

## Analyzing the Brand-Customer Relationship on Instagram with a Mixed Approach

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### Abstract

Purpose: The present study aims to provide a model for analyzing the brand-customer relationship on Instagram in the cosmetics industry. In this study, qualitative and quantitative methods have been used to analyze the data. The statistical population in the qualitative phase includes brand marketing experts and in the quantitative phase consists of customers of the cosmetics industry. Sampling has been non-probabilistic and purposeful in the qualitative phase, and random using Cochran formula in the quantitative phase. Interviews and questionnaires were utilized as data collection tools. Content analysis was used to analyze specialized interviews. Moreover, the identified indicators were validated by Fuzzy Delphi method. Then, using the structural-interpretive method, the initial model is designed and finally, using the partial least squares method, the final model of the research is presented. The analysis of research data in qualitative quantitative phases has been done with MaxQDA software and Smart PLS software, respectively. In order to achieve the objectives of the

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study, a set of practical indicators of brand-customer relationship were identified on Instagram through analyzing experts' interviews. The findings reveal that brand performance influences the positioning and creating of brand and brand value. Brand awareness and brand personality are among the indicators that affect brand performance. Furthermore, marketing strategy affects the quality of services. It is recommended that various entertainment tools such as videos, applications, in cyberspace on Instagram be posted and create a happy and fun atmosphere in cyberspace along with humor, contest design, and puzzles related to the type of activity and brands.

**Keywords:** Brand-customer relationship, Instagram, Mixed Approach.

## 1. Introduction

Customer relationship is a key factor in marketing, and what matters in customer interaction is the set of tasks which increases the relationship between the customer and the brand in the social media, and introduces brands better and more in cyberspace (Giovanis & Athanasopoulou, 2019). In the recent decade, social networks have increasingly become a means of communication and business. Businesses have found social networks as a way to attract customers (Shafie, Rahmatabadi, Soleimanzadeh, 2019). Nowadays, communication technologies and expert systems of information have provided the possibility of establishing wider communication with customers (Shaffers, 2015). The spread of social networks have led the companies and brands to look for new ways to interact with their customers. There are currently about four billion, about 60% of the world's population, who use the Internet (Itu, 2018). Therefore, a new form of communication between customers and companies has formed, and customers have become an active and important communication sector of companies. Social media provide an opportunity for communication, sharing and exchange of information with customers (Cho & Hwang, 2020). Currently, over 90 companies use social media marketing to connect to customers and as their use grows, a stronger and closer connection between companies and customers is established (Alalwan, Rana, Dwivedi, & Algharabat, 2017).

The Internet acts as a tool for organizations to strengthen their relationship with consumers and using strategies of social media, such as virtual communities, they build their brand (Perren et al., 2018). Shaping the processes of the socialization of human beings in social relations and the empowerment of consumers are among the changes that have taken place during this period (Acar & Puntoni, 2016). With the growth and development of markets and the expansion of communication tools, other traditional methods cannot fulfill the requirements. Therefore, new marketing methods have entered the market with the aim of reducing costs and increasing competitive advantage (Gomez et al, 2019). The Internet and social media have become an integral part of people's daily lives since, in the current situation, consumers are the main factors determining the success and failure of brands in the competitive market (Wu et al, 2010). Predicting and interpreting customers' behavior in interaction with the

brand is one of the duties of marketers (Hosseini, Samiei, Ahmadi, 2018). Instagram is one of the most popular domestic and foreign social media in Iran with a focus on sharing photos and videos among online users (Ismailpour & Kabirifard, 2019).

Advances in how people interact with each other have created opportunities and threats for brand-customer relationship management. Consumers spend a lot of time on virtual networks such as Instagram, Facebook, YouTube, and Twitter (Ledikwe et al, 2019). Since users generate content through interaction, they obtain information and consciousness about their desired product through using the Internet. Therefore, businesses should be looking for a better environment that is faster and cheaper to cover more customers. Instagram is one of the most widely used virtual networks and has attracted many users due to the good features such as free photo and video sharing, unlimited and fast information exchange. It is worth noting that despite the popularity of Instagram among its users, it has not yet been able to gain a commercial position among its users and only its entertainment aspect is considered. Thus, how to properly brand, offer, and sell products and services on Instagram social networks is an issue that has not yet been resolved (Sharma et al, 2020).

Since the cosmetic products have a special sensitivity among users, the type of supplying and building trust among Instagram users is an important issue that has been overlooked. Three main questions are proposed in this study; to what extent does the customer brand matter? What are the main factors of brand-customer relationship? What are the factors change the customer's perspective and turning him into a committed and loyal customer? Currently, many studies in the field of brand, customer, customer relationship management and customer's perspective have been separately carried out in social networks. Regarding the previous research, the gap is obvious; that is lack of adequate awareness and knowledge about Instagram.

How and in what ways does the customer communicate with the brand, and in what space can s/he obtain appropriate and sufficient information? How can the Instagram cyberspace be used to introduce risk-taking products such as cosmetics that are directly related to the customer's senses to attract more customers? What factors help the customer to get a positive mental background after one purchase and to be a loyal customer and use that product and service in the long run

and with complete satisfaction? With regard to the legal and religious restrictions in the country, how can a legal relationship with a positive mentality be established with a customer? In the current study, these questions have been answered.

## **2. Theoretical foundations and research background**

### **2.1. Brand-customer relationship**

In the current marketing environment, maintaining a competitive advantage based on product differentiation is often a tedious race to the finishing line. As a result, organizations can reveal the relationship between customers and the brand (Hsieh & Wei, 2017). Researchers believe that the type of customers' relationship with the brand is very important. Communities see the brand as similar to how they communicate in their personal lives (Kennedy & Guzmán, 2020). The Internet has fundamentally changed the way information is received. Therefore, close customer relationship with brand is effective for increasing brand engagement. To achieve this, companies allow customers to interact with the brand (Nisar & Whitehead, 2016). According to Aaker, like human beings, brands have some characteristics. Keller and Lehmann (2006) have introduced five characteristics of a brand such as honesty, excitement, competence, maturity, and diligence.

Social network - cyberspace is a set of sites where users can share interests, ideas and activities with each other. In fact, utilizing a search engine and creating features such as conversation, audio and video transmissions, a social network provides its users with the ability to communicate individually and in groups (Ghasemi & Ghadimi, 2011). According to Lee (2019), in social networks, members can search for or share new information and experiences. The main difference between the traditional and modern forms of communication is in the type of content created by users ( Components that are discussed in this type of marketing include brand awareness, brand attitude, mental norms of brand, perceived brand value, risk, customer satisfaction, brand identity, social identity, brand loyalty, brand trust, interaction with society, personal and social identity of the brand, quality of customer-brand communication, social networks, level of brand interaction and participation, quality of information, online marketing and virtual networks (; Rahimnia, Ramezani, & Zargarani, 2019; Soltaninejad & Nowruzi, 2016; Roshandel, 2016; Poursaid, 1394).

## **2.2. Marketing strategy: Effective marketing**

Milani (2016) studied the effect of using various marketing strategies on social networks on gaining customers' trust. The purpose of this study was to investigate the impact of using a variety of marketing strategies in social networks on gaining customers' trust. Milani's research is in common with the present research in the field of effectiveness and significance of marketing strategy. The innovation of the present study is the use of the present variable along with the new variables. According to the concepts mentioned, the following hypothesis was stated:

Hypothesis 1: "Marketing strategy" has a positive and significant effect on "effective marketing".

## **2.3. Effective marketing: Service quality**

Rahimnia and Lotfi (2015) studied about the chain of global brand value; the effect of brand relationship, service quality and brand experience with a trust in and loyalty to the brand. The purpose of this study was to investigate the role of factors affecting the most important output with the value of loyalty to a brand that is more stable and strategic than other cases. The results of that research showed the positive effect of 'brand experience', 'quality service' and 'brand relevance' on 'brand trust' and 'brand loyalty'. Bahri and Shahroodi (2014) conducted a research entitled prioritizing the factors affecting brand marketing to create brand equity. The goals of the research were identifying the criteria that affect brand marketing strategies and prioritizing them in order to create and promote special brand value. In this research, price strategy, people and distribution channel had the highest priority. Regarding to the commonality observed in the two variables of "effective marketing" and "service quality", the research innovation compared to previous studies is examining both variables in this research. Moreover, the effect and significance of both variables are emphasized in this research. Based on studies, research hypothesis was proposed:

Hypothesis 2: "Effective marketing" has a positive and significant effect on "service quality".

## **2.4. Service quality: Brand awareness**

Rahimnia and Lotfi (2015) conducted a review research dealing with the chain of global brand value; the effect of brand relationship,

service quality, and brand experience on brand trust and brand loyalty. The purpose of this study was to investigate the role of factors affecting the most important valuable output that is brand loyalty, which is more sustainable and strategic than others. Another study entitled the effect of brand awareness on store brand identity was carried out by Soltaninejad and Nowruz (2016). The results of this study showed that with increasing brand awareness, customer functional risk decreases. Customer satisfaction has also a positive and significant effect on brand identity. According to previous studies, the two variables of service quality and awareness of brand is extracted from qualitative phase of interviews as two important research variables and after evaluating the quantitative phase, in the final analysis both variables were approved.

Hypothesis 3: "Service quality" has a positive and significant effect on "brand awareness."

### **2.5. Quality of service: Brand personality**

Cheri (2016) in a study entitled The consequences of customer brand interaction examined the role of communication quality. In previous studies, the role of knowledge in the quality of customer communication and the impact of brand on customer interaction have been less mentioned. Cheri's research aimed at investigating the impact of diversity and application of smartphones on the quality of communication and customer interaction. The research findings revealed that the higher the level of satisfaction with, trust in and commitment to the brand, the greater the level of interaction. Andonova (2016) conducted a study on customer interaction and the perceived benefits and the impact of individual personality and brand personality on behavioral interaction. In order to propose the fourth hypothesis it was attempted to examine the internal and external factors affecting the interaction. This research can help marketers identify customers with different tastes. In interviews with experts, "brand quality" and "brand personality" are introduced as two important variables. Based on this, the fourth hypothesis was proposed:

Hypothesis 4: "Quality of service" has a positive and significant effect on "brand personality."

### **2.6. Brand awareness: Brand performance**

In a study conducted by Soltaninejad and Nowruzi (2016) under the title of the effect of brand awareness on store brand identity. The main purpose of brand management is to create and maintain brand awareness, so the significance of this research is on the impact of brand awareness on brand identity. According to previous research, in the present study, from the perspective of experts and customers, brand awareness affects brand performance and is considered as one of the important factors in brand-customer relationship management. Because brand awareness has a direct effect on brand performance, the fifth hypothesis was formed.

Hypothesis 5: "Brand awareness" has a positive and significant effect on "brand performance."

### **2.7. Brand personality: Brand performance**

Kim et al. (2020) conducted a study entitled " The effect of online social networks on brand equity and brand performance in the market with an emphasis on the desire to use online social networks". The main purpose of the study is to investigate the impact of online social networks on brand equity and brand performance in the market with an emphasis on the desire to use online social networks with mobile phone brands. Findings indicate that there is a positive relationship between the characteristics of online social networks and brand performance in the market, the desire to use online networks, and customer-based brand equity (Luo & Zhang, 2013).The previous research and present research have something in common in the 'brand performance'. In the present study, two variables 'brand personality' and 'brand performance' were also considered as influential factors that have a positive and significant effect on brand-customer relationship management. On this basis, the sixth hypothesis was formed.

Hypothesis 6: "Brand personality" has a positive and significant effect on "brand performance."

### **2.8. Brand performance: Brand positioning**

Rastegar and Amini Khiabani (2019), in a study entitled " success based on brand performance and market control", investigated the role of moderation in the management ability of brand. This research is designed to explain success based on brand performance and market

control. To this end, the brand performance plays a role in creating a valuable brand and the role of market control in regulating consumer behavior. The research results show that creating a valuable brand is a way to achieve success in brand-based organizations while marketing-based organizations use the regulation of customer behavior to succeed. This research suggests that the organization should adopt only one of the success strategies. The results of Rastegar's and Amini Khiabani's research are consistent with the seventh hypothesis of the research.

Hypothesis 7: "Brand performance" has a positive and significant effect on "brand positioning."

Innovation of the present study: Brand performance has a positive effect on the market in creating brand value. Brand positioning has been considered unimportant to some extent in previous research. However, in the view of the respondents of the current research, brand positioning has been introduced as an important factor (Schamari & Schaefer, 2015).

### **2.9. Brand performance: Creating brand value**

Hasani, Samiei and Ahmadi (2018) in a research entitled "The impact of social media marketing on consumer behavior", examined the role of brand equity, the quality of the brand relationship, and the attitude towards the brand. The purpose of this study was to investigate the impact of social media on customer behavior through brand equity, brand relationship quality, and brand attitude. Social media marketing has a positive effect on brand equity and brand quality. The confirmed hypotheses of this study showed that the value and quality of the brand has a positive and significant effect on brand attitude and all variables affect customer behavior. In line with the importance of brand relationship-customer and its effects on Instagram and reviewing the background of previous research, the eighth hypothesis was proposed:

Hypothesis 7: "Brand performance" has a positive and significant effect on "creating brand value".

The innovation of the present study is paying attention to brand performance in creating brand value, which in previous studies has been an individual variable.

### **2.10. Instagram**

Instagram is the fastest form of social media where users post photos and videos. This media is quickly growing. This type of communication is relatively new and has attracted millions of people and is witnessing its rapid growth among users. Apparently, little research has been done in this area. Manchanda, Packard, and Pattabhiramaiah (2014) analyzed Instagram quantitatively and qualitatively and gained insights into different types of Instagram users, categorization of popular photos and about Instagram content, in general. Portal et al (2019), carried out a study entitled "customer participation in industry brand pages Instagram cosmetics". He believes that customer attraction measures in social media marketing is one of the most important measures adopted in social media today. The purpose of this quantitative study was to find out the level of customer participation in the cosmetics industry of brand pages of Instagram. The results showed that the content pages with the images and videos of the products have a relatively positive impact on customer participation. It was also found that very exciting posts with positive feedback are positively related with number of comments but are negatively related with the number of Likes. This study shows how Instagram is used in the cosmetics industry.

## **3. Research methodology**

### **3.1. Research typology**

The present study is a basic one that aims at providing a model of brand-customer relationship analysis on Instagram in the cosmetics and hygiene industry. From a philosophical point of view, this study falls into the category of empirical research, with a deductive approach.

In terms of data type, the present study was conducted with a mixed approach (quantitative-qualitative) and with regard to the data collection time it falls into the category of survey-cross-sectional research. The main tools for data collection are semi-structured interviews and questionnaire. The study of the country's cosmetics industry has the spatial scope of all those who have an account on Instagram and buy online purchases, especially cosmetics.

### 2.3. Population, sample and sampling method

Since this study has been done by qualitative-quantitative methods, the statistical population is divided into two categories. The statistical population of this research in the qualitative section includes theoretical experts (university professors) and experimental experts (managers of the cosmetics industry). The sample size recommended in qualitative studies and interviews is usually between 5 and 25 participants. In general, the interview process in qualitative analysis continues until theoretical saturation is reached (Ranjbar, Haghdoost, Salsali, Khoshdel, Soleimani, & Bahrami, 2012). Furthermore, non-probabilistic and purposeful sampling methods are recommended for experts sampling (Naderifar, Goli, & Gholjayi, 2017).

The criteria for selecting academic experts are at least ten years of experience in marketing and branding or research studies like writing books and articles. The criteria for the selection of experimental experts are five years of experience in online businesses of cosmetics brands. Qualitative sampling was performed purposefully and continued until theoretical saturation was achieved. Accordingly, 20 eligible individuals participated in the interview.

The statistical population in quantitative phase also included all Instagram users who had experience of buying cosmetics online. The Cochran's formula was used to calculate the sample size. Similar to studies (e.g., Papas, 2016) conducted on online customers, the sample size was estimated to be 400 participants.

$$n = \frac{z^2 pq}{d^2} = \frac{(1.96)^2 (0.5)(0.5)}{(0.05)^2} = \frac{0.9604}{0.0025} = 384 \approx 400$$

For sampling, the Instagram managers of the cosmetics sales channels were communicated with. Then, the online questionnaire link was given to the customers with online shopping experience. This process continued until 400 valid questionnaires could be accessed.

### 3.3. Methods and tools of data collection

Interviews and questionnaires were used to collect the research data. Since mixed studies aim at exploration and designing pattern, semi-structured interviews are more suitable for the qualitative phase. In the current study, a semi-structured interview and a Likert scale questionnaire were used in the qualitative and quantitative phases,

respectively. Validity of interviews was evaluated through the use of Holstein method. The degree of correlation of the experts' opinion was done by the calculation of the Holstein coefficient or observed percentage of agreement which was 0.814, indicating acceptable reliability and agreement in coding and is a significant value. Cronbach's alpha of all dimensions obtained was above 0.7, so the questionnaire enjoyed a good reliability estimate.

### **3.4. Data analysis methods**

Data analysis methods are divided into qualitative and quantitative categories. Since quantitative methods alone cannot explore the complexities of the issues and elements of the brand-customer relationship pattern without bias, a combination of qualitative-quantitative methods was used. In the qualitative phase, using content analysis method, main and sub-components and the brand-customer relationship were specified. The indices were then validated using the fuzzy Delphi method. Next, the initial model was designed using the structural-interpretive method, and finally, the final research model was presented using the partial least squares (PLS) regression. Max QDE software, MATLAB software, Mick Mac software, Smart PLS were used to analyze the content analysis, fuzzy Delphi, structural-interpretive, and the partial least squares (PLS) regression, respectively.

## **4. Data Analysis**

### **4.1. Demographic data**

In the qualitative phase, the opinions of 20 (four male & 16 female) experts were used. In terms of age, they were in three groups of age range below 35 (5), 35-45 (8), over 45 (7). Regarding academic degree, three, eleven, and six experts had bachelor's degree, master's degree, and PhD, respectively. Finally, with regard to the work experience, five experts had 10 to 15 years of work experience and 15 experts had more than 15 years of experience in this industry.

In the quantitative phase, the views of 400 customers were collected. The statistical population of the quantitative phase of this research includes cosmetics customers. Customer frequency was assessed based on demographic characteristics. In terms of gender, 315 (79%) customers were female and 85 (21%) were male. Regarding their age, 126 people (24%) were under 30 years old, 161

people (40%) were between 30 and 40 years old, and 101 people (25%) were over 40 years old. with regard to their academic degrees, 98 (25%) of the customers had post-diploma degree and lower. 148 (37%) of customers also had bachelor's degree, 138 (35%) of the customers had master's degree, and 16 (4%) of the clients had PhD. Based on work experience, 157 people (39%) of customers had less than 5 years of work experience, 138 people (35%) of customers had 5 to 10 years of shopping experience, and 105 customers (24%) had more than 10 years of experience.

#### 4-2- Content analysis

Semi-structured interviews with eight open-ended questions were conducted by Instagram cosmetics page experts to provide a model for brand-customer relationship in Instagram cyberspace. During the interviews, it was anticipated that new questions would be asked according to the type of answers and in order to direct the interview process. The results of the interviews were analyzed by content analysis method. The extracted data was broken down into meaningful sections and appropriate codes of each semantic unit were written, and these codes were classified based on the semantic similarity of the concepts. The interviews continued until the theoretical saturation stage was reached. The criterion for achieving theoretical saturation was finding duplicate concepts in extractive code. After the open coding stage, 46 indicators were achieved.

The theme analysis was performed based on the method proposed by Sterling (2001) including basic, organizing, and comprehensive themes. The text of the interviews, which was previously entered into the software as a text file, was read many times, and their key points were entered into MaxQDA software as code. The indicators of the brand-customer relationship pattern extracted from the interviews by content analysis method are presented in Table 1.

**Table 1- Indicators of brand-customer relationship pattern in Instagram based on content analysis**

Comprehensive	Organizing	Basic themes
Digital Marketing	Developing a strategy	Content production strategy, knowledge of the rules and methods of content marketing, identifying when the target market is active, defining marketing goals, intelligent marketing strategies

Comprehensive	Organizing	Basic themes
	Influential Marketing (Effective marketing)	Choosing effective influencers, finding a specific brand audience using a celebrity, communicating with customers through the right influencers, using social media star
	Quality and development of online services	Strengthening communication and interaction skills, attracting new audiences, provide warranties for products, identifying customer needs, considering discounts for customers, delivering products on time and 24-hour support, paying attention to features such as age, gender, revenue and user interests, holding events And bidding, implementing CRM (customer relationship management)
Digital Branding	Brand awareness	Facilitating customer interaction, redefining brand position, product visibility (in person), providing appropriate and adequate advice
	Brand personality	Developing human resources, providing knowledge-based competitiveness, appreciating regular customers
	Brand performance	Gaining a competitive advantage, gaining users' trust and confidence, providing security and user satisfaction
	Creating brand value	having variety and existence of alternatives for products, having reasonable price and availability of the product, branding based on customer demands, displaying products far from exaggeration, historicity and originality of the product
Brand positioning on Instagram	Brand positioning on Instagram	Using new features such as IGTV, impressive photos and videos, writing pragmatic captions, the importance of using stories, creating promotional clips, considering the importance of Live Instagram, increasing audience participation, producing attractive and useful content, holding contests and giving gifts

### 3. Fuzzy Delphi

The identified indicators were based on the researchers' perception and inference from the interviews conducted with the help of content analysis. The fuzzy Delphi approach has been used to ensure the accuracy of the identified indicators and the selection of the final indicators. To fuzzy the experts' point of view, a spectrum of seven

degrees was used. The experts' views on each index were collected and their fuzzy mean was calculated. After de-fuzzing the mean values by the center method, the indices that scored less than 0.7 were removed. Based on the results of the first round, three indicators were eliminated. Items with a score above 0.7 were used for the second round. Fuzzy Delphi analysis continued for the remaining indicators in the second round. At this stage, 42 indicators were evaluated based on the views of experts. In the second round, no questions were asked, which signals a sign that the Delphi rounds are over. In general, one approach to the end Delphi is to compare the average scores of the first and second round questions. If the difference between the two stages is much smaller than the threshold (0.2), the polling process will stop (Cheng & Lin, 2009; Habibi & Adnvar, 2017). A summary of the results of the fuzzy Delphi technique is presented in Table 2.

**Table 2. Summary of fuzzy Delphi technique results**

Indices	Results: Round 1	Results: Round 2	Diff.	Result
Knowing the variety and the existence of alternatives to products	(0.75,0.905,0.97)	(0.605,0.815,0.93)	0.092	Agreed
Considering reasonable price and product availability	(0.59,0.805,0.93)	(0.76,0.91,0.98)	0.108	Agreed
Branding based on customer demands	(0.79,0.93,0.98)	(0.63,0.83,0.94)	0.1	Agreed
Displaying products away from exaggeration	(0.68,0.86,0.96)	(0.71,0.88,0.96)	0.017	Agreed
Having date and originality of the product	(0.745,0.9,0.98)	(0.705,0.875,0.97)	0.025	Agreed
Facilitating customer relationship interaction	(0.775,0.92,0.98)	(0.71,0.88,0.96)	0.042	Agreed
Redefining brand position	(0.735,0.895,0.97)	(0.72,0.885,0.97)	0.009	Agreed
Having product location (in person)	(0.735,0.895,0.97)	(0.76,0.91,0.98)	0.016	Agreed
Providing appropriate and sufficient advice	(0.735,0.895,0.97)	(0.75,0.905,0.97)	0.008	Agreed
Developing human recourses	(0.67,0.855,0.95)	(0.8,0.935,0.99)	0.083	Agreed
Having knowledge-based competitiveness	(0.67,0.855,0.95)	(0.73,0.89,0.98)	0.042	Agreed

Indices	Results: Round 1	Results: Round 2	Diff.	Result
Appreciating of regular customers	(0.8,0.935,0.99)	(0.72,0.885,0.97)	0.05	Agreed
Gaining a competitive advantage	(0.67,0.855,0.95)	(0.71,0.88,0.96)	0.025	Agreed
Gaining users' trust and confidence	(0.75,0.905,0.97)	(0.735,0.895,0.97)	0.008	Agreed
Providing users' security and satisfaction	(0.765,0.915,0.97)	(0.685,0.865,0.95)	0.05	Agreed
Strengthening communication and interactive skills	(0.71,0.88,0.96)	(0.655,0.845,0.95)	0.033	Agreed
Attracting new audiences	(0.71,0.88,0.96)	(0.72,0.885,0.97)	0.008	Agreed
Providing warranty for products	(0.75,0.905,0.97)	(0.77,0.915,0.99)	0.017	Agreed
Recognizing the needs of customers	(0.685,0.865,0.95)	(0.67,0.855,0.95)	0.008	Agreed
Considering discounts for customers	(0.75,0.905,0.97)	(0.76,0.91,0.98)	0.008	Agreed
Having timely delivery of products and 24-hour support	(0.67,0.855,0.95)	(0.71,0.88,0.96)	0.025	Agreed
Having demographic features of the users	(0.695,0.87,0.96)	(0.68,0.86,0.96)	0.009	Agreed
Holding events and offering bids	(0.685,0.865,0.95)	(0.71,0.88,0.96)	0.017	Agreed
Implementing CRM (customer relationship management)	(0.72,0.885,0.97)	(0.745,0.9,0.98)	0.017	Agreed
Selecting influential influencers	(0.76,0.91,0.98)	(0.8,0.935,0.99)	0.025	Agreed
Finding a brand audience using a celebrity	(0.74,0.9,0.96)	(0.72,0.885,0.97)	0.009	Agreed
Communicating with customers through the right influencers	(0.71,0.88,0.96)	(0.735,0.895,0.97)	0.017	Agreed
Using social media stars	(0.76,0.91,0.98)	(0.745,0.9,0.98)	0.008	Agreed
Using new features like IGTV	(0.68,0.86,0.96)	(0.655,0.845,0.95)	0.016	Agreed
knowing the impact of photos and videos	(0.665,0.85,0.96)	(0.79,0.93,0.98)	0.075	Agreed

Indices	Results: Round 1	Results: Round 2	Diff.	Result
Writing pragmatic captions	(0.71,0.88,0.96)	(0.63,0.83,0.94)	0.05	Agreed
Considering the importance of using stories	(0.705,0.875,0.97)	(0.8,0.935,0.99)	0.058	Agreed
Creating promotional clips	(0.745,0.9,0.98)	(0.735,0.895,0.97)	0.008	Agreed
Knowing the importance of Live Instagram	(0.76,0.91,0.98)	(0.735,0.895,0.97)	0.016	Agreed
Increasing audience participation	(0.655,0.845,0.95)	(0.755,0.905,0.99)	0.066	Agreed
Generating engaging and functional content	(0.735,0.895,0.97)	(0.65,0.84,0.96)	0.05	Agreed
Holding competitions and giving gifts	(0.71,0.88,0.96)	(0.655,0.845,0.95)	0.033	Agreed
Having content production strategy	(0.775,0.92,0.98)	(0.68,0.86,0.96)	0.59	Agreed
Being aware of the rules and methods of content marketing	(0.77,0.915,0.99)	(0.685,0.865,0.95)	0.59	Agreed
Identifying when the target market is active	(0.675,0.855,0.97)	(0.625,0.825,0.95)	0.33	Agreed
Identifying marketing goals	(0.735,0.895,0.97)	(0.65,0.84,0.96)	0.05	Agreed
Holding intelligent marketing strategies	(0.655,0.845,0.95)	(0.755,0.905,0.99)	0.066	Agreed

Based on the results in Table 2, it was found that in all cases the difference is less than 0.2, so the Delphi rounds can be completed. In this way, 42 indicators were selected.

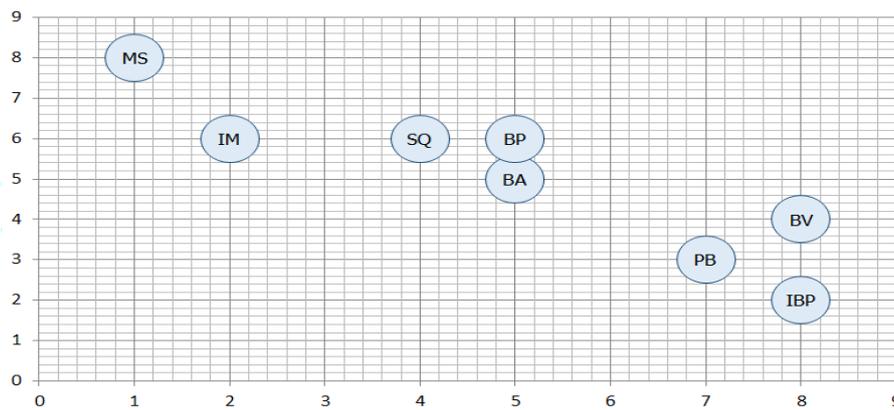
#### 4.4. Structural-interpretive modeling

Structural-interpretive modeling method was used to design the initial model of brand-customer relationship. In this method, by analyzing the effect of one structure on other structures, the order and direction of complex relationships between structures of a system are examined and thus the complexity of relationships between structures is overcome (Azar, Khosravani, & Jalali, 2019). In the ISM model, the interrelationships and effectiveness between criteria and the relationship of criteria at different levels were well shown, which led to a better understanding of the decision-making space by managers.

The final matrix was drawn to determine the key criteria for penetration power and dependence of criteria.

**Table 3. The levels of influence power and dependence degree of research variables**

Research variables	Influence power	Dependence degree	Level
Quality of service delivery and development (SQ)	6	4	4
Creating Brand Value (BV)	5	7	1
Brand Awareness (BA)	5	6	3
Brand Performance (PB)	3	7	2
Brand Personality (BP)	6	5	3
Marketing Strategy (MS)	8	1	6
Effective Marketing (IM)	6	2	5
Brand Positioning on Instagram (IBP)	1	8	1



**Figure 1- Influence power diagram and dependence level (Mick-Mac output)**

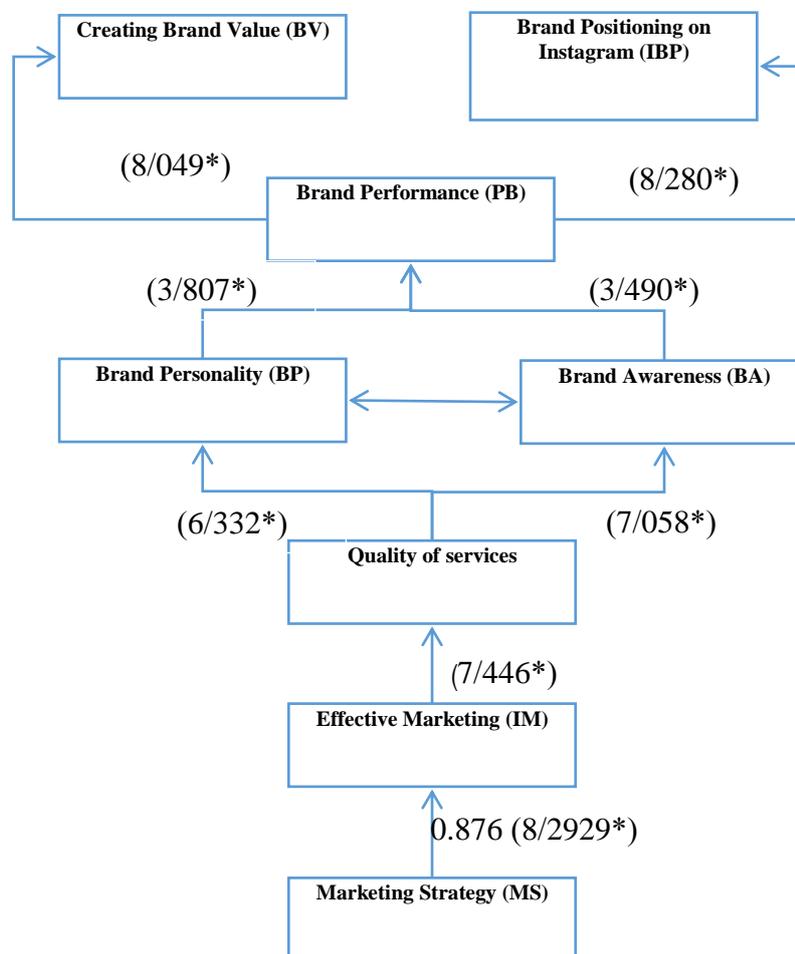
In this study, based on the influence-dependency power diagram, the variables of marketing strategy (MS) and effective marketing (IM) had high influence power and low effectiveness and were located in the area of independent variables. Brand performance (PB) and brand positioning variables on Instagram were also highly dependent but had little influence, so they were considered dependent variables. The variables of service delivery and development (SQ), brand value creation (BV), brand awareness (BA) and brand personality (BP) had similar influence and degree of dependence, so they were related

variables. It should be noted that no variable is located in the autonomous region.

### 5. Evaluation of the final pattern with partial least squares (PLS) method

The basic pattern was drawn using the structural-interpretive method. This template was validated using the partial least squares method. The relationship between the studied variables in each of the research hypotheses was investigated based on the PLS technique. This model was the output of Smart PLS software. The general research model is shown in Figure 2. A summary of the results related to the standard factor load of the variables is also presented. The t-statistic and the amount of bootstrap to measure the significance of the relationships are also shown in Figure 2, as well.

Research variables	Influence power	Dependence degree	Level
Quality of service delivery and development (SQ)	6	4	4
Creating Brand Value (BV)	5	7	1
Brand Awareness (BA)	5	6	3
Brand Performance (PB)	3	7	2
Brand Personality (BP)	6	5	3
Marketing Strategy (MS)	8	1	6
Effective Marketing (IM)	6	2	5
Brand Positioning on Instagram (IBP)	1	8	1



**Figure 2 - Validation output of the model with partial least squares method**

The results of the hypotheses are summarized in Table 4, which confirm all the research hypotheses.

**Table 4- Summary of results of testing the hypotheses**

Hypotheses	Independent variable	Dependent variable	Factor loadings	t statistic	Result
Hypothesis 1	Marketing strategy	Effective marketing	0.876	8.9929	Confirmed
Hypothesis 2	Effective	Service quality	0.854	7.4446	Confirmed

Hypotheses	Independent variable	Dependent variable	Factor loadings	t statistic	Result
	marketing				
Hypothesis 3	Service quality	Brand awareness	0.820	7.0058	Confirmed
Hypothesis 4	Service quality	Brand personality	0.789	6.3332	Confirmed
Hypothesis 5	Brand awareness	Brand Performance	0.454	3.4490	Confirmed
Hypothesis 6	Brand personality	Brand Performance	0.461	3.8807	Confirmed
Hypothesis 7	Brand Performance	Brand Positioning	0.881	8.0049	Confirmed
Hypothesis 8	Brand Performance	Creating brand value	0.9	8.2280	Confirmed

Finally, the fit of the model was examined. The structural part of the model, unlike measurement models, did not deal with the explicit questions and variables of the model and only pays attention to the hidden variables and the relationships between them. In this research, structural model fitting was used along with coefficient of determination (R<sup>2</sup>), redundancy, and finally GOF statistics.

The coefficient of determination (R<sup>2</sup>) is a measure that indicates the amount of change in each of the dependent variables of the model, which is explained by independent variables. It should be noted that the value of R<sup>2</sup> is presented only for the endogenous variables of the model and in the case of exogenous structures its value is equal to zero. The higher the value of R<sup>2</sup> for the endogenous structures of the model, the better the fit of the model. Hair et al (2016), defines the three values of 0.19, 0.33 and 0.67 as the criterion values for the weak, medium, and strong values of the fit of the structural part of the model by the coefficient of determination. The value of R<sup>2</sup> is reported in Table 5.

**Table 5. Coefficient of determination of endogenous structures of the model**

The main components	Symbol	Recognition coefficient	Cross-validity of redundancy	Shared cross-validity	GOF
Brand Awareness	BA	0.673	0.560	0.430	0.552
Brand Personality	BP	0.622	0.549	0.419	

The main components	Symbol	Recognition coefficient	Cross-validity of redundancy	Shared cross-validity	GOF
Creating Brand Value	BV	0.704	0.418	0.288	
Brand Positioning on Instagram	IBP	0.776	0.261	0.141	
Effective Marketing	IM	0.752	0.466	0.236	
Marketing Strategy	MS		0.451	0.451	
Brand Performance	PB	0.749	0.466	0.336	
Quality of service delivery and development	SQ	0.753	0.291	0.161	

According to Table 7, the reported coefficient values for these variables lie in the medium to strong level. The most important index of model fit in the partial least squares technique is the GOF index (Hair et al, 2019). Therefore, the goodness of fit in this study was equal to:

$$GOF = \sqrt[3]{0.725 \times 0.420} = 0.552$$

The GOF index is 0.522, so the model has a good fit. The Stone-Geiser criterion, or  $Q^2$  index, determines the predictive power of the model. On the intensity of predictive power of the model for endogenous structures, Hensler et al. (2015) have determined three values of 0.02, 0.15 and 0.35 as weak, medium and strong predictive power, respectively. If the value of  $Q^2$  is zero or less than zero in the case of an endogenous structure, it indicates that the relationship between the other structures of the model and that endogenous structure is not well explained. Blindfolding technique was used to calculate the value of  $Q^2$  in PLS software. Positive numbers indicate the proper quality of the model. In the current study, the blindfolding value obtained on the basis of two indices of shared cross-validity and redundancy cross-validity for all research constructs was positive and greater than 0.35.

The eight main themes of this research include strategy formulation, brand positioning on Instagram, influential marketing, quality of service delivery and development, brand performance, brand personality, brand awareness, and brand value creation. According to the output of ISM calculations, variable brand performance (PB) is the second level. To determine the elements of the third level, the variables of the second level were removed. The final pattern of the research can be designed according to the leveling. The brand-customer relationship pattern is shown in Figure 2.

Brand Value Creation (BV) and Brand Position (IBP) are level one or dependent variables. After identifying the first level variable (s), these variables (s) were deleted and the set of inputs and outputs was calculated without considering the first level variables. And once again the set of inputs and outputs was calculated without considering the quadratic variables. Based on the identification of common dimensions and the variables that had commonalities with inputs were selected as third level variables. According to the output of ISM calculations, the variables of brand awareness (BA) and brand personality (BP) were the third level. In this plan, the significant relationship of the elements of each level to the elements of the lower level and the significant internal relationship of the elements of each line were only considered.

## **5. Concluding and presenting practical suggestions**

The main objective of the current study was to provide a model for analyzing the brand-customer relationship on Instagram in the cosmetics industry. The results of confirming the first hypothesis of the research show that marketing strategy has a positive and significant effect on effective marketing. Milani (2016) in a study has investigated the effect of using various marketing strategies on social networks to gain customer trust. A marketing strategy includes a set of policies that are used to market a brand and product.

The results show that all four variables, exchange, relationship, database, and knowledge-based marketing strategies in social networks have a significant effect on gaining customers' trust. According to the results of the first hypothesis, it is suggested that since cosmetic products have a special sensitivity among customers, choosing the right strategy plays an important role in the success of the brand.

According to the results of the second and third hypotheses, effective marketing has an impact on service quality and the third hypothesis has a positive and significant effect on service quality. Because the quality of the relationship with the brand is a mental construction that customers achieve in multiple interactions. Kennedy & Guzmánry (2020), examined the implications of customer brand engagement: the role of communication quality. They examined the effects of customer brand interaction, and lacks of the knowledge of communication quality of customers and the impact of brand on customer brand interaction. The findings of the study done by Hosseini et al (2018), on the impact of social media marketing on consumer behavior show that social media marketing through brand equity, brand relationship quality and brand attitude affect consumers' behavior.

The results of the fourth hypothesis of service quality have a positive and significant effect on brand performance and the fifth hypothesis of brand awareness on brand performance. Brand awareness is gained in a variety of ways, including advertising, interacting with friends, referring to books, searching the Internet, and using virtual networks. Brand awareness affects brand personality (Machado et al, 2019). Quality of service also affects personality and brand awareness. According to the results, it is suggested that brands try to gain a strong and reliable position in the minds of customers as much as possible with the help of Instagram. Creating brand attractiveness, affiliation, commitment, and intimacy of customer brand interaction should be considered for effective positioning.

The results obtained from the confirmation of the sixth hypothesis indicate positive effect of brand personality on brand performance and the seventh hypothesis show that brand performance has a positive and significant effect on brand positioning. This means that brand personality and performance have influenced brand positioning. Brand positioning in the customer's mind on Instagram plays an important role in the customer's future purchases. The findings of the current study is in harmony with the results of the study conducted by Rastegar and Amini Khiabani (2019) who found that the effect of two approaches in achieving success, creating a valuable brand in brand-based organizations, and the regulation of consumer in market-oriented organizations.

Another finding of the research is that brand performance has a positive and significant effect on brand value creation. This finding is in line with results of a study done by Shafie et al. (2019) on the impact of social media marketing communications on brand equity and that social media managers can influence customer response through mechanisms in brand equity and communication equity. Nowadays, Instagram is well-known to be one of the most useful cyberspace applications for sharing personal activities. It is suggested that the practical and business dimensions of this cyberspace be introduced to users so that they get acquainted with the new type of virtual businesses and increase the rate of independent employment.

It is recommended that various entertainment tools such as videos, applications, in cyberspace on Instagram be posted and create a happy and fun atmosphere in cyberspace along with humor, contest design, and puzzles related to the type of activity and brands.

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