

Faculty of Economics & Administrative Sciences

# Modeling the Factors Influencing Store Price Image in Iran by Interpretive Structural Modeling Method

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# Abstract

Price is one of the most significant factors in competing in the retail market. This study aims to present the interpretive-structural modeling of elements affecting store price image, considering local and situational variables. Having analyzed KIOSERT analysis and been sure of accuracy in variables choice, the interpretive-structural modeling was used at the level of categories. The outcome of interpretive-structural modeling was a two-level model, in which the first one consisted of 'services', 'enthralling factors', 'store factors', and 'social responsibility', and in the second level, the variables consisted of 'competitors', 'buyer factors', 'price and promotions', and 'sale policies'. In addition to the mentioned model, another finding of the study is depicting driving-dependency power, in which research variables are divided into four groups: autonomous, dependent, independent, and linkage. Accordingly, the 'competitors', 'buyer factors,' 'price and promotions', 'sale policies', 'enthralling factors', 'store factors', 'sale policies', 'enthralling factors', 'store factors', 'sale policies', 'enthralling factors', 'buyer factors', 'price and promotions', 'sale policies', 'enthralling factors', 'store factors', and 'social responsibility' belong to linkage variables and 'service' variable, by itself, belong to independent variables.

Keywords: store price image, interpretive-structural modeling, pricing, Iran.

# 1. Introduction

Price is one of the most significant factors in competing in the retail market. This highlighted role of price has been proved in all selling situations. Also, price is a complicated drive, and many customers construe price as a great concept. For example, they see the price a factor to judge the product quality (Graciola, Toni, Lima & Milan, 2018). The buyer's general image concerning a store price is known as price image in the pricing literature. Store price image is one of the most effective factors for purchase decision-making. The review of the literature suggests that price image affects the tendency to buy and determines to choose or not choosing a store as the target store. Retail price image is a concept which reflects the buyer's attitude toward the overall price of a retail (Koschmann & Issac, 2018). In Lombard, Luis Velaby's (2016) view, price image is a rather superficial indicator of prices in the sale point, in which accordingly, the stores are understood to be overcharging or fair. As Zielke and Toporowski (2009) claim in his study, it is essential for retail managers to be able to measure their store price image. This helps them be able to identify the wished and understood prices. Measuring the price image would be necessary for monitoring the effect of changes in strategies and techniques for pricing. On the other hand, retailers not only need to measure price image, but they also need to identify and prioritize their components. Lourenço, Carlos, Gijsbrechts, and Paap (2015) point out that, considering the effectiveness of

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Received 10 May 2020; Received in revised form 30 May 2020; Accepted 8 June 2020

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price image, the price image management has become a matter of concern for pricing for retailers. For instance, Carrefour, the largest chain hypermarket in the world, is French and spent approximately half a million dollars for managing price image in 2009. Another example, Walmart is a giant corporation in retailing, which lowered the price of 10 thousand items to highlight its discount image in 2010. Babin, Borges, and James (2016), while pointing out the cultural differences in forming price image, believe that cultural differences in different societies and or variety in competition in various industries might lead to appearing differences in consumers' price image. Therefore, regarding the importance of price image and its role in purchase decision-making and stores' profitability, the main problem of this research is identifying the active factors in forming price image and determining the effect level and the way the variables interact, considering the role of cultural-local components. This study follows two general aims. The first aim is identification and categorization of active factors in store price image and the second one is determining the procedure and effect level of these factors and drawing the relations among these factors, which can be achieved through interpretive- structural analysis.

## 2. Theoretical Background

The price image is proposed as an essential phenomenon in marketing, which affects consumer's behavior and purchase decision-making. The price image is often indicative of overall price levels to which a buyer assigns to a specific seller. Store price image is developed through a dynamic process. Forming an image is a complicated task as there are several factors useful in shaping them. The factors include price knowledge and price process mechanisms (Graciola, Toni, Lima, and Milan, 2018). The researchers, which have been performed, have conceptualized the price image in various methods. Some assume that price image is a general belief about the general level of prices in a store, and others see that as a multi-dimensional structure (Roth, Himbert and Zielke, 2017). Behrand (1966) considers that price image is a mental taking which has been formed during a period and based on individuals' purchase experience of prices and items' qualities. Behrand's research results depict that buyers' price experience is useful in their image price. Nystrom (1970) considers the price image as one of the most significant factors which affect retailers' pricing. In his viewpoint, managing a price image in pricing creates a competitive advantage for retailers. He defines price image as the attitude of the buyer to the collection of the retailer prices. This researcher has described the price image as a psychological variable that consists of one dimension, and its only practical aspect is price level. Desai and Talukdar (2003) defined the price image of the consumers' understanding of the overall or general price of stores, which is formed by their knowledge of the price levels of individual items in store. They added two new variables in their research as useful variables in price image for theoretical bases. One of the variables was the effect of the price of particular item groups, and the other was the size of the purchase basket. Desmet and Nagard (2005) discussed the effect of guaranteed price on price image. They confirmed the impact of the sudden and adaptive guaranteed price on the price image.

Zielke (2006) defined the price image of the customers' rational belief and feeling in relation to the price activities of retailers. It might be argued that Zielke is the first researcher who has a clear vision toward price image and considers it to be multidimensional. Based on Zielke (2010), most researchers in previous decades held a one-dimensional view toward price image and defined it as a simple one-dimensional variable related to the price level. However, recent studies see the price image differently and see that as a hidden multi-dimensional variable. In Zielke's view, there is four flow of thinkings in price literature about price image. The first flow is about researchers who hold a one-dimensional view of the price image variable. The second flow extends the price image at the level of store price image; however, they do not have a comprehensive view of that. The third flow analyzed the structures related to price, beyond the price level, and adds some factors such as monetary value or price fairness in the price image. The fourth flow is a compliment for the third flow, which conceptualizes the price image concept in the form of a multi-dimensional variable by merging and integrating the research done in this group. Andrea, Schleicher, and Lunardini (2006) regard forming the store price image a big challenge for consumers since this requires price data processing in an extensive range of items whose prices change during times and from one store to another. He believes that comparing prices among stores might be difficult. The reason why is the number of comparisons that need to be made. To pass through such

complexities, the consumers generally use a set of available data to achieve price image based on exploratory senses.

Another researcher who has a vital role in forming the theoretical bases of the research is Hamilton (2008). In his doctoral dissertation, under the title of 'Price Image in Retail Management', he defines retailers' price image buyers' expected price, price understanding, and perceptual price fairness, which their preferences are affected by expressiveness or inexpensiveness of items. From his viewpoint, the relative nature of price image depends on the fact that from where and from which initial data, the buyer's judge. For example, our price image related to a retailer's price, when our judgment is compared to the retailers available in the district, might be this that the costs of the store are lower than the other stores. However, when the collected data includes a bigger circle (for instance, hypermarkets in the city), the prices might be regarded higher. In a retailer environment, the price image is an integrated set of many price perceptions with additional data, which leads to a general and unique assessment. Hamilton (2010) sees the price image as a very significant subject from the retailers' viewpoint as price image influences the senses resulting in decision-making for consumers. Porral and Mangin (2015) argue that the price image is affected by some factors such as the mean of the price level, changes in price during a time, and alteration and depth of promotional measures. Lombart, Louis, and Labbé (2016) see the price image as one of the critical concerns for retailers. They believe that buyers will go to stores based on their rational beliefs and feelings about the pricing. This is known in pricing literature as a price image. Babin, Borges, and James (2016) addressed the cultural roles and their effects on the price image. They argued that consumers' behavior might be dependent on the type of culture and competition. On the one hand, various and occasionally contradictory viewpoints exist regarding the difference in consumers' reactions in two different cultures.

# 3. Empirical background

Coulter (2002) discussed the effect of using odd decimal pricing on the price image and the way to show the price data in the advertisement. His results show that using prices ending in 9 would produce a cheaper price image in consumers. Furthermore, the location where to put the price data in the advertisement is of the utmost importance, which affects the way to process price data. Desmet and Nagard (2005) investigated different effects of the sudden guaranteed price and adaptive guaranteed prices on the price image. They addressed the behavioral differences which affect retailer and consumer relationships. Their research results showed that the guaranteed price acts as a reliable defensive tool and has no profit for the customers. Using sudden guaranteed price policies have been useful for the customers who have not been our regulars, and it helps them to have a positive image toward our store.

Hamilton and Chernev (2010) investigated the effect of extension or development of the product line on the price image. Extending the product line, whether in the form of adding quality products and or products with lower quality, is more common among retailers. The results of the research showed that extending the product line, with the intervention effect of consumers' purposes, causes an impact on the price image. Their observation showed that consumers are more sensitive to investigate the price of some particular item groups. These items include those which are durable about which the consumers would like to know more.

Nazari and Dastar (2018) identified the factors effective in the price image discussed in the research background using meta-synthesis analysis of research related to the price image until their research publication. The summary of their study is shown in Table 1.

| Table 1. Summary of the meta-synthesis analysis (Ivazari and Dastar, 2010) |                        |  |  |  |  |  |  |
|--|------------------------|--|--|--|--|--|--|
| Theme  | Number of subset codes |  |  |  |  |  |  |
| Price comparison   | 2                      |  |  |  |  |  |  |
| Mental reference price   | 1                      |  |  |  |  |  |  |
| Price knowledge  | 1                      |  |  |  |  |  |  |
| Number of competitors  | 1                      |  |  |  |  |  |  |
| Variety in item classes  | 2                      |  |  |  |  |  |  |
| Wholesale  | 1                      |  |  |  |  |  |  |
| Brand and item supply with store brand                                     | 1                      |  |  |  |  |  |  |
| Service quality  | 1                      |  |  |  |  |  |  |
| Others' suggestions  | 1                      |  |  |  |  |  |  |
|  |                        |  |  |  |  |  |  |

 Table 1. Summary of the meta-synthesis analysis (Nazari and Dastar, 2018)

| Theme   | Number of subset codes |
|---|------------------------|
| Customer service  | 1                      |
| Personnel suggestion                                    | 1                      |
| Method of payment                                       | 2                      |
| Design and decoration                                   | 4                      |
| Size of store   | 1                      |
| Framework and age of store                              | 2                      |
| Withdrawal of store cost                                | 3                      |
| Social class  | 2                      |
| Cultural differences                                    | 1                      |
| Individual differences                                  | 2                      |
| Environmental functions                                 | 1                      |
| Observing moral standards in production                 | 1                      |
| Attending to the consumers' rights                      | 1                      |
| Aiding society  | 1                      |
| Understanding price level                               | 6                      |
| Price value   | 3                      |
| Awards and price promotions                             | 5                      |
| Most-purchased item prices                              | 5                      |
| Price variety   | 4                      |
| Labelling and showing discounted and comparative prices | 5                      |
| Type of pricing   | 3                      |
| Guaranteed price  | 3                      |
| Price fairness  | 1                      |

Nazari and Dastar (2018) identified the cultural-local factors which are useful in the price image, which has not been discussed using theme and modeling analysis. Defined new codes and themes were depicted in Table 2 by them:

| Code  | Final theme                            | Status |
|---|--|--------|
| Store location  | Store location                         | New    |
| Appearance and behavior of sellers                      | Say and babayian of caller             |        |
| Sex of seller   | Sex and behavior of sener              | New    |
| Number of store personnel                               | Number of store personnel              | New    |
| Exhibiting brand items                                  | Exhibiting brand items                 | Now    |
| External items  | Exhibiting brand items                 | INCW   |
| Earlier recognition of store's owner                    |  |        |
| Earlier recognition of seller                           | Earlier recognition                    | New    |
| Store background  |  | INCW   |
| Store traffic   | Store traffic                          | New    |
| High-speed internet                                     |  |        |
| Parking availability                                    | Darking availability and free services | Now    |
| Carrying to the car                                     |  | INCW   |
| Shopping cart in the store                              |  |        |
| Numbr of Payment stations                               | Numbr of Payment stations              | New    |
| Trsust-making pictures and notes                        | Environmental advertisment             |        |
| The slogans behind the window (wholesale-factory price) | Environmental advertisment             | New    |

Table 2. Summary of a theme analysis. Nazari and Dastar (2018)

# 4. Methodology

In this study, interpretive-structural modeling was used to achieve a model that efficiently shows relations between factors forming the price image structure. Warfield first introduced the interpretive-structural modeling in 1974. This method is usually used to interpret complex situations using a set of measures to solve targeted problems. This approach was increasingly used to show relationships between different elements regarding a subject. Rajesh, Nikhil, and Vivek (2013) presented the method of performing the mentioned analysis as Figure 1.



Figure 1. Steps of performing interpretive-structural analysis. Rajesh, Nikhil, and Vivek (2013)

The main steps of this method, from Soti, Goel, Shankar, and Kaushal's (2010) as well as Talib, Rahman, and Qureshi's (2011) include:

- 1 .Identifying factors related to the problem
- 2.Forming the structural self-interactional matrix
- 3 .Forming an initial access matrix
- 4 .Forming final access matrix
- 5 .Determining indicator levels
- 6 .Drawing model
- 7 .Analyzing model

The population of this research was knowledgeable in the research problem. The participants were chosen to be 12, based on the research background, of which 7 participant's data were collected and analyzed. To select participants, snowball sampling was used.

# 5. Research finding

As discussed in the psychology section, the interpretive-structural analysis was used in 7 steps. So, the results are presented as the following:

# 1 .Identifying factors related to the problem

Factors related to the problem were investigated in previous studies. To make sure of the efficiency and comprehensiveness of the elements, the databases were examined for another time, and no new factor was identified. To make sure of the proper choice of identified factors, the KIOSERT analysis method was used. A list was created which was made up of 41 themes and eight components related to them, and the factor analysis was also sent for the experts, and they were asked to express their opinions about the effectiveness or ineffectiveness of the price image. The significance level for the KIOSERT analysis was considered 65 percent based on the investigated studies. After collecting experts' opinions and computing the level of agreement, the effect of all distinguished dimensions was approved on the price image in the view of experts. The result of this analysis was depicted in Table 3.

| Components            | Themes                                  | Status   | Percentage of Agreement |
|-----------------------|---|----------|-------------------------|
|                       | Price comparison                        | Recorded | 86                      |
| Competitor            | Mental reference price                  | Recorded | 86                      |
|                       | Price knowledge                         | Recorded | 86                      |
|                       | Number of competitors                   | Recorded | 100                     |
|                       | Variety in item classes                 | Recorded | 71                      |
| Sale policies         | Exhibiting brand items                  | New      | 71                      |
|                       | Wholesale                               | Recorded | 86                      |
|                       | Brand and item supply with store brand  | Recorded | 71                      |
|                       | Service quality                         | Recorded | 71                      |
| Services              | Parking availability and free services  | New      | 86                      |
|                       | Numbr of Payment stations               | New      | 86                      |
|                       | Others' suggestions                     | Recorded | 100                     |
| Enthralling factors   | Customer service                        | Recorded | 71                      |
|                       | Personnel suggestion                    | Recorded | 86                      |
|                       | Method of payment                       | Recorded | 71                      |
|                       | Design and decoration                   | Recorded | 100                     |
|                       | Size of store                           | Recorded | 86                      |
|                       | Store location                          | New      | 100                     |
|                       | Sex and behavior of seller              | New      | 100                     |
| Store factors         | Number of store personnel               | New      | 71                      |
|                       | Earlier recognition                     | New      | 71                      |
|                       | Store traffic                           | New      | 86                      |
|                       | Framework and age of store              | Recorded | 100                     |
|                       | Withdrawal of store cost                | Recorded | 71                      |
|                       | Social class                            | Recorded | 71                      |
| Buyer's factors       | Cultural differences                    | Recorded | 71                      |
|                       | Individual differences                  | Recorded | 71                      |
|                       | Environmental functions                 | Recorded | 71                      |
|                       | Observing moral standards in production | Recorded | 71                      |
|                       | Attending to the consumers' rights      | Recorded | 71                      |
| Social responsibility | Aiding society                          | Recorded | 86                      |
|                       | Understanding price level               | Recorded | 100                     |
|                       | Price value                             | Recorded | 100                     |
|                       | Awards and price promotions             | Recorded | 100                     |
|                       | Most-purchased item prices              | Recorded | 86                      |
| Price and             | Environmental advertisment              | New      | 71                      |
| promotions            | Price variety                           | Recorded | 71                      |
|                       | Labelling and showing discounted and    | Recorded | 86                      |

Table 3. Results of KIOSERT analysis

| Components | Themes           | Status   | Percentage of Agreement |
|------------|------------------|----------|-------------------------|
|            | Type of pricing  | Recorded | 71                      |
|            | Guaranteed price | Recorded | 86                      |
|            | Price fairness   | Recorded | 100                     |

According to the interpretive-structural method, the abundance of several variables strongly affects the results of the interpretive-structural analysis. In most resources, the maximum number of variables, which needs to be entered into the interpretive structural phase, was mentioned to be 15 ones. Therefore, considering the high number of themes, the analysis was done on components level.

# 2. Forming the structural self-interactional matrix

In this step, based on the face-to-face explanation, the experts were asked to fill in a matrix, which was created in an Excel file, in a special time interval, according to the procedure of interpretive structural method, and with the consideration of the following items:

V: if the variable I have a role in or is useful in making variable j.

A: if the variable I have a role in or is effective in making variable j.

X: if the variable I has a role in making variable j and vice-versa or mutual effect.

O: if the variable I do not have a role in making variable j and vice-versa or lack of mutual effectiveness of two variables.

After collecting questionnaires, to achieve a matrix representing the self-interactional matrix of this research, the cellular mode principle was used. In this section, the initial accessibility matrices were drawn according to Table 4.

|     | Table 4. Sen-interactional matrix of research |   |   |   |   |   |   |   |   |  |  |
|-----|---|---|---|---|---|---|---|---|---|--|--|
| No. | Variable explanation (i)                      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |  |  |
| 1   | Price and promotions                          | - | Х | V | V | Х | А | Х | Х |  |  |
| 2   | Store factors                                 | - | - | V | А | Х | Х | 0 | А |  |  |
| 3   | Services                                      | - | - | - | Х | А | А | А | А |  |  |
| 4   | Enthralling factors                           | - | - | - | - | А | А | V | А |  |  |
| 5   | Buyer's factors                               | - | - | - | - | - | V | Х | 0 |  |  |
| 6   | Sale policies                                 | - | - | - | - | - | - | А | Х |  |  |
| 7   | Social responsibility                         | - | - | - | - | - | - | - | 0 |  |  |
| 8   | Competitors                                   | - | - | - | - | - | - | - | - |  |  |

#### Table 4. Self-interactional matrix of research

#### 3. Forming an initial access matrix

The initial access matrix is obtained from the self-interactional matrix by converting data of each cell of the matrix into binary digits (0 with 1). This conversion is done by replacing symbols with 0 and 1, considering the stated principle in Table 5:

| Table 5. the coding method to obtain initial access matrix |                       |                                    |  |  |  |  |
|--|-----------------------|------------------------------------|--|--|--|--|
| Input in   | initial access matrix | Input in self-interactional matrix |  |  |  |  |
| (j,i)  | (i,j)                 |                                    |  |  |  |  |
| V  | 1                     | 0                                  |  |  |  |  |
| A  | 0                     | 1                                  |  |  |  |  |
| X  | 1                     | 1                                  |  |  |  |  |
| 0  | 0                     | 0                                  |  |  |  |  |
|  | 1                     | Diameter of matrix                 |  |  |  |  |

Having converted symbols into binary digits, initial access matrix was obtained in Table 6 as the following:

|     | Table 0. Initial access matrix |   |   |   |   |   |   |   |   |  |
|-----|--------------------------------|---|---|---|---|---|---|---|---|--|
| No. | Variable explanation (i)       | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |  |
| 1   | Price and promotions           | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 |  |
| 2   | Store factors                  | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 |  |

# Table 6. Initial access matrix

| No. | Variable explanation (i) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8        |
|-----|--------------------------|---|---|---|---|---|---|---|----------|
| 3   | Services                 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0        |
| 4   | Enthralling factors      | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0        |
| 5   | Buyer's factors          | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0        |
| 6   | Sale policies            | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1        |
| 7   | Social responsibility    | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0        |
| 8   | Competitors              | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1        |
| 8   | Competitors              | 1 | 1 | I | 1 | 0 | 1 | 0 | <u> </u> |

# 4. Forming the final access matrix

To obtain the final access matrix, the transferability concept was used. Based on this principle, some of the initial access matrices were completed by inferring. This means that if variable i is related to variable j and variable j is related to variable k; therefore, i is related to k based on the transferability concept. Various methods were proposed to obtain and equalizing the final matrix by the researchers. In this study, using MATLAB 2016 features, conversion codes of this matrix were coded in MATLAB 2016, and the final access matrix was extracted as Table 7.

| Table 7. Final access matrix |                          |   |   |   |   |   |   |   |   |               |
|------------------------------|--------------------------|---|---|---|---|---|---|---|---|---------------|
| No.                          | Variable explanation (i) | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Driving power |
| 1                            | Price and promotions     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 8             |
| 2                            | Store factors            | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 8             |
| 3                            | Services                 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 4             |
| 4                            | Enthralling factors      | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 7             |
| 5                            | Buyer's factors          | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 8             |
| 6                            | Sale policies            | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 8             |
| 7                            | Social responsibility    | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 8             |
| 8                            | Competitors              | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 8             |
|                              | Dependency               | 7 | 8 | 8 | 8 | 7 | 7 | 8 | 6 | -             |

#### 5. Determining indicator levels

In this step, the input and output sets were identified, and after determining the common set, the rating was done. The variables whose output and similar sets are completely similar are located in the highest level of interpretive-structural modeling hierarchy. These variables will not be the source of other variables. In other words, the first level is superficial analysis, whose compositional variables are affected by other levels. To find the components of the next level in the system, the components of its highest level (previous level) are eliminated in mathematical computations and operations related to determining components of the next level are conducted like the method of determining components of the highest level. This operation is repeated so that the components of all levels in the system are determined. Doing this manually is time-consuming, and there is the chance of making mistakes, that is why MATLAB 2016 was used. Ranking function coding was created in MATLAB, and then it was performed on the final access matrix. The software computed two separate levels for the model. The results are depicted in Table 8.

| Table 8. Set of input and output |                       |                                 |                               |                                 |       |  |  |  |  |
|----------------------------------|-----------------------|---------------------------------|-------------------------------|---------------------------------|-------|--|--|--|--|
| Line                             | Variable              | Input set                       | Output set                    | Common                          | Level |  |  |  |  |
| 1                                | Price and promotions  | All variables except except 3   | All variables                 | All variables except except 7   | 2     |  |  |  |  |
| 2                                | Store factors         | All variables                   | All variables                 | All variables                   | 1     |  |  |  |  |
| 3                                | Services              | All variables                   | 2 and 3 and 4 and 7           | 2 and 3 and 4 and 7             | 1     |  |  |  |  |
| 4                                | Enthralling factors   | All variables                   | All variables except except 8 | All variables except except 8   | 1     |  |  |  |  |
| 5                                | Buyer's factors       | All variables except except 3   | All variables                 | All variables except except 3   | 2     |  |  |  |  |
| 6                                | Sale policies         | All variables except except 3   | All variables                 | All variables except except 3   | 2     |  |  |  |  |
| 7                                | Social responsibility | All variables                   | All variables                 | All variables                   | 1     |  |  |  |  |
| 8                                | Competitors           | 1 and 2 and 5 and 6 and 7 and 8 | All variables                 | 1 and 2 and 5 and 6 and 7 and 8 | 2     |  |  |  |  |

#### 6. Drawing model

In this step, the interpretive-structural model of research was designed in the level of components. This model was shown in Figure 2.



Figure 2. Interpretive-structural modeling in research

# 7. Analyzing model and drawing MICMAC diagram

In this step, variables are classified into four groups based on driving and dependency power:

Autonomous variables group: this group includes variables that have very low driving and dependency powers. These variables are somewhat separated from the other variables. None of the research variables placed in this zone.

Dependent variables group: this group has a low driving group, but a high dependency. The only variable which was placed in this group was services.

Linkage variables group: this group has a high driving power and dependency. Any change in these variables would lead to a difference in the other variables. This group has a mutual relationship with the other variables. The other variables were placed in this group except services.

Independent variables group: this group has high power and low dependency. None of the research variables were placed in this group. The Dependency-driving matrix of the research variables was shown in Figure 3.



Figure 3. The Dependency-driving matrix of the research variables

## 6. Conclusion and Suggestions

The aim of interpretive-structural modeling is to present a leveled model, according to which the effect of each variable is determined. To reassess the identified factors, the dependent components and themes were assessed through KIOSERT analysis, which was based on the experts' opinions. As mentioned in the research finding, after collecting the experts' opinions and calculating the agreement level, the effect of all the identified dimensions on the price image was approved by the experts' opinions.

After conducting interpretive-structural analysis and drawing the model in the fifth step, a two-level model, as depicted in Figure 2, was identified in the step as its output. Each level consists of four variables in which the variables of levels are the research components. As shown in the figure, level 1 consists of the following components: 'service', 'enthralling factors', 'store factors', and 'social responsibility'. The first level of the model in interpretive-structural modeling is the level in which the constituent variables are affected by the other variables in the other levels. In other words, the other variables of this level are influenced by the variables of the next level. Therefore, the mentioned quadratic variables are affected by the remaining four variables which formed the second level of the model.

The second level of the model consists of the following components: competitor', 'buyer factor', 'price and promotions', and 'sale policies'. This group of variables affects the first level variables. So, it is suggested that

the stores and retailers provide policies and strategies related to each level of the model by regarding this group of variables since the mentioned components at the first level are affected by this level.

Considering this leveling is important because any mistake in providing the strategies and implementing improper policies to manage the second level variables would bring about detrimental effects related to the first level variables. This would take place even if stores start to adopt very conscious policies for the first level variables, disregarding the second level variables. The second level variable will then be a basic and effective one. In short it could be argued that 'competitor', 'buyer factors', 'price and promotions', and 'sale policies' are base model and the adopted policies related to the way to manage these variables influence the performance of 'services', 'enthralling factors', 'store factors', and 'social responsibility'. One another significant achievement of this research is the result of the driving-dependency matrix, depicted in Figure 3. In this matrix, variables are placed in one of the 4 zones of the diagram based on the score of driving and dependency. These four zones have each its features. The variables placed in the autonomous zone are separated from the other variables, and neither affects other variables nor impress them. These variables are somewhat separated from other research variables. and there is no relationship between them. None of the research components was placed in this zone. So, no autonomous variable was identified in this study. The independent variables zone consists of variables having the most effectiveness and the least impressiveness of the other research variables. This group of variables is known to be critical variables, and any change in them would result in a powerful influence on the other variables. None of the research variables was placed in this zone. The dependent variables zone consists of the ones who have the most dependency and the least driving. These variables are known to be output variables. Thus, they are much more impressive than dependent and linkage zones. The only variable which was placed in this zone was component 'services'. So, based on this matrix, services are an output variable and is affected by other variables. In other words, providing strategies related to component 'services' depends on the other seven conditions. Based on the changes in the other seven variables, services need to change when they change. The last zone of this matrix consists of linkage variables. Linkage variables are those with high deriving power and dependency. They are also called strategic variables. The nature of these variables dictates a change or reaction in other variables when they change. All the research variables, except services, were placed in this zone. As a result, the seven research components of the current study were placed in the linkage variables group. These variables are the ones with both high driving power and dependency. In other words, they are both effective and impressive. Since all the research variables, except services, are placed in this group, it could be argued that the seven research components effective in the price image and their subset themes are highly effective and the store and retailers should consider this fact when they provide their policies. When it is said, the linkage variables or strategies have both high effectiveness and impressiveness; it shows the changing nature of these components. Due to the high dependency ratio, this group of variables is highly effective and, resultingly, changing. Their change in the other research variables or components and variables of the shared group is considerable. Therefore, considering the placement of seven research components effective on store price image in this group, it could be argued that the store price image is an active variable with a high degree of change. The stores and retailers should be continuously considering the mentioned components changes and assess their effects on the store price image. This stresses the necessity to evaluate continuously strategies and measures of stores related to the effective components of the price image. The stores can thus assess their store price image using the model of this study, which is a native one, and accordingly improve and manage their policies and strategies while accommodating the mentioned model components. Although the authors of the current research made a deliberate attempt to provide a comprehensive model about store price image considering local variables, this research had focused on some specific aspects due to the limitations. To complete the results of this study, the following suggestions are provided:

- Investigating the degree of correspondence in the obtained model with store image model of online stores, considering that the research model was designed for retailers and chain stores.
- Developing a store image model for the other businesses and using this model as a base model to identify the other businesses' store image model.

## Resources

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