



Providing the assessment model of customer satisfaction

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Abstract

With the purpose to increase the customer satisfaction in Bank Melli Iran in Tehran province, this article explains a model for ranking the customer satisfaction criteria and its subsidiary indices in 2012. This research is applied based on the objective and has the library type in terms of data collection. Data and information needed for the research are collected based on document library studies (Designing the assessment model) and the information related to the research variables are extracted by using the experts' opinions and questioning. The main objective of this article is to provide an assessment model of customer satisfaction by using the Fuzzy Hierarchy Process in the study field of Bank Melli Iran in Tehran province. This study attempts to provide the scientific method based on the hierarchy data analysis model for those interested in this research field by the help of this case study. Finally, it became clear that the priorities of doing the e-banking services in Bank Melli of Tehran province in 2012 include the quality of providing services, customer's sense of financial security and confidence, employees' personality and behavioral characteristics, customers' access to the banking services, variety and attraction of services and bank granted privileges, quality of staff administrative, physical and welfare facilities, respectively. Obviously, any generalization and statistical inference without the field research will cause that the users to be deviated from the results.

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electronic satisfaction with the meaning of a customer satisfaction according to his previous experience of purchasing from an electronic business enterprise. In successful organizations, the customer satisfaction is considered as one of the measures of success. These organizations invest heavily in improving the activities which lead to the customer satisfaction, but it should be noted that the organizations should first identify and prioritize the factors affecting the customer satisfaction according to the limited resources and facilities of organizations and also the necessity to ensure the customer satisfaction, and then improve the customer satisfaction by considering the limited resources and

1 - Introduction

Satisfaction is derived from two Latin words including the "Sot is" means "Enough" and "Facer" means "Doing or making". Thus, satisfaction means demanding what we are looking for until we get it fully. Customer satisfaction is the consumer's feeling or attitude towards the product or service after it is consumed. Satisfaction can be defined in this way: customer reaction to the assessment of perceived difference between the previous expectations or relatively the performance norm and actual performance of product which is perceived after consuming. Customer satisfaction has been defined differently. (Cronin Jr. et al, 1992) considered the



researchers' viewpoints about the definitions of "satisfaction", (Moshiri, Esmaeil, 2001) has classified the main factors in the comprehensive definition of satisfaction into three factors. These factors are:

1 - Customer satisfaction is an emotional reaction or a state of mutual and cognitive understanding.

2 - Customer satisfaction is a response to a special focus on the expectations from production and experience of consumption or services.

3 - Customer satisfaction is a reaction which occurs in a period of time usually after the first choice or repeated experience.

Another group of researchers have considered the satisfaction as the reaction of mutual or cognitive understanding. (Harvay, D., 2002) believes that the customer satisfaction is the "identifying and understanding the customer behavior". In recent years, most of the researchers (Nezhad Parizi, Iran, 2002) have been researched and investigated the satisfaction as an emotional issue. In recent decades, the financial service sector has been undergone the several changes and developments. (Gronroos, C., 1982), the increasing technological advances, changes in people's living conditions, change at the educational level of society, starting the activities of banks and private financial institutions and... have caused that the structure of this industry and the nature of competition in it to be changed. Before these changes, the common thinking was that the customers need the banks for their own financial affairs and no serious action was taken in order to attract and retain the customers by the banks. But these changes caused that the banks to revise their attitude towards the customers and their financial activities. (Hansen, Eric, 1999) has expressed in his article that the satisfaction is a positive feeling which everyone acquire after receiving the service. This feeling is occurred by the conflict between the customer expectations and service supplier performance. If the received service from a customer is evaluated at the same level with the expectations, the feeling of satisfaction is created in him. In other words, if the level of service is higher

facilities of organization and based on the importance and priority of factors.

(Wai-ching Poon, 2008), believes that in today competitive world only the organizations and companies, which can take their own customers' needs into account and satisfy them in this regard, can compete each other and make the profit and this leads to the customers' loyalty towards the products and services provided by those organizations and companies. (Kavosi, Mohammadreza et al, 2005) expressed in their article that the banks should do wider attempts and activities in order to attract the customers due to the reliance of their own assets on the people deposits and also because of the individuals' attention to their own property and money; the best tool for this purpose is to apply the marketing principles especially the banking services marketing in order to maintain the market share, customer share and profitability. As a long-term success of financial institutions, the marketing is focused on the customer-orientation. In fact, the customer-orientation is the most useful and appropriate strategy for the banks because the customer is the basis of banking system. (Bruce, Andy et al, 2004) have suggested that the bankers should see themselves in the mirror of customer existence and try to understand the customer's demands and desires in a full competitive environment and try to get the customer's complete satisfaction, therefore the identifying the needs and expectations levels and factors affecting the customers' satisfaction and investigating the results of surveys and evaluating the public satisfaction of bank services can be a fundamental step in changing the system service delivery. (Zahedi, F., 1986) has defined the customer according to the legal perspective as follows. The customer is the person, people or organizations who contract each other in to provide the goods and services. Moreover, based on the perspective of market and economy, the customer is the one for whom an individual or organization meets a need. This need is probably related to a kind of food, beverages, computer, medical services and personnel services. By the review of

most important achievements which lead to increased level of society awareness. With an increase in the people's awareness in the society, the society requirements will also be increased. Evaluating the effective factors is important in creating the mutual trust between the customers and banking system. In banking system, the customers are the main axis and in fact all tasks are done for getting their satisfaction, attention and attracting them. Therefore, in the competitive space among the banks, the banks are successful which can receive higher customers' loyalty. The bank, which uses the world modern technologies in its own daily processes, can easily be aware of its own customers' needs and can meet the customers' today needs as well as predicting their future requirements.

2-Research Background

Electronic banking history in Iran dates back to 1971 when Tehran Bank had the first experience of automatic money payment only in that installed branch with 7 to 10 ATM in its own branches. In the late 1981s the Iranian banks began to computerize the bank operations due to the use of personal computers and the need for automation of banking operations. Comprehensive plan of banking automation was provided for banking network officials as a proposal for a vast development in planning the informatics activities of banks after numerous studies and research and the comprehensive banking system automation plan was formalized by the approval of General Assembly of banks in 1993. In the same year, the Central Bank established the Informatics Services Company as the executive organization for comprehensive informatics banking plan of banking system. During the years 1993 and 1994, the first signs of creating the national switch for electronic banking were seen and in the same regard, the communication network between the Bank Melli and Shahrvand Chain Stores was created. In June 2002, the set of regulations governing the network center for information exchange between the banks was adopted with the name "Shetab".

than the level of customer expectations, it causes the excitement and the lower level of service leads to the customer dissatisfaction. (Forouzandeh, 2001), in the field of satisfaction in the bank and banking industry, Philip Kotler, and Gary Armstrong consider that establishing the appropriate relationships with customers causes the customer satisfaction and believe that customer satisfaction will also lead to their loyalty to the bank. If a customer is completely loyal to the bank, he will be committed to the bank. He will try to do all his banking work in a bank. On the other hand, a loyal and satisfied customer will be a free-of-charge propagandist for the bank. Studies have shown that the satisfied customers distribute their satisfaction among 4 to 7 people, while dissatisfied customers distribute their dissatisfaction among 9 to 11 people.

Customer orientation is the most useful and appropriate strategy for the banks and in fact they have expressed this sentence much stronger and stated that the customer is the foundation and basis of banking system. A customer in the bank is at least equal to an asset. Nowadays, the banking system should see itself in the mirror of customer existence and tries to understand the customers' demands and desires in a competitive environment and take actions for making the customer satisfied with the organization. This study tries to determine and prioritize the importance of each of these factors by using the customers' viewpoints and through identifying and categorizing the factors affecting the customer satisfaction of banks. It helps the banks to consider more important factors in order to increase the customer satisfaction. (Fathian, 2007) has considered the information technology as the underlying factor for improving the operation and innovation in providing services and the factor which facilitates the relationship with customers and increase its speed and effectiveness. He has also considered the increasing development of information and communication technologies as the factor of human society achievements.

Individuals' easy access to the wide volume of different information is one of the

that Moutinho & Brownlie, 1989, found in their research that the customer satisfaction had a direct correlation with the place and access to ATMs. Their research has shown that the customer satisfaction depends on the ATM and the failure of machines long rows of ATMs make the customers dissatisfied. (Jamal and Nasser, 2003) researched about the correlation between the service quality and customer satisfaction of a Pakistani bank and found that this correlation is generally strong despite not finding a correlation between the customer satisfaction and tangible aspects of services. In a research entitled as the evaluation of electronic service quality and e-banking customer satisfaction in Bank Keshavarzi, (Beikzad and Molavi, 2009) have provided a model, in which the electronic service quality is defined as a seven dimensional phenomenon (efficiency, ordering supply, reliability, personal privacy, accountability, compensation and contact) and their effect on the customer satisfaction was measured. In a research entitled as the impact of electronic banking in enhancing the customer satisfaction of banks with case study of Bank Melli Iran, (Fathian, M. et al. 2008) measured the customer satisfaction in the cross correlation matrix after defining the electronic banking and ways of measuring the customer satisfaction by using the Kano model, and concluded through evaluating the tendency towards the electronic banking that the electronic services of Bank Melli are among the customers' functional needs and their development correlation with the customer satisfaction is a direct linear correlation. In a study entitled as the evaluation of electronic service quality in Raja passenger trains company, (Zahedi, Sh. Et al. 2008) described the eQual model as the chosen model for measuring the research after reviewing the literature related to the electronic service quality and then evaluated the services of this company by using this model. (Qureshi¹, TM. Et al. 2008), conducted a research entitled as Online Banking in Pakistan; the results have shown that the usefulness, safety and privacy (Personal Privacy) are among the most important

Thus, the Shetab department of central bank was established in 24/03/2002 and began its work with the aim to provide the electronic banking infrastructure. Shetab was created officially by making a link among the automated teller machines (ATMs) of three banks (Keshavarzi Bank (Agriculture)), Export Development Bank and Export (Saderat) Bank of Iran presented in the initial pilot of this plan and private banks of Saman and Karafarin asked to be presented in the initial tests of Shetab). Now, most of the Iranian banks are now implementing their e-banking projects directly. Bank Melli with SIBA plan, Bank Tejarat with SGB, bank Saderat with Sepehr, Bank Refah Kargaran with mobile Current plan, Bank Keshavarzi with Mehr plan, Bank Mellat with Jaam plan and private banks with 24-hour banking plan have experience and are experiencing the e-banking separately and individually in their own covered area. In general, the electronic banking is the ability of employees to increase their speed and efficiency in banking means creating the opportunities for staff in order to enhance their speed and efficiency in providing the banking service in the branch and also the processes among the branches and banks worldwide and providing the banking hardware and software facilities for customers in order to do desired banking operations by using them and through safe and secure communicational channels and without the need for physical presence in the bank at any time of day or night (24 hours).

(Guang-lee et al, 2005) defined the aspects of electronic service quality according to five components of Website design, reliability, accountability, trust and privacy and then considered the effect of these variables on two variables of customer satisfaction and service quality as the mediator variables in the form of five two-state theories. (Pourbabaei, Zohreh, 2008) mentioned in his article that Harington and Karmel, 2007, confirmed the correlation among the service quality, productivity, cost reduction and profitability in a study entitled as the E-banking service quality and its impact on the customer satisfaction. (Yazdanpanah, Ahmad Ali, 2009), mentioned in his article

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research is presented in table one.

factors of online banking acceptance by the customers. Comparison of conducted

Table (1) Comparison of conducted research

No.	Researcher's Name	Year	Working area
1	Guang-lee, gwo, et. al.	2005	Customer perceptions of e-service equality in online shopping
2	Pourbabaei, Zohreh	2008	Providing a model based on the exchange process in the quality of electronic services
3	Yazdanpanah, Ahmad Ali	2009	Identifying the factors affecting the quality of online services in the acceptance of e-business models
4	Jamal, Ahmad, et. al.	2002	Customer satisfaction and retail Banking
5	Beikzad, Jafar et. al.	2009	Electronic service quality and customer satisfaction
6	Fathian, Mohammad et. al.	2008	Effect of implementing the e-banking on increasing the customer satisfaction of banks
7	Zahedi, Shams al-Sadat et al	2008	Evaluating the E-service quality in RAJA passenger trains Co.
8	Qureshi, T.M, et. al.	2008	Consumer Acceptance of Online Banking in Developing Economics

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the sub-indices (second level) are presented with the conceptual model as follows.

- **Six main factors**

The priority of main factors includes the service delivery quality, employees' personality and behavioral characteristics, quality of administrative, physical and welfare facilities for employees, customers' access to the banking services, variety and attraction of services and granted benefits of banks, customers' sense of financial security and confidence.

- **Sub-indices of six main factors**

Sub-indices related to the **Quality of Service delivery** include providing the services for customers in the shortest time- speed, providing the liquidity for regular clients particularly in critical times, having the national processing network, customers' awareness of new banking regulations and rules, providing the Cheque Book in the shortest possible time, bank flexibility in providing the services according to the customer requirements, existence of a talking system for informing the customers quickly.

Sub-indices related to the **employees' characteristic and Behavior** include the indicators of politeness and respect in dealing with the customers, employees' openness and dignity in relationships with the customer, employees' attempt to resolve the clients'

3- Research methodology

This research is applied based on the objective and is a descriptive-analytical research based on the method of collecting and processing the information. Furthermore, it is among the case study research due to the study of a certain bank, Bank Melli Iran. The assessment models of strategic programs, such as FAHP model, have been used in order to conducting this research. The method of document library studies has been used in order to collect the data and information needed for research of. At the first stage, the factors affecting the customer satisfaction in the banks were identified by applying the library studies and also Interview with experts. At the second stage the identified factors were ranked through the questionnaire and interview and by the help of Analytic Hierarchy Process Technique and based on the research hypotheses. The time period of research includes the year 2023 and the location of research was in Bank Melli Iran in Tehran province. Moreover, the subject of research includes the category of customer satisfaction model in the banking industry and the application of models including the balanced scorecard and Fuzzy Analytic Hierarchy Process in this regard. The ranking is done by the AHP method (first level) and



Sub-indices related to the **Variety and attraction of granted services and benefits** include facilitating the benefits grant, lack of too much bureaucracy, providing affordable banking services, rate of paid interest to deposits, various banking facilities (granting various loans to the applicants), considering the special benefits for major and permanent clients, opening the various deposit accounts, considering the valuable prizes for lottery.

Sub-indices related to the **customers' Sense of financial security and confidence** include employees' attention in data processing and doing financial calculations related to the customers, bank commitment to protect the customers' properties and financial rights, providing accurate and reliable information for the customers, financial stability of bank, financial strong position and reliable bank, customers' feel of secure about their savings, customers' financial and physical security in the bank area.

- **Conceptual model**

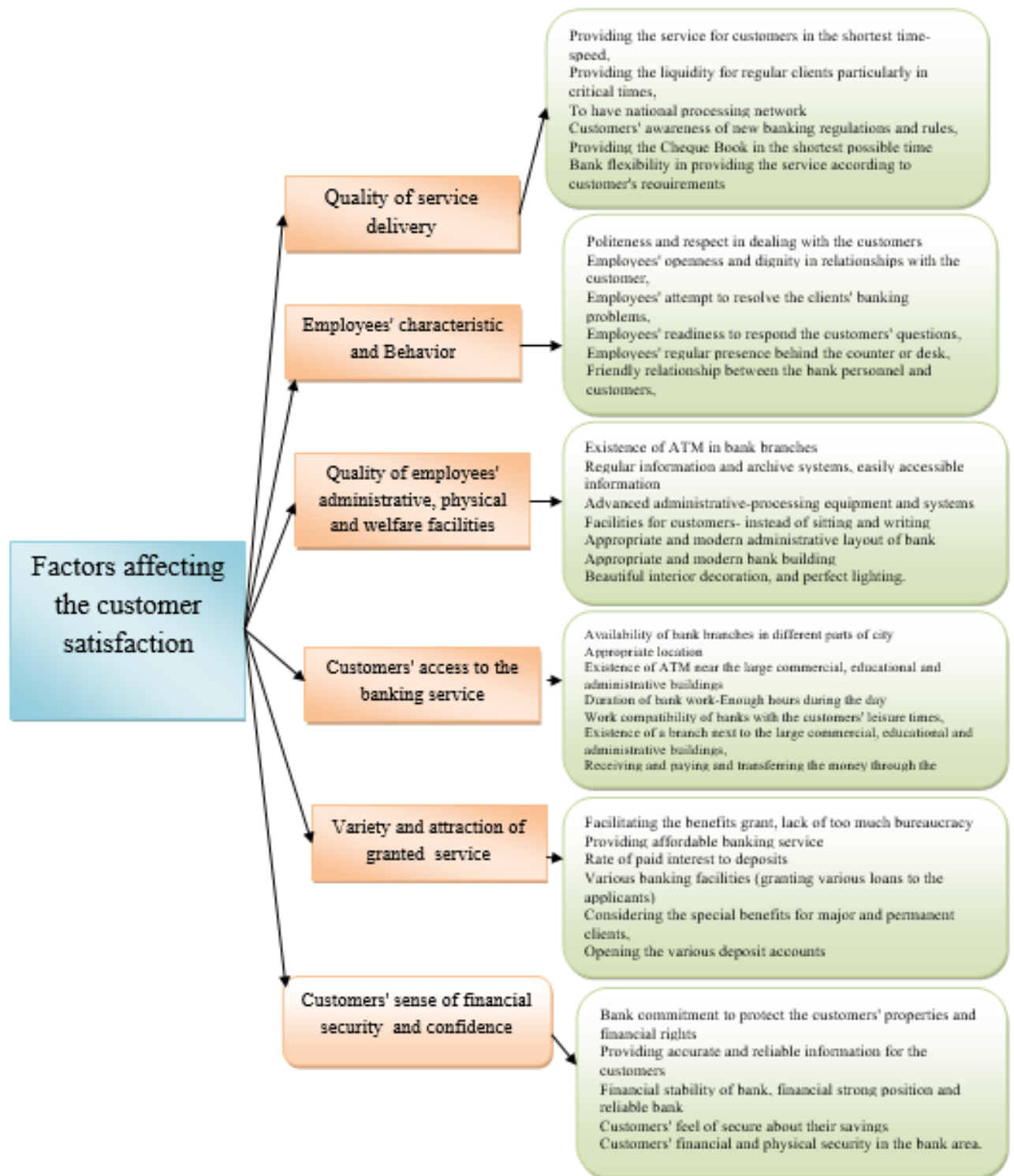
By using a Fuzzy Analytic Hierarchy Process (FAHP) in this study, we seek to provide the customer satisfaction model in Bank Melli Iran of Tehran province. Criteria, indicators and sub-indices of model were extracted and introduced above. Graphical conceptual model of research is presented in figure one.

banking problems, employees' readiness to respond to the customers' questions, employees' regular presence behind the counter or desk, friendly relationship between the bank personnel and customers, employees' tidiness and wearing suitable and formal clothing.

Sub-indices related to the **quality of employees' administrative, physical and welfare facilities** include the existence of ATM in bank branches, regular information and archive systems, easily accessible information, advanced administrative-processing equipment and systems, facilities for customers - instead of sitting and writing, appropriate and modern administrative layout of bank, appropriate and modern bank building, beautiful interior decoration, and perfect lighting.

Sub-indices related to the **Customers' access to the banking services** include the availability of bank branches in different parts of city, appropriate location, existence of ATM near the large commercial, educational and administrative buildings, duration of bank work- Enough hours during the day, work compatibility of banks with the customers' leisure times, existence of a branch next to the large commercial, educational and administrative buildings, receiving and paying and transferring the money through the Internet.

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Figure (1) Conceptual model of dependent and independent variables

are triangular fuzzy numbers and this indicates the priority or importance between two criteria. Therefore, decision makers compare the indicators with each other and use the triangular fuzzy numbers for paired

4- Research findings

4-1 Ranking the main factors of customer satisfaction by using the FAHP

Evaluating the criteria is done by paired comparison and granting the privileges which



elements in each level compared to the higher levels by a fuzzy method. Preferred values in the AHP fuzzy method are presented in table 3.

comparisons. Using the spectrum 1 to 9, the paired comparison matrix can be created as the triangular fuzzy numbers. In the other words, decision maker expresses his own preferences with a paired comparison of

Table (3) Fuzzy numbers corresponding to the preferences in paired comparisons

Triangular fuzzy numbers	Linguistic expression for determining the preference
(3.5, 3, 2.5)	Complete and absolute preference or importance
(2, 2.5, 3)	Much stronger preference or importance
(1.5, 2, 2.5)	Stronger preference or importance
(1, 1.5, 2)	Low priority or importance
(0.5, 1, 1.5)	Almost equal preference or importance
(1, 1, 1)	Exactly equal preference or importance

including the quality of service delivery (A), employees' personality and behavioral characteristics (B), quality of employees' administrative, physical and welfare facilities (C), Customers' access to the banking service (D), Variety and attraction of granted service and benefit by the bank (E), and Customers' sense of financial security and confidence (F) in the questionnaire as the table three.

In order to be familiar with the Fuzzy Analytic Hierarchy Process, first the weighting of options is done step by step based on one of the respondents' viewpoint. Then, given the presence of 100 respondents, the output results, which were achieved by using Expert Choice software, are presented.

First respondent completed the table related to the priority of main factors

Table (3) Prioritizing the main factors

Six factors	A	B	C	D	E	F
A	1	3.00	5.00	0.33	5.00	3.00
B	0.33	1	3.00	5.00	3.00	0.20
C	0.20	0.33	1	3.00	5.00	3.00
D	3.00	0.20	0.33	1	3.00	5.00
E	0.20	0.33	0.20	0.33	1	3.00
F	0.33	5.00	0.33	0.20	0.33	1

At the next stage, the numbers and input of above matrix should be changed to the fuzzy numbers according to the equivalency in the table "Fuzzy numbers corresponding to the preferences". Therefore, the paired comparisons matrix of factors based on the first respondent's perspective have been presented in table four.

Table (4) Paired Comparisons of factors

Six Factors	A	B	C	D	E	F
A	(1, 1, 1)	(1, 1.5, 2)	(1.5, 2, 2.5)	(0.5, 0.66, 1)	(1.5, 2, 2.5)	(1, 1.5, 2)
B	(0.5, 1, 1.5)	(1, 1, 1)	(1, 1.5, 2)	(1.5, 2, 2.5)	(1, 1.5, 2)	(0.4, 0.5, 0.66)
C	(0.4, 0.5, 0.66)	(0.5, 1, 1.5)	(1, 1, 1)	(1, 1.5, 2)	(1.5, 2, 2.5)	(1, 1.5, 2)
D	(1, 1.5, 2)	(0.4, 0.5, 0.66)	(0.5, 1, 1.5)	(1, 1, 1)	(1, 1.5, 2)	(1.5, 2, 2.5)



E	(0.4, 0.5, 0.66)	(0.5, 0.66, 1)	(0.4, 0.5, 0.66)	(0.5, 1, 1.5)	(1, 1, 1)	(1, 1.5, 2)
F	(0.5, 0.66, 1)	(1.5, 2, 2.5)	(0.5, 0.66, 1)	(0.4, 0.5, 0.66)	(0.5, 1, 1.5)	(1, 1, 1)

Then the relative and final weights should be calculated and different methods have been proposed for it by researchers such as the Extent Analysis Method presented by Chang; in this study, we use this method as described below.

1 – Value of SK, which is a triangular fuzzy number, is calculated for each of the rows of paired comparisons matrix which is prepared with above method. Then, after completing the tables of preferences of factors by the respondents, first the coefficients of each of paired comparison matrixes were calculated (S_k). Value of S_k is a triangular number which is calculated as follows.

$$S_K = \sum_{i=1}^n M_{kj} * \left[\sum_{i=1}^m \sum_{i=1}^n M_{ij} \right]^{-1}$$

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In which, K indicates the number of row and i and j represent the options and criteria, respectively.

In the EA method, their largeness degree towards each other should be measured after calculating the SKs. Generally, if M1 and M2 are two triangular fuzzy numbers, the largeness degree of M1 from M2 is shown with V ($M_1 \geq M_2$) and is defined as follows.

If $M_1 \geq M_2$ $V(M_1 \geq M_2) = 1$

Otherwise, $V(M_1 \geq M_2) = hgt(M_1 * M_2)$

$$hgt(m_1 \cap m_2) = \frac{u_1 - l_2}{(u_1 - l_2) + (m_2 - m_1)}$$

Also, we have:

A largeness amount of a triangular fuzzy number from k other triangular fuzzy number is also calculated according to the following equation.

$$v(m_1 \geq m_2 \dots m_k) = mi[v(m_1 \geq m_2) \dots v(m_1 \geq m_k)]$$

For calculating the weight of indices in the paired comparison matrix in the method EA, we do as follows.

$$w'(x_i) = \min \{v(s_i \geq s_k), k = 1, 2, \dots, n, k \neq i\}$$

Thus, the index weight vector will be as follows.

$$w' = [w'(c_1), w'(c_2) \dots w'(c_n)]^t$$

which is the vector of non-normalized coefficients of fuzzy AHP. The obtained numbers in the previous step are the non-normalized weight for criteria of Analytic Hierarchy Table. Then, the normalized weights of criteria (indices) are calculated according to the following formula.

$$W_j = \frac{W'_i}{\sum W'_i} \quad w(x, x, x, \dots)^t$$

Obtained weights are the coefficients of relative importance of each indicator (Criteria) based on the Fuzzy AHP (by the EA method) and determine the best option of decision-making from decision-making criteria. Given what was stated, the general model of ideal investment plan is defined and provided by considering the relevant criteria as follows. As mentioned, 100 respondents, have completed the tables related to the weighting the options of questionnaire. Paired comparisons of the whole group (100 people) should be combined in such a way for final prioritization of options. Using the geometric mean is one of the best methods for this purpose. In other words, it has shown for every five respondents in Table 5. The geometric mean for inputs of a, b, c and ... and n is as follows: (Geometric mean = $(a \times b \times c \dots \times n)^{1/n}$).



Table (5) Row Sum of indices

Main factors	Row sum of main factors
Quality of service delivery	(6.5, 8.6, 10.5)
Employees' personality and behavioral characteristics	(5.4, 7.16, 9.16)
Quality of employees' administrative, physical and welfare facilities	(5.4, 5.6, 9.1)
Customers' access to the banking service	(5.6, 5.4, 9.1)
Variety and attraction of granted service and benefit by the bank	(3.8, 4.7, 6.2)
Customers' sense of financial security and confidence	(4.4, 5.3, 7.1)
Column sum	(31.1, 36.76, 51.16)

In the first step, SK value, which is a triangular fuzzy number, is calculated as follows for each of the rows of paired comparisons matrix which are calculated based on the above method.

$$S_k = \sum_{j=1}^n M_{kj} \times \left[\sum_{i=1}^m \sum_{j=1}^n M_{ij} \right]^{-1}$$

In the second step, their largeness towards each other can be calculated as follows after measuring the Si(s):

$$V(M_2 \geq M_1) = \text{hgt}(M_1 \cap M_2) = \mu_{M_2}(d) = \begin{cases} 1, & \text{if } m_2 \geq m_1, \\ 0, & \text{if } l_1 \geq u_2, \\ \frac{l_1 - u_2}{(m_2 - u_2) - (m_1 - l_1)}, & \text{otherwise,} \end{cases}$$

So, we have,

$$\text{hgt}(M_1 \cap M_2) = \frac{u_1 - l_2}{(u_1 - l_2) + (m_2 - m_1)}$$

In the third step, for calculating the weight of indices in paired comparisons matrix according to the second step, we have,

$$W'(xi) = \text{Min} \{V(Si \geq Sk)\}, \quad k = 1, 2, \dots, n$$

After calculating the largeness degree of Sis towards each other, the fuzzy row minimum is calculated and then the vector of non-normalized weight of indices is calculated.

In the fourth step, we normalized the weight vector, resulted from the third step, by the following equation and the weight vector of criteria is calculated as follows.

$$w_i = \frac{w'_i}{\sum w'}$$

At the end of the calculations, the final weight and prioritization of six main factors affecting the customer satisfaction in Bank Melli Iran as presented in table 6, respectively, from the total perspective of sample and based on the FAHP method.

Table (6) Prioritizing the main factors by using the FAHP method

Priority	Weight	Index (Criterion)
1	0.2	Quality of service delivery
3	0.16	Employees' personality and behavioral characteristics
6	0.14	Quality of employees' administrative, physical and welfare facilities
4	0.15	Customers' access to the banking service
5	0.15	Variety and attraction of granted service and benefit by the bank
2	0.2	Customers' sense of financial security and confidence

Output chart of Expert Choice software about the final prioritization of six factors is as following figure 2 for total number of respondents.

Figure (2) Final prioritization of six factors

Synthesis with respect to:
 Goal: Select the best retail site



After ranking the main factors, the indicators related to each of six factors above are prioritized as well as the sub-indices related to the indicators by described method. The results of calculations are presented as the output results of Expert Choice software in order to prevent the prolonged workload of sub-indices related to six factors above. It should be reminded that the customer satisfaction, employees' personality and behavioral characteristics, quality of employees' administrative, physical and welfare facilities, Customers' access to the banking service (D), and Variety and attraction of granted service and benefits by the bank have 7 sub-indices and customers' sense of financial security and confidence has six sub-indices.

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Figure (3) Ranking the main sub-indices for the quality of service delivery

Synthesis with respect to:
 Goal: Select the best retail site

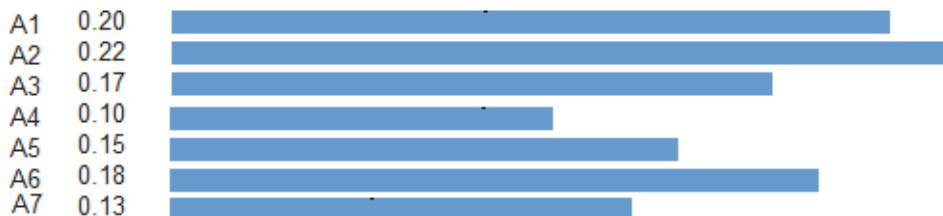


Figure (4) Ranking the main sub-indices for employees' personality and behavioral characteristics

Synthesis with respect to:
 Goal: Select the best retail site

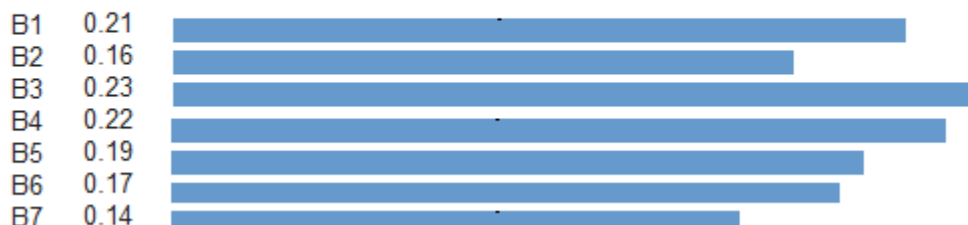


Figure (5) Ranking the main sub-indices for quality of employees' administrative, physical and welfare facilities

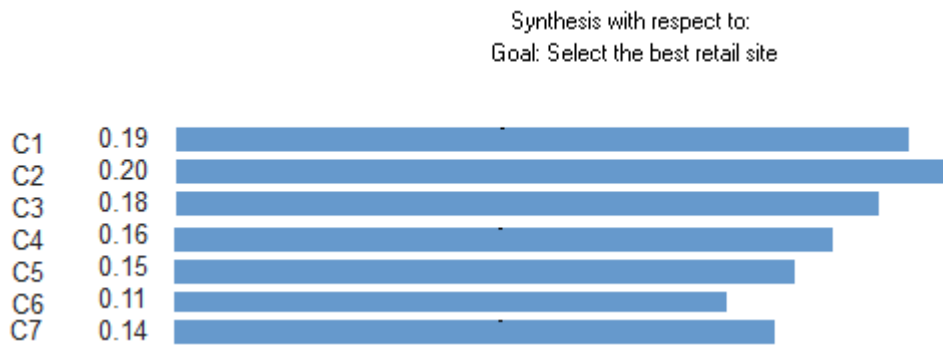


Figure (6) Ranking the main sub-indices for Customers' access to the banking service

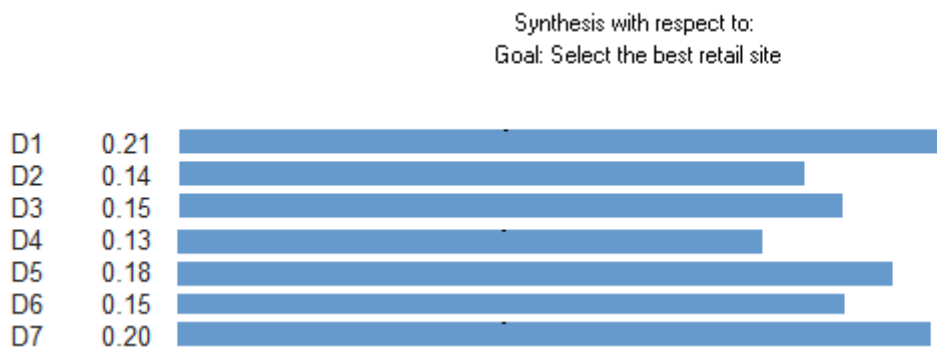


Figure (7) Ranking the main sub-indices for Variety and attraction of granted service and benefit by the bank

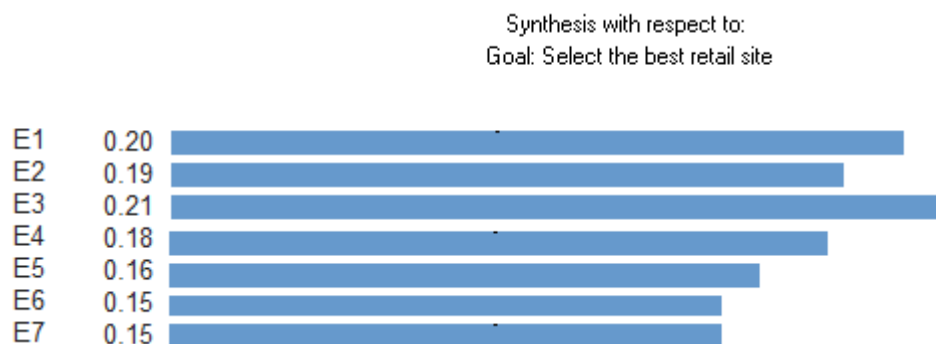
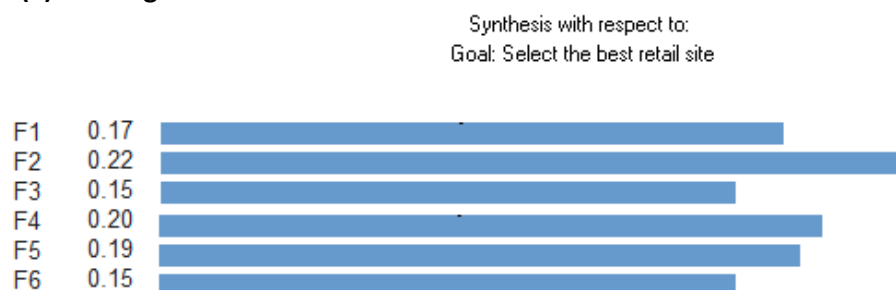


Figure (8) Ranking the main sub-indices for customers' sense of financial security and confidence



provided. Obviously, the researchers can use the results of this paper in future work and promote the obtained results.

5- Conclusion and suggestion

In this section, the results of ranking by the AHP method on the research data was reviewed and then offered suggestions were



2 – Increasing the customers' sense of financial security and confidence through,

- Bank commitment to protection of customers' assets and financial rights
- Financial strength of banks, financial strong position and reliability of bank
- Customers' feel of secure about their deposits

3 – Increasing the satisfaction of employees' personality and behavioral characteristics through,

- Staff attempts to solve the clients' banking problems
- Customers' respect and politeness in dealing with the customers
- Employees' readiness to respond to the customers' questions

Other researchers are suggested to develop the sample population by the help of statistical methods and generalize the executive calculations in the field studies to the entire community of Bank Melli Iran. It is also recommended to attempt to increase the criteria of customer satisfaction and relevant sub-indices.

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Tables one to five show the results of calculation. Results of Table six indicate that the priority of doing e-banking services is listed as the quality of service delivery, customers' sense of financial security and confidence, employees' personality and behavioral characteristics, Customers' access to the banking service, Variety and attraction of granted service and benefit by the bank, and quality of employees' administrative, physical and welfare facilities, respectively.

All criteria of customer satisfaction and their sub-indices are shown in Figure 1. Figure two shows the prioritization of customer satisfaction criteria. Figures three to eight also display the prioritization of sub-indices criteria.

- Suggestion

The main objective of this article is to provide an assessment model for the customer satisfaction by using the Fuzzy Analytic Hierarchy Process in the study field of Bank Melli Iran in Tehran Province. Through a case study, this paper attempts to provide a scientific method based on the Analytic Hierarchy Process of data for those interested in this kind of research field. Therefore, the suggestions are provided in summery for Bank Melli Iran in Tehran Province and other researchers, as follows. Given the required facilities and budget, only three cases of work field are mentioned for enhancing the customer satisfaction. Obviously, the workload for enhancing the customer satisfaction according to the presented prioritization in this study will be chosen based on relevant executives' opinion. Hence, the improvement of following criteria (3 initial cases) is recommended through the relevant sub-indices (3 sub-indices) in order to increase the customer satisfaction in Bank Melli of Tehran province,

- 1 – Increasing the quality of service delivery through,
 - Providing the liquidity for permanent clients particularly in critical times
 - Providing the service for customers
 - Bank flexibility in providing services according to the customer requirements

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