionnaire was calculated as 0.836. Cronbach's alpha and composite reliability for all dimensions were also estimated. According to the results of research external model, convergent validity and composite reliability, the research hypotheses were tested and the results of the model implementation were reliable.

Data Analysis

Data analysis in the qualitative section

In the first step, in order to identify the underlying categories of social media marketing effectiveness, the qualitative data analysis method of grounded theory was done by the use of MaxQDA software.

Data Analysis in the quantitative section

In the second step, the structural-interpretive modeling method was used to design the initial model. Then, structural equation modeling method was used to validate the designed model. The software used in this section were MicMac and LISREL, respectively.

4. Research findings

Findings in qualitative section

Semi-structured specialized interviews with experts in Tehran dairy industry were done to provide a model for the effectiveness of social media marketing. At this stage, before the interview, three open questions were considered and new questions were asked during the interview process as expected. To get acquainted with the depth and scope of the data content, the data were read and re-read repeatedly and actively (searching for meanings and patterns). The main questions of interviews for designing an effective social media marketing model are presented in Table 3.

Table 3. Interview questions of designing effective media marketing social

Row	Interview questions
۱	What are the effective antecedents on social media marketing in order to increase the return on investment in Tehran diary industry?
۲	What are the defining dimensions of social media marketing to increase return on investment in Tehran diary industry?
۳	What are the effective results of using social media marketing to increase return on investment in Tehran diary industry?

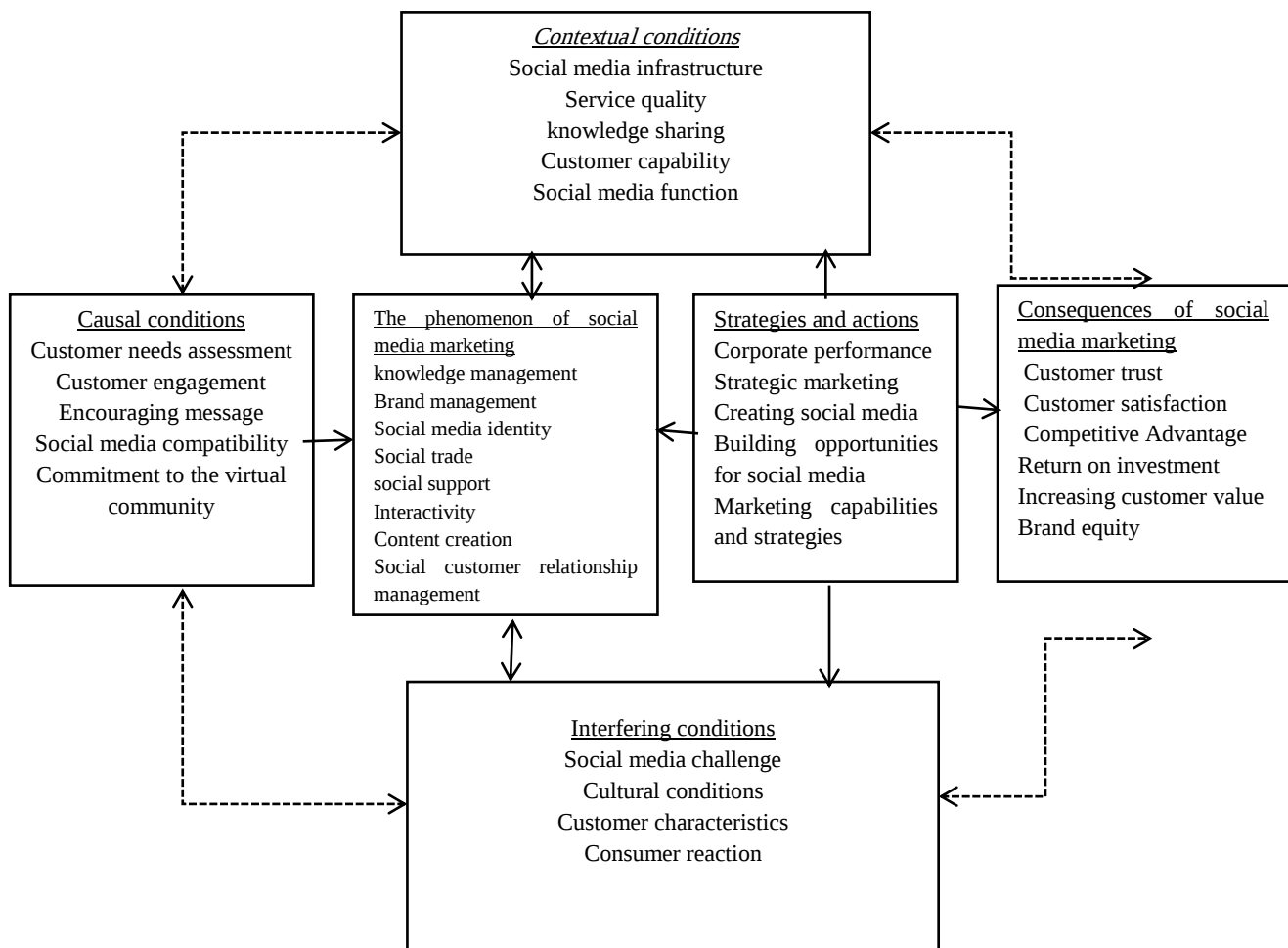
To apply the grounder theory of qualitative analysis as well as the content analysis of the interviews, at first the text of each interview was transcribed from the audio recorded from interview session and completed using the notes taken during the interview sessions. Then, by examining these texts carefully, for each of the prepared interviews firstly all independent ideas in the form of concepts and sub-categories were identified (open coding) and then from the combination of sub-categories, the main categories were constructed (axial coding) (Strauss and Corbin, 1997).

In continuation, the results of the first stage of Grounder theory qualitative analysis are presented below. To facilitate the analysis of the interviews in the coding process, an initial code was first designed for each of the interview questions. Then, each interview was studied many times and the initial codes were extracted. Sometimes the original codes were expressed metaphorically to better convey the subject. The data were then broken down into semantic units in the form of sentences and paragraphs related to the main meaning. The semantic units were also reviewed several times and then the appropriate codes of each semantic unit were written and the codes were classified based on semantic similarity. The analysis process was repeated in the same way with the addition of each interview. Interviews continued until theoretical saturation. The criterion to achieve theoretical saturation was to achieve repetition in the extracted codes. Theme analysis was performed based on the method proposed by Attride-Stirling (2001) including basic, organizing and comprehensive themes. The text of the interviews, which was previously entered into the software as a text file, was studied many times, and their key points were entered into MaxQDA software as code. In the open coding stage, 521 codes were identified. Finally, through axial coding, the indexes in the table below were obtained.

Table 4: Indexes of social media marketing model to increase return on investment in Tehran diary industry

Inclusive Categories	Organizing categories	Basic themes
Corporate on-financial performance	Brand Communities/ Commitment to the Virtual Community	Repurchase; recommendation to others; partnership with the corporate; continuity of communication with the corporate; attitudinal loyalty; behavioral loyalty, shared awareness; common religion and tradition; social commitments, creating online platforms for users; customer cooperation to maintain long-term relationships with the corporate
Customer trust	-	Technological trust; promotional trust; fundamental trust; advertising trust
Customer satisfaction	Consumer reaction	Emotional satisfaction; social satisfaction; habitual satisfaction; cognitive satisfaction; intention to buy, willingness to confirm; willingness to share; word of mouth electronics, acceptability
Corporate financial performance	Building opportunity for Social media challenges of social media / Media Social adaptation	The presence of many contacts in social media; the classification of target community through social media; accurate understanding of customer needs through the social media; brand reputation through social media, lack of skills in using social media; the harassment for social media contacts; the high cost of content production in the social media, the number of followers in corporate's website; quick reaction to negative reviews and comments about the corporate's products and services; accompanying; belonging; escape from boredom

Inclusive Categories	Organizing categories	Basic themes
Return on investment	Marketing capabilities	Growth (increasing market share; improving annual return on investment; increasing the number of employees), profitability (profitability objectives of the corporate; increasing overall revenue of the corporate), innovation and branding of products and services
Increase of customer value	Interactivity	Earned value; the eigenvalue of the relationship; the value of social networks, quick and effective response; direct relationship with the consumer
Infrastructure of social media	Content creation / social media functionality / cultural context	Social media platform; various tools for using social media; social media diversity; sharing consumer experience and feedback; sharing information by users; creating business and attracting the attention of the audience on the platforms; increasing the speed of information transfer to customers, information content; entertainment content; aesthetics, reducing marketing costs; customer trust; improving organizational culture; more sales; marketing and decision-making evaluation, culture building, taking into account the cultural conditions of consumers
Knowledge management	Knowledge sharing	Establishment and combination of knowledge structures; discipline database, blogs and social search; establishment of electronic businesses, ability to store information; quick and extensive notice about the objectives of the corporate; exchanging ideas and information online between people; creating information subscriptions and valuable content; user generated information; sharing information about a product
Social media identity	Social support	Sense-making to the human factor, the fundamental role of consumers, mutual identification between consumers and products and the formation of a permanent relationship between consumers and products and services, emotional support; Instrumental support; Information support
Competitive Advantage	Social customer relationship management	Being active; Being resource-oriented; Innovation in products and services, customer interaction plans; Customer information processes
Service quality	System quality /information quality	Usability; social interaction, necessary permissions, website content, accuracy of information, being up to date
Brand management	Brand equity	Willingness to pay more for the brand; brand development and expansion; brand selection and preference; brand purchase intention, brand awareness; brand image
Social trade	Customer capability	Social shopping; site support technologies, the ability to create social interactions; ability to express and share opinions; consumerism and providing practical comments, building trust and consumer satisfaction
Strategic management	Marketing strategies	Vision, mission, corporate goals, corporate virtual culture, corporate resources, change of advertising strategy, production of customers 'favorite concepts, production of customers' favorite concepts
Customer needs assessment	From the perspective of corporate / From the perspective of customers	Standing out from others; competitiveness; security; the effect of being public; customer interaction, emotional need; cognitive need; social need; habitual needs
Customer engagement	-	Cognitive engagement; Impact engagement; Activeness engagement
Encouraging message	Customer characteristics	Gender; age; level of education; familiarity with the social media, the quality of discussion; publicity of posts; attractive posts

Figure 1: Coding paradigm of social media marketing in Tehran diary industry

Considering the identified categories, actions can be taken to design an initial research model.

Findings of quantitative section

Designing a primary social media marketing model to increase return on investment in Tehran diary industry

According to the research model, the next step is to identify the internal relationships of social media marketing indexes in Tehran diary industry. The indexes of the first quarter (improvement) and the second quarter (continuation) are considered in this section. Structural-interpretive modeling method has been used to design the final model. The model of relationships between the identified indexes is determined using the model in Table 5.

Table 5: Signs used in structural - interpretive modeling

A symbol	V	A	X	O
Relation	Variable i affects j	Variable j affects i	Two-way relationship	Lack of relationship

By identifying the relationship between indexes, Structural Self-Interaction Matrix (SSIM) is formed.

Table 6- Structural self-interaction matrix of research

Main	C01	C02	C03	C04	C05	C06	C07	C08	C09	C10	C11	C12	C13	C14	C15	C16	C17
C01		A	V	A	O	O	O	V	A	X	O	O	O	O	O	V	O
C02			V	A	A	O	O	V	X	V	A	A	A	A	A	V	O
C03				O	O	O	O	V	A	A	O	O	O	O	O	X	O
C04					X	A	X	O	V	V	X	X	X	X	A	O	X
C05						A	A	O	V	O	X	O	X	O	O	O	X
C06							X	O	O	V	V	V	V	V	V	O	V
C07								O	O	O	V	V	V	X	V	O	V
C08									O	A	A	O	A	O	O	A	A
C09										V	A	A	A	A	A	V	A
C10											O	O	O	O	O	V	O
C11												X	X	X	X	O	X
C12													X	X	X	O	X
C13														X	A	O	X
C14															X	O	X
C15																V	V
C16																	O
C17																	

The reachability matrix (RM) is obtained by converting the structural self-interaction matrix into a zero-one dual-value matrix. In the reachability matrix, the elements of the original diameter are equal to one. Also for reassurance, secondary relationships should be controlled, i.e. if A leads to B and B leads to C, then A leads to C. That is, direct effects should be considered based on the secondary relationship, but if this doesn't happen in practice, the table should be corrected and the secondary relationship should also be shown. The following formula shows how to determine access method using the proximity matrix:

Equation 1: Determine the final access matrix

$$M = (A + I)^n$$

Matrix A is the initial access matrix of the identity matrix and the final access matrix. The matrix empowerment operation is carried out according to Boolean rules (Equation 2).

Equation 2: Boolean rules

$$1 \times 1 = 1; 1 + 1 = 1$$

(Azar et al., 2019, p. 262). The final access matrix is presented in Table 6.

Table 6: Reachability matrix after adaptation

X	C01	C02	C03	C04	C05	C06	C07	C08	C09	C10	C11	C12	C13	C14	C15	C16	C17
C01	1	0	1	0	0	0	0	1	0	1	0	0	0	0	0	1	0
C02	1	1	1	0	0	0	0	1	1	1	0	0	0	0	0	1	0
C03	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0
C04	1	1	0	1	1	0	1	0	1	1	1	1	1	1	0	0	1
C05	0	1	0	1	1	0	0	0	1	0	1	0	1	0	0	0	1
C06	0	0	0	1	1	1	1	0	0	1	1	1	1	1	1	0	1
C07	0	0	0	1	1	1	1	0	0	0	1	1	1	1	1	0	1
C08	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
C09	1	1	1	0	0	0	0	0	1	1	0	0	0	0	0	1	0
C10	1	0	1	0	0	0	0	1	0	1	0	0	0	0	0	1	0
C11	0	1	0	1	1	0	0	1	1	0	1	1	1	1	1	0	1
C12	0	1	0	1	0	0	0	0	1	0	1	1	1	1	1	0	1
C13	0	1	0	1	1	0	0	1	1	0	1	1	1	1	0	0	1
C14	0	1	0	1	0	0	1	0	1	0	1	1	1	1	1	0	1
C15	0	1	0	1	0	0	0	0	1	0	1	1	1	1	1	1	1
C16	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0
C17	0	0	0	1	1	0	0	1	1	0	1	1	1	1	0	0	1

After the reachability matrix is formed, "reachability set" and "antecedent set" must be identified in order to obtain equations and leveling of indexes. For the variable C_i , the reachability set (output) includes the variables that can be reached through the variable C_i . The antecedent set (input) includes the variables through which the variable C_i can be obtained.

The set of inputs and outputs for each element is used in the formation of Cross-Impact Matrix Multiplication applied to classification (MICMAC analysis). The MICMAC is presented in Table 7. In the ISM model, the interrelationships and impacts within measures and their relationship at different levels are well shown, which leads to a better understanding of decision-making space by managers. The driving power and dependence of the measures in the final access matrix is formed in order to determine the key measures. Figure 3 shows the driving power and dependence diagram for the studied variables.

Table 7- The driving power and dependence of social media marketing effectiveness indexes

	Research variables	driving power	dependence	Level
C01	Corporate financial performance	0	0	2
C02	Customer value	9	7	4
C03	Trust	6	3	2
C04	Strategic marketing	10	12	0
C05	Social trade	7	7	0
C06	Encouragement	3	11	6
C07	Customer engagement	0	10	6
C08	Return on investment	9	1	1
C09	Media infrastructure	10	6	4
C10	Corporate performance	6	0	3
C11	Service quality	10	11	0
C12	Brand management	9	9	0
C13	knowledge management	10	10	0
C14	Competitive Advantage	9	10	0
C15	Needs assessment	6	12	6
C16	Corporate non-financial performance	7	3	2
C17	Media identity	10	9	0

After determining the relationships and the level of the mentioned indexes, they can be designed as a model. For this purpose, at first the indexes are arranged according to their level from top to bottom, respectively. In this study, qualitative indexes are located at 5 levels. The final model of social media marketing effectiveness in Tehran diary industry with a mixed approach is shown in Figure 2.

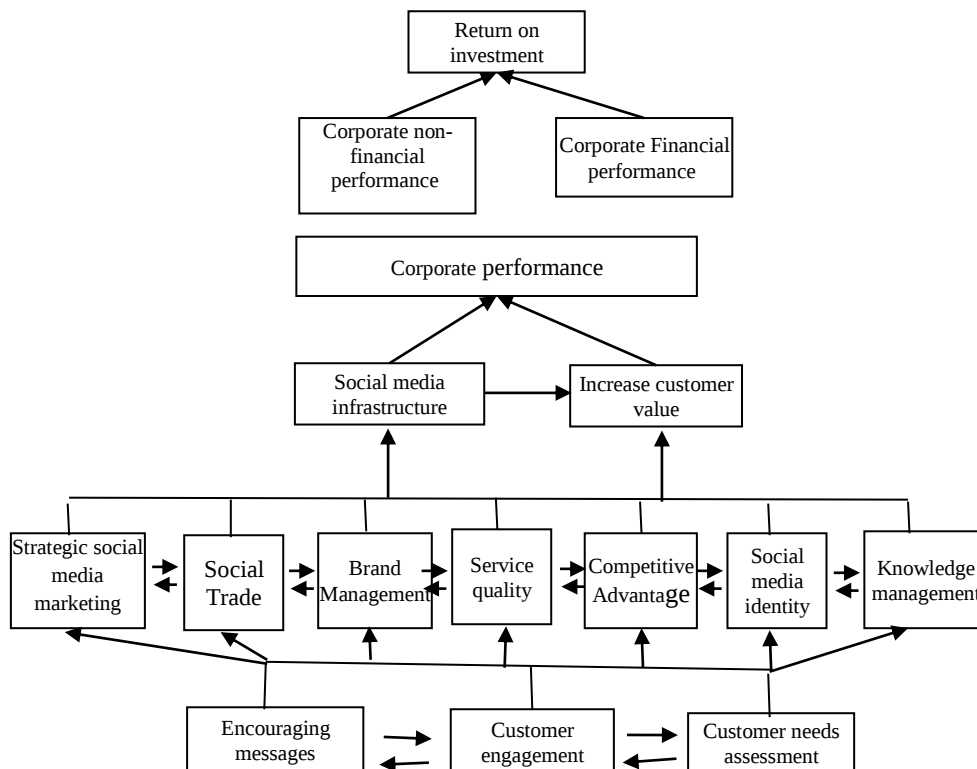


Figure 2: Social media marketing model to increase return on investment in the Tehran diary industry

5. Validation of social media marketing model to increase return on investment in Tehran dairy industry

After designing the initial model of social media marketing effectiveness in Tehran dairy industry, the structural equation model (SEM) method was used to validate and present the final model.

The final structural model of the study is shown in Figure 3. In this model, which is the output of LISREL software, a summary of the results related to the standard factor load of factor relations is presented. The t-statistic is also presented to measure the significance of the relationships.

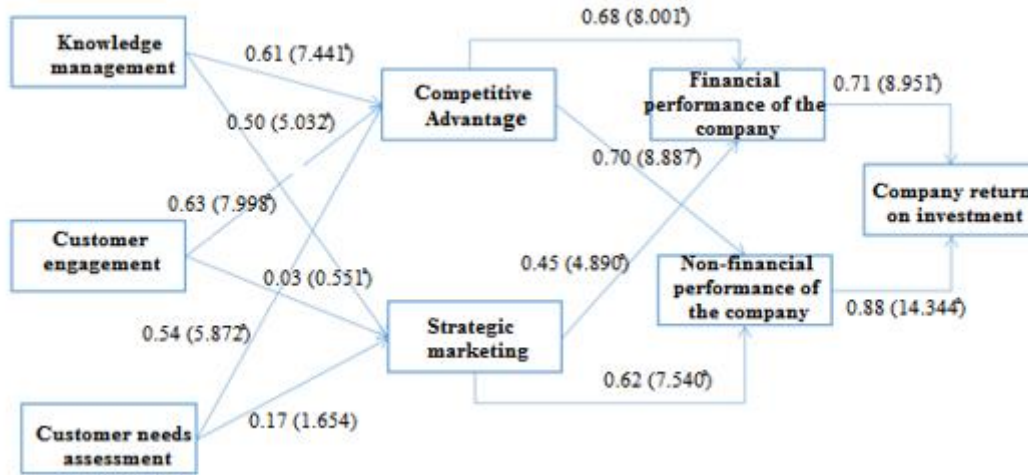


Figure 3: Validation of the research model

The standard factor load for the impact of customer engagement on competitive advantage is obtained as 0.63. Also, the value of t-statistic is 7.74, which is greater than the critical value of 1.96. Therefore, it can be claimed with 95% confidence that hypothesis 1 is confirmed. The standard factor load for the impact of customer engagement on strategic marketing is 0.03. Also, the value of t-statistic is 0.51, which is less than the critical value of 1.96. Therefore, it can be claimed with 95% confidence that hypothesis 2 is rejected. The standard factor load for the impact of customer needs assessment on competitive advantage is 0.54. Also, the value of t-statistic is 5.84, which is greater than the critical value of 1.96. Therefore, it can be claimed with 95% confidence that hypothesis 3 is confirmed. The standard factor load for the impact of customer needs assessment on strategic marketing is 0.17. Also, the value of t-statistic is 1.65, which is less than the critical value of 1.96. Therefore, it can be claimed with 95% confidence that hypothesis 4 is rejected. The standard factor load for the impact of knowledge management on competitive advantage is 0.61. Also, the value of t-statistic is 7.39, which is higher than the critical value of 1.96. Therefore, it can be claimed with 95% confidence that hypothesis 5 is confirmed. The standard factor load for the impact of knowledge management on strategic marketing is 0.50. Also, the value of t-statistic is 43955, which is greater than the critical value of 1.96. Therefore, it can be claimed with 95% confidence that hypothesis 6 is confirmed. The standard factor load for the impact of competitive advantage on the financial performance of the corporate is 0.68. Also, the value of t-statistic is 44048, which is greater than the critical value of 1.96. Therefore, it can be claimed with 95% confidence that hypothesis 7 is confirmed. The standard operating load for the impact of competitive advantage on the corporate non-financial performance is 0.70. Also, the value of t-statistic is 8.91, which is greater than the critical value of 1.96. Therefore, it can be claimed with 95% confidence that hypothesis 8 is confirmed. The standard factor load for the impact of strategic marketing on the corporate financial performance is 0.45. Also, the value of t-statistic is 4.89, which is greater than the critical value of 1.96. Therefore, it can be claimed with 95% confidence that hypothesis 9 is confirmed. The standard factor load for the impact of strategic marketing on the corporate non-financial performance is 0.62. Also, the value of t-statistic is 7.54, which is greater than the critical value of 1.96. Therefore, it can be claimed with 95% confidence that hypothesis 10 is confirmed.

The standard factor load for the impact of corporate financial performance on the return on investment is 0.71. Also, the value of t-statistic is 8.76, which is greater than the critical value of 1.96. Therefore, it can be claimed with 95% confidence that hypothesis 11 is confirmed.

The standard factor load for the impact of corporate non-financial performance on the return on investment is 0.88. Also, the value of t-statistic is 13.34, which is greater than the critical value of 1.96. Therefore, it can be claimed with 95% confidence that hypothesis 12 is confirmed.

Table 8: The Validation results of research final model

Hypothesis	independent variable	The variable	dependent variable	Standard values	The significance level	Result
H ₁	Customer engagement	Competitive Advantage		0.63	7.74	Confirmed
H ₂	Customer engagement	Strategic marketing		0.03	0.51	Rejected
H ₃	Customer needs assessment	Competitive Advantage		0.54	5.84	Confirmed
H ₄	Customer needs assessment	Strategic marketing		0.17	1.65	Rejected
H ₅	knowledge management	Competitive Advantage		0.61	7.39	Confirmed
H ₆	Knowledge management	Strategic marketing		0.50	5.04	Confirmed
H ₇	Competitive Advantage	Corporate financial performance		0.68	8.05	Confirmed
H ₈	Competitive Advantage	Corporate non-financial performance		0.70	8.91	Confirmed
H ₉	Strategic marketing	Corporate financial performance		0.45	4.89	Confirmed
H ₁₀	Strategic marketing	Corporate Non-financial performance		0.62	7.54	Confirmed
H ₁₁	Corporate financial performance	Return on investment		0.71	8.76	Confirmed
H ₁₂	Corporate non-financial performance	Return on investment		0.88	13.34	Confirmed

(source: Study results)

The structural model of the research is saturated in two stages. The normal chi-square value is 1.74, which is in the acceptable range of 1 to 5. The fit index of RSMEA and SRMR is 0.040 and 0.036, respectively, which is less than 0.05. The goodness of fit index (GFI), Bentler-Bonett Normed Fit Index (NFI) and Tucker-Lewis index (TLI) are also greater than 0.9, which are accepted in the given range.

$$\frac{\chi^2}{df} = \frac{1125.62}{887} = 1.27; RMSEA = 0.040; SRMR = 0.036; GFI = 0.92; NFI = 0.94; TLI = 0.92$$

Therefore, the research model has a good fit index and can be relied on results.

6. Discussion

One of the most important results of the development and popularity of social media in today's market is that many states are looking for new ways to promote the efficiency and effectiveness of their countries' domestic media so that they can integrate new communication technologies with the growing needs of audience. The growing use of the Internet resulted in the creation of social networks that provide the ability to express ideas and feelings by individuals in groups. Such phenomenon has the advantage to expand individual and group relationships without the need for face-to-face

communication. Social marketing is effective when the costs of current behavior are tangible by the community and people do not expect to receive early personal interests. At all times and all new boundaries, the process of social media marketing with its advantages and disadvantages develops businesses. Proper business management leads to prosperity, and neglecting it leads to job losses.

According to the presented model and based on driving power-dependence diagram, the variables of "needs assessment, customer engagement and encouraging messages" have high driving power and low dependency. These variables are identified as independent variables. High customer engagement leads to more motivation to collect information about the product and customer mental engagement is considered as a key determinant in the continuous search for product information. The customer's mental involvement in the purchase of products can be more or less, which in the case of everyday shopping is usually behavioral and the method of action, awareness and feeling is used. Milk consumption, which is an essential item of daily shopping, also follows this pattern. This is consistent with the results of a study by Hollebeek et al. (2014).

At the next level of the model, the variable of "corporate financial performance" has less driving power and dependence. This shows that this autonomous variable has little effect on this system. The variables of "loyalty, satisfaction, trust and return on investment" are also highly dependent and have little driving power. Thus, they are dependent variables and are greatly affected by other research variables. This is also stated in study results of Iankova et al. (2018) and Smith and Vardiabasis (2010), and therefore it is in line with the results of the present study. It should be noted that other variables in the research model are linkage variables. Based on the obtained results and their comparison with previous studies, it can be stated that the presentation of components like the establishment of knowledge management and strategic marketing in this study is regarded as the gap filling of previous studies.

Also, the validation results of the present research model indicated that the impact of customer engagement, customer needs' assessment and knowledge management with a standard factor load above 0.50 on the competitive advantage is evident. Also, the standard factor load above 0.60 indicated the impact of competitive advantage and strategic marketing on corporate non-financial performance. As stated in the theoretical framework section, researchers and marketing managers consider the component of customer engagement and needs assessment as an important category, thus it can be claimed that the results of this study also confirm this theory. Knowledge management and the effectiveness of social media organizational processes can be a powerful tool in serving knowledge management, in particular if there is a way to receive and share messages, ads and announcements online.

Also in the study results of Raiiat et al. (2015), Arman and Javid (2015), Roshandel Arbatani (2016), Nisara et al. (2018) and Labrecque (2014), the effective component of competitive advantage and corporate non-financial performance are stated which is consistent with the results of the present study.

Also, the results showed that the effect of corporate financial performance and non-financial performance on the return on investment with a standard factor load above 0.70, indicates the importance of these components in the return on investment. These results are consistent with the results of Tajvidi and Karami (2017), Wang and Kim (2017) and Parker et al. (2019) studies.

The findings of this study help the practitioners of Tehran dairy industry to better manage the effectiveness of social media marketing in the food industry. Some findings help Tehran dairy industry to identify key factors that lead to the implementation, productivity and effectiveness of social media marketing in Tehran dairy. The findings of this study also help senior and active managers of Tehran dairy to be able to allocate resources to the effectiveness of social media marketing in this field. In addition, by identifying key factors, management can focus on these factors and monitor and control them well.

7. Suggestions

According to the results of the research, practical suggestions are provided to managers working in the field of Tehran dairy industry: The corporate's marketing resources are one of the strategic and very valuable issues. As the importance of social media as a marketing tool increases, the need to find a framework for strategic actions becomes more significant. By following this framework or platform, a corporate can decide which type of marketing social media will be more appropriate to gain a

competitive advantage and increase its marketing efficiency. Social media marketing will make a significant contribution to the organization's progress in strategic decision making. In addition, knowing the framework of strategic actions is a guide for companies to help them act more distinctly. Another way to increase customer value is to combine customer knowledge and creativity in product customization. The difference with the previous category is that these measures not only enable customers to customize the products they have purchased, but also dairy companies can make customized products available to other customers. Also, the involvement of customers in participatory promotion and actions in this group are focused on the involvement of customers in the promotion process by participating in exams, tests or competitions. The development of the Internet and the formation of online social media have created a proper infrastructure for mass communication. Today, with the increase use and popularity of social media, many dairy companies use this communication infrastructure in order to achieve objectives like marketing, advertising, culture building and so on. Therefore, it is important to take into account social media infrastructure and strengthen it in order to gain a competitive advantage.

Since interaction with competitors on social media is very important, the corporate's return on investment includes listening to the customer and aims to monitor the voice of the customer or audience. Customer trust and satisfaction in the field of social media and taking measures in this field encourage customers to post their criticisms, suggestions, and concerns on social media applications related to sales trends. This can also increase the corporate non-financial performance. actively interacts with customers to send their criticisms, suggestions and concerns in social media programs related to the sales process. This can also increase the corporate non-financial performance.

This study has also some limitations. Lack of sufficient scientific support and localized knowledge about the social media marketing model in Tehran's dairy industry, the novelty of the subject in terms of conceptualizing the social media marketing in Tehran's dairy industry has created limitations, too. Lack of operational experience and accurate statistics in the field of social media marketing in Tehran's dairy industry is another major constraint.

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