INTRODUCTION

Human beings have been transacting and trading goods from the dawn of civilization. Ancient civilizations such as Egypt, Greek and Byzantine had massive transactions outside their territories. While these early examples of international trading contributed to wealth distribution all over the world, only in the second half of the 20th century these efforts were accompanied by a systemic understanding of customer requirements through capturing an organized picture from their satisfaction and analyzing the various responses given to demand and supply chain in order to apprehend the market expansion opportunities and niches.

Therefore, it can be said that the international marketing as a scientific discipline has just over half a century of history.

When there is a limitation of opportunities in the local markets, the need for market expansion to other areas will be felt. In such cases companies have to enter foreign markets to decrease the degree of their
These situations usually create a close competition among the international companies with respect to the size, industry and geographical regions (Craig and Douglas, 1996).

This is why the process of developing effective and efficient international marketing strategies within the new competitive business environment has become the focal point of a huge stream of studies done by marketers and researchers. The researches in particular have dealt with the question whether companies entering the overseas markets need to have standards actions matched with the home market policies and approaches or they have to adjust these policies and approaches with the new conditions dominating foreign markets through an adaptation strategy.

Two approaches are exposed in the literature review on the process of selecting acceptable strategies for the company success in the international markets. The first approach opts for standardization strategy which means the implementation of a single marketing strategy in both domestic and international markets. The second approach focuses on the adaptation which means the adjustment the companies marketing strategy with especial features and conditions in each country’s market. The standardization versus the adaptation of international marketing strategic planning as a topic of interest has created a bulk of researches in the last 80 years and generated hot debates among the marketers (Ryans, Griffith and Jobeer, 2001; Nordstrand and Ohman, 2005; White, 2003).

The basic question raised in the researches on this subject is to determine which one of these international marketing strategies – standardization or adaptation – has a higher practical efficiency. (Levitt, 1983; Walters, 1986, Douglas and Wind 1987; Onkuisit and Shaw, 1987; Wills et al., 1991; Cavusgil and Zou, 1994; Littler and Schlieper, 1995; Zou and Cavusgil, 2002; Ryans et al., 2003; Nordstrand and Ohman, 2005).

These researches lack in practical and experimental documentation and demonstration (Nordstrand and Ohman, 2005) and usually focus on promotion activities. In spite of the variety of issues studied by researchers there have not been key hypotheses, discoveries or documentation in the field yet. As such researches need precision, stability and practical conceptualization (Ryans et al., 2003) it is difficult to find a conceptual framework and provide a basic genuine idea about these strategies relation and convergence (Zou and Cavusgil, 2002; Nordstrand and Ohman, 2005).

The present research thus makes an attempt at studying the concurrent effects of two fundamental dimensions effective on the considered problem, i.e., the internal dimension which includes all factors relating to the marketing mix (Product, Price, Promotion and Place) and the external dimension which consists of the external factors in the selection of standardization or adaptation strategies (including physical, demographic, socio-cultural, policy-legal and economic factors); this is a contrary practice in comparison with the previous researches which have dealt with only one group of factors involved factors (Nordstrand and Ohman, 2005).

This research follows two directions which are: (1) identifying the relationship between two internal and external dimensions in the process of strategy development through examining the individual variables embedded in each dimension based on group decision making models and arithmetic techniques and (2) evaluating and calculating the reciprocal effects of individual variables including Price, Product, Place and Promotion in the selection of strategy as well determining the effect of external dimension variables on the internal ones. Therefore, a comprehensive research is undertaken regarding the above mentioned factors as the previous researches have taken a zero value for the effect of these variables on each other.

**Literature Review**

The advocates of the standardization strategy take the globalization as one of the reasons for increasing similarity, technological integration advancement and consideration of customer priorities in world markets (Levitt, 1983; Ohmae, 1985).

They believe that the selection of such a strategy is advantageous to the companies in the following respects:

a) Economy of scale in all operations with value added results, especially in R & D, production and marketing departments

b) Creation of unique and persistent trade name in all around the world especially regarding the growing customers and consumers movements

c) Reduction of management complexities due to improved control and coordination in the international operations (Levitt, 1983, Douglas and Craig, 1986; Yip, Loewe and Yoshinio, 1988).

Moreover, the advocates of the adaptation strategy
believe that the countries differences and diversities in areas such customer requirements, good consumption conditions, buying power, trading barriers, culture and tradition, and technological development are so extensive and important that it is necessary to design the company marketing strategy in accordance to especial and unique features of individual markets in spite of globalization trends (Terpstra and Sarathy, 2000).

They also criticize the standardization strategy as a “marketing myopia” which simplifies revises the realities and of marketing concepts (Boddewyn, Soehl and Picard, 1986; Wind, 1986; Douglas and Wind, 1987). They lay emphasis on the fact that the final aim of a company is not only the cost reduction through standardization but also long term profitability through higher selling activities with supplying products/services which are compatible with customer various needs (Onkvisit and Shaw, 1990; Rosen, 1990; Whitelak and Pimblett, 1977).

There is also a third group of researchers who advocate the contingency perspective in the debates of standardization/adaptation to overcome such unidirectional groupings. They look at the issue from a different perspective that is based on the following assumptions.

a) The standardization and adaptation strategies should not be examined and judged individually since they are two ends of a continuous spectrum in which various degrees of adaptation/standardization marketing strategies are appeared in different points. 

b) The selection of any of these two strategies requires the analysis and evaluation of specific contingency factors such as the innate factors in specific market and time.

c) The appropriateness level of standardization/adaptation strategy for the company must be evaluated on the basis of its impact on the company performance in the international markets (Quelch and Hoff, 1986; Onkvisit and Shaw, 1987; Jain, 1989; Cavsgil and Zou, 1994).

The proponents of this prospective believe that the selection of special strategic elements for standardization or adaptation in various situations depends on the most favorable results. However as the table 1 shows there are many advantages to both strategies.

Conceptual Framework
The research key variables consist of a combination of independent internal affecting factors’ namely product, price, promotion and place dimensions and external affecting factors which are physical, demographic, socio-cultural, economical and political-legal dimensions; the variables in these categories affect the depended variable i.e. standardization/adaptation in the international marketing strategy (figure 1).

Research Questions
1- Which factors affect the selection of standardization/adaptation strategies?
2- Is there any interdependency between the internal affecting factors on selection of standardization/adaptation strategy?
3- What model explains the impact of external environmental variables on the internal variables (i.e. Product, Promotion, Price and Place) in the process of evaluating the standardization/adaptation international marketing strategy in multinational companies (MNCs)?

RESEARCH METHOD
The present research aims at obtaining the relationship between variables in a multi variable model; therefore, the research’s method is descriptive.

The research aims at establishing the appropriate approaches for the studied sample.

Decision Makers Group
The problem of selection and determination of international marketing strategy involves various complex factors; the selections of a favorable marketing strategy is in most cases the responsibilities of the organization top managers who develop the policies for the organization’s marketing mix. The decision taken can be classified as a Multiple Criteria Decision Making (MCDM) problem.

In the group decision making with the use of expert opinions, the statistical sample includes 10-20 experts. (Asgharpour, 2004) In the present research, participants are 30 directing managers, business managers, expert and professionals of international marketing in the big companies active in the field of manufacturing cosmetic-hygienic products in Iran as subsidiary of some foreign companies. Each of these companies has headquarters in several countries and all are among the largest and the most successful multinational companies of the world with an outstanding experiment
in the area marketing strategy selection in foreign countries.

**Data Gathering Instrument**

The research uses pair-wise comparison matrixes for data collection in which pair-wise comparisons are undertaken in order to determine the relative significance of criteria/sub-criteria and alternatives. The evaluation method in the research is based on DEMATEL and ANP techniques, so the DEMATEL- and ANP-specific pair-wise comparison matrixes have been used separately for data gathering according to the DEMATEL and ANP methods, respectively. The decision makers are asked to measure the effects of row factors on column factors through the pair-wise comparisons. The measurement is based on Saaty’s decision making 9 point scale. The scale includes: 1 (equal priority), 3, (small priority), 5 (medium priority), 7...
(high priority), 9 (absolute priority) and numbers 2, 4, 6 and 8 are designated as medium and inbetween values for the mentioned priorities.

The Inconsistency Ratio (IR) is also measured in the ANP method’s pair-wise comparison matrixes in order to validate the procedure and to insure the consistency of expert’s opinions. If the ratio for the pair-wise comparison matrixes is equal or less than 0.1, so the matrixes will have acceptable consistency (Mehregan, 2004; Momeni, 2006).

The inconsistency ratio calculated for all the ANP’s pair-wise comparison matrixes is less than 0.1 to ensure their acceptable consistency.

Methods of Analysis

The problem of international marketing strategy selection being a multiple criteria decision making problem, it is reasonable to find its solution using multiple criteria decision making methods such as Elimination and Choice Translating Reality (ELECTRE), Techniques for Order Preference by Similarity to Ideal Solution (TOPSIS) and Analytic Hierarchy Process (AHP) methods. Unfortunately, the mentioned methods are unable to deal with interdependencies between the indexes and variables and it is why the ANP method has been proposed by Saaty as a new method of multi criteria decision making (Wu, 2008).

However, it is impossible to ignore the interactions and mutual relations between the variables or indexes in a set of variables, therefore the research proposes a model considering the inner variable relations to justify and evaluate the external relationships to the next levels or clusters.

According to the ANP method, the decision makers are asked to determine the relative significance of elements through pair-wise comparison matrixes and to find the correct answers. These pair-wise comparison matrixes are provided according to saaty’s 9 point scale which ranges from 1 (equal priority) to 9 (maximum priority). The AHP method uses the eigenvector principles in the evaluation of elements or factors weights embedded in the comparison matrixes, while the ANP method employs the limiting process method for weights in a super matrix (Sekitaini and Takahashi, 2001).

The total alternatives priorities must be organized in a way that the unweighted super matrix is modified to a weighted super matrix (Sekitaini and Takahashi, 2001). The weighted super matrix can use the limiting theorems power in the calculation of indexes total priorities. But it is necessary to use the DEMATEL method before the formation of unweighted super matrix which results in the delineation of inner relationship between criteria and variables. It is worth mentioning that the ANP method calculates the long term effects of variables and elements regarding their inner relationship. It is more rational to use the DEMATEL method for the purpose which results in higher reliability because the method provides more valuable information about the variables’ inner relationships and ultimately it is more helpful in decision making problems (Wu, 2008).

The DEMATEL Method

Step 1: Constituent Elements

The constituent elements of the considered system are detected through one of the methods including Delphi, brain storming, noun group technique or other methods, and variables and factors effective on the system are then selected. These constituent elements may be indexes, variables, key persons, entities or trends.

Step 2: Elements Diagram

The assumed elements are placed in the vertex of a diagram and relations dominated on interrelations between the stations or vertexes are identified by referral to experts and professionals.

The elements comparison is pair-wise and the expert’s judgment is needed only for direct relations between the elements.

Step 3: Generating the Direct-Relation Matrix

First, in order to measure the relationship between elements, it is necessary that the comparison scale be designed in four levels: 0 (no influence), 1 (low influence), 2 (high influence) and 3 (very high influence). Then, the experts make the pair-wise comparison in terms of influence and direction between criteria. As a result of such comparison, the initial data are obtained and are shown in the direct-relation matrix that is an n × n matrix, Z, in which z_{ij} denotes the degree to which the criterion i affects the criterion j (figure 2).

Step 4: Normalizing the Direct-Relation Matrix

From the initial direct-relation matrix, the normalized direct-relation matrix X is obtained by the following formul:
The new obtained matrix $X$ is known as normalized direct-relation matrix.

**Step 5: Attaining the Total-Relation Matrix**

Once the normalized direct-relation matrix $X$ is obtained, the total-relation matrix $T$ can be acquired using formula (2) in which the $(I)$ denotes the identity matrix.

$$T = X(I - X)^{-1}$$

The above formula is resulted from the fact that the DEMATEL method assumes that at least one $I$ obeys such a rule.

$$\sum_{j=1}^{n} Z_{ij} < S$$

The assumption is a necessary and sufficient condition for all operational cases. Thus, the matrix $X$ is a sub-stochastic matrix as derivative of absorbing Markov chain matrix. It has been demonstrated in the case that:

$$\lim_{k \to \infty} X^k = 0$$

$$\lim_{k \to \infty} (I + X + X^2 + \ldots + X^k) = (I - X)^{-1}$$

where $O$ is a neutral matrix and $I$ indicates an identity matrix. Then, the total-relation matrix $T$ is obtained as:

$$T = \lim_{k \to \infty} (X + X^2 + \ldots + X^k) = X(I - X)^{-1}$$

**Figure 2: Direct-relation matrix**

$$S = \max_{1 \leq i \leq n} \left( \sum_{j=1}^{n} Z_{ij} \right), \quad X = \frac{Z}{S}$$

**Step 6: Producing a Causal Diagram**

In the obtained total-relation matrix, the sum of rows and the sum of columns are separately denoted as vector $D$ and vector $R$ using Formulas (4)-(8). Then, the horizontal axis vector $(D + R)$ named as "Prominence" is made by adding $D$ to $R$ which reveals how much importance the criterion has.

Similarly, the vertical axis $(D - R)$ named as "Relation" is made by subtracting $D$ from $R$ which may divide criteria into a cause group and an effect group. Generally, when $(D - R)$ is positive, the criterion belongs to the cause group, otherwise, if the $(D - R)$ is negative, the criterion belongs to the effect group. Therefore, the causal diagram can be acquired by mapping the dataset of $(D + R, D - R)$, providing valuable insight for decision making.

$$T = [t_{ij}]_{n \times n}, \quad i, j = 1, 2, \ldots, n$$

$$D = \left[ \sum_{j=1}^{n} t_{ij} \right]_{n \times 1} = [t_{i.}]_{n \times 1}$$

$$R = \left[ \sum_{j=1}^{n} t_{ij} \right]_{1 \times n} = [t_{.i}]_{1 \times n}$$

Vectors $D$ and $R$ respectively denote the sum of rows and the sum of columns from total-relation matrix.

$$T = [t_{ij}]_{n \times n}$$

**Step 7: Obtaining the inner dependence matrix**

In the step, the sum of each column in total-relation matrix is equal to 1 by the normalization method and so the inner dependence matrix can be acquired. Following the extraction and collection of the required data, in this stage of research data analysis is undertaken and a systematic structure is provided for interpretation and deduction (figure 3).
RESULTS AND DISCUSSION
As said before the research aims at answering three basic questions. For the purpose, two techniques i.e. DEMATEL and ANP methods are employed. In the first method, DEMATEL, the inner dependence and relationship between the first set/cluster of variables named as internal affecting factors are measured. Next, the inter set/cluster dependence and relations in the whole system are evaluated using the ANP method to determine the appropriate strategy.

DEMATEL Implementation
Based on the above mentioned seven step procedure, the DEMATEL technique is implemented to delineate inter relationships between the internal affecting factors (including Product, Promotion, Price and Place) (table 2).

Then the R and D values which respectively are the sum of T rows and the sum of T columns will be calculated in the sixth step for attaining the casual diagraph using the total relation matrix T (table 3).

Now it is the time for mapping the casual diagram with horizontal coordinate axis \((Di+Ri)\) and vertical coordinate axis \((Di-Ri)\) (figure 4).

In the structure resulted from the DEMATEL technique, if the criterion \((Di-Ri)\) has a positive value, so the criterion will be absolutely an affecting criterion while a negative value for \((Di-Ri)\) means the criterion is an affected one. According to the results, The Product variables are affecting factors and three other criteria i.e. Promotion, Price and Place are known as affected factors. The final step of the DEMATEL technique is implemented because its results are needed as input for the ANP method, thus in the step, the total-relation matrix T is normalized to inner dependence matrix which forms one of the ANP method’s super matrixes. Accordingly, the total-relation matrix T is normalized to obtain the inner dependence matrix and so the matrix (4) is attained (table 4).

After the implementation of the DEMATEL technique and finding the interdependence between the internal affecting factors, the strategy is determined through the combination of the DEMATEL and ANP methods. This means that the previous obtained internal-relation matrix is applied as input for the ANP method which results in the selection of correct marketing strategy in terms of external variables as well as interdependency and relationships of internal factors.
**ANP Method**

Once the relationship between variables in internal affecting factors on adaptation/standardization international strategy selection has been obtained by the DEMATEL method, the factors relationship with the external affecting factors should be delineated in terms of decision alternatives selection.

In this step, the calculated eigenvalue matrixes are used to form a super matrix which is employed in the ANP method (Table 5).

The weighted super matrix convergent is obtained in the 9th power and indicates the convergence and weights which belong to internal affecting factors considering interdependency between the elements and the external affecting factors effects (Table 6).

**The Selection Step**

In this step, convergent weights are obtained from the limited and convergent super matrix which indicates the inner dependency of elements, this insures that the external factors and variables effects on the internal factors have been calculated considering inner dependency of these factors, so improves the selection precision and decreases the error rate. In the previous researches, such interdependency and relations between the elements have been taken into account separately not being embodied in any model or calculation.

In order to make an accurate selection between the adaptation/standardization strategies for each of the internal affecting factors (Product, Promotion, Price, and Place), it is necessary that the pair-wise comparison matrixes are employed to delineate the related weights. They show the external factors importance and weights and also reveal the alternatives weights with respect to the elements included in the internal factors and so the limited super matrix is applied in the attained weights.

Once the weights extracted from the internal factors were calculated based on (1) external factors effects and (2) dependency and relations between the elements of external factors, the relative weight or importance of

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As: PF=physical factors, DF=demographical factors, CSF=cultural, social factors, LPF=legal, political factors, PL=place, PRO=promotion, PR=price, PRO=product

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<th>Table 6: Convergent matrix in the ninth power (limited super matrix)</th>
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As: PF=physical factors, DF=demographical factors, CSF=cultural, social factors, LPF=legal, political factors, PL=place, PRO=promotion, PR=price, PRO=product
the adaptation strategy is calculated:
Product adaptation weight + Promotion adaptation weight + Price adaptation weight + Place adaptation weight = w1 + w2 + w3 + w4 + w5  
Where:
w1 = adaptation weight under the influence of physical factor
w2 = adaptation weight under the influence of demographic factor
w3 = adaptation weight under the influence of socio-cultural factor
w4 = adaptation weight under the influence of policy-legal factor
w5 = adaptation weight under the influence of physical factor
The same procedure has been used in measuring the total weights of standardization strategy.
Standardization strategy weight considering inner dependence of internal affecting factors and under the influence of external affecting factors = w’1 + w’2 + w’3 + w’4 + w’5

CONCLUSION
The ultimate results of this paper are as follows:
1- Evaluation and discovering the factors affecting on international marketing strategy selection, standardization/adaptation:
   To answer the question, 110 research articles are reviewed, the mentioned factors are identified and then are classified into two main groups: environment-based factors named as external affecting factors which include physical, demographic, socio-cultural, political-legal and economic factors, and organization-based factors named as internal affecting factors i.e. four elements of marketing mix. The marketing mix elements are under the control of marketing and business managers and the company survival and growth in the ever changing and competitive environment of international marketing depends on such elements.

(Najafizadeh, 2008) The research findings corroborate the other mentioned researches results.

2- Assessment of inner dependency and relations between the internal affecting variables: Product, Price, Promotion and Place in the adaptation/standardization strategy:
As it is already mentioned it is for the first time that the interdependency and effects among the marketing mix variables are considered and evaluated in the modeling of adaptation/standardization international marketing strategy. The DEMATEL method’s seventh step provides the end result of the method in which mutual effects of variables is mapped into a casual diagram as shown in figure (4); the elements of a systematic structure are classified into affecting and affected groups based on DEMATEL instructions. Figure 3 indicates the reciprocal effects of four internal affecting factors which is obvious in the corresponding digraph. Based on the method results, elements with positive (Di-Ri) have effects on elements which their (Di-Ri) value is negative. As the figure shows, the Product factor is known as affecting factor and three other factors have not any effect on Product. Based on the DEMATEL rules, in the strategy selection problem these three factors not only are under the influence of the Product factor but also have reciprocal and relative effects on each other.
The fact is completely justifiable and indicates that regarding the experts and professionals opinions in the field of international marketing in detergent and hygienic industry, the Product is the only factor that its direction toward the adaptation/standardization strategy will change the other three marketing mix elements directions accordingly. It means that the factor has effects on the type, form and components of the Promotion factor and so it guides the Promotion toward each of the two mentioned strategies. The Product also has effects on the Place, distribution channel policies, type, the channel length (short or long) and other constituents of the Place factor and its corresponding strategies. The Product is effective on the Price, price list and pricing strategies which these policies may be according to a unique pricing system or diverse pricing system corresponding to the source country.
On the other hand, the Promotion and Place factors are effective on the pricing policy and Price factors but the effect has narrower range than the Product effect.

3- Attaining a model for inner dependency and relations of variables based on the mathematical rules and techniques:
In the fifth step which deals with the selection of standardization or adaptation strategy, all of the
external variables effects are considered individually and also the weight and importance of each alternative for the sub-criteria is determined. The obtained values are 0.40418 and 0.5955 for the adaptation strategy and standardization strategy, respectively. This indicates the dominance of standardization strategy over the adaptation strategy. The finding confirms that the international marketing strategy is not entirely based on standardization or adaptation strategies, rather its aim is finding an optimum point for strategy development in a continuum between the standardization strategy and the adaptation strategy. In fact, the constructive strategy for each company is an optimal and correct combination of these two strategies, so it is necessary to confirm that the developed combined strategy provides the best approach for the marketing mix elements (Product, Promotion, Price and Place). The research findings reveal that the correct combined strategy inclines toward the standardization which may be due to special features inherent in the detergent-hygienic industry. Based on the results, it is recommended that the combination of two ANP and DEMATEL methods will be useful in international marketing selection and development.

REFERENCES