

Journal of Industrial Strategic Management

Investigating the Effect of Technology Management Elements on Organizational Agility Using Structural Equation Techniques in Refah Chain Stores, Tehran

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CHRONICLE Abstract

Article history:

Received: 04/07/2017

*Received in revised:
08/18/2017*

Accepted: 10/11/2017

Keywords:

** Technology
Management,
* Organizational
Agility
* Fuzzy AHP
* Refah Stores*

The purpose of this study was to investigate the impact of technology management elements on organizational agility using the structural equation technique. The research method was descriptive with the use of survey and the statistical population of the study consisted of all 500 managers and employees of Refah chain stores in the city of Tehran. The sample was selected through cluster sampling, followed by convenience sampling, which led to the selection of 217 participants according to Morgan table. Measurement tools in this research included two standard questionnaires for technology management Wang & Hong (2017) and organizational agility Sharifi and Zhang (2004) (2004) The validity of the questionnaires were confirmed by the supervisor and a number of managers and experts. Also, the Cronbach's alpha coefficient stood at 0.88, indicating an acceptable of reliability. Data analysis was performed on two levels of descriptive statistics and inferential statistics. At the descriptive level, statistical frequency as well as frequency percentage were investigated. At the inferential level, research hypotheses were tested with LISREL software. Finally, using the Fuzzy AHP technique, technology leadership elements were ranked. The results showed that e technology management elements affect organizational agility in Refah chain stores of Tehran, with the identifying component and the acquisition component having the highest and lowest priority respectively

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Introduction

Nowadays, the role of technology management as the main driver and engine of economic development in the world today is unquestionable. Technology is nourished in the context of knowledge and, in principle, through R&D, different applications of knowledge in human life could be discovered or created (Kabaran zadeh, 2009).

Organizational agility means the provision of diverse and high quality products in the shortest time possible (olfat and Zanjiri, 2017). The rapid growth of technology, increased risk taking in the global business, and rising changes in customer needs, have posited product development teams with mounting pressures to reduce costs, and shorten production cycles, along with maintaining quality and reliability of the production. As such, much attention has been paid to agility strategies in the production process of such products (Hosseini & Mostafavi, 2013).

Statement of the problem:

Survival in a global and competitive business environment requires the transformation of business processes in agile and customer-oriented structures, and technology as a vital driving force, facilitates the realization of business goals, and supports business decision making in a timely manner (Karimi et. al., 2010). The emergence of innovative products is mainly market-oriented, and the creation of value is a challenge to the technology-driven industries, which is why technology would be necessary to develop competitive advantage (Barbosa et al., 2015). The success of technology management depends on effective management of innovation processes and technology development in addition to the use of technology in business and industry (Karimi et. al., 2010). On the other hand, agility is one of the most important capabilities that companies need to reduce their response time, improve flexibility and increase their competitive ability (Hosseini & Mostafavi, 2013). Despite the existence of previous research in this area, the impact of technology management activities on agility capabilities has been scantily investigated. Thus, this study aims to fill this theoretical and practical gap and in one of the key chain stores in Iran namely Refah. As such, the main purpose of this research is to understand the impact of technology management elements on organizational agility in Refah chain stores in Tehran.

Importance of the research

From a theoretical perspective, technology management activities and agility capabilities have been used separately in previous studies. Due to the importance of these variables in responding to dynamic environments, in the present research these variables are modeled simultaneously. From a practical point of view, it is worth noting that the research population consisted of managers and employees in Refah chain stores as a leading player in the market and the country which could effectively identify, choose and implement the right technology in the long run. Such significance is doubled considering the fact that no prior research has so far been conducted in this respect at a domestic or international scale in these stores. In this regard, the innovation of this research is justifiable. Ultimately, and in an attempt to address the main research aim in Refah stores, this research is looking for ways to study the elements of technology management and its impact on agility as a tool for to improve performance in today's dynamic environment and the changing needs of customers in domestic and foreign businesses to develop sustainable competitive advantage.

Research aim and objectives:**Research Aim:**

Determining the effects of technology management elements on organizational agility in Refah chain stores in Tehran.

Objectives:

This research is aimed at determining:

- 1) The effect of technology identification on organizational agility in Refah chain stores in Tehran.
- 2) The effect of technology selection on organizational agility in Refah chain stores in Tehran.
- 3) The effect of technology equating on organizational agility in Refah chain stores in Tehran.
- 4) The effect of technology learning on organizational agility in Refah chain stores in Tehran.
- 5) The effect of technology utilization (use) organizational agility in Refah chain stores in Tehran.
- 6) The effect of technology protect on organizational agility in Refah chain stores in Tehran.
- 7) The effect of technology quality on organizational agility in Refah chain stores in Tehran.

Research hypotheses Research hypotheses:**Main hypothesis:**

•Technology management elements influence organizational agility in Refah chain stores in Tehran

• Sub-hypotheses:

- 1) Identification of technology affects organizational agility in Refah chain stores in Tehran.
- 2) The selection of technology affects organizational agility in Refah chain stores in Tehran.
- 3) Acquisition of technology affects organizational agility in Refah chain stores in Tehran.
- 4) Learning of technology affects organizational agility in Refah chain stores in Tehran.
- 5) Utilization technology affects organizational agility Refah chain stores in Tehran.
- 6) Protect of technology affects organizational agility in Refah chain stores in Tehran.
- 7) Quality of technology affects organizational agility in Refah chain stores in Tehran.

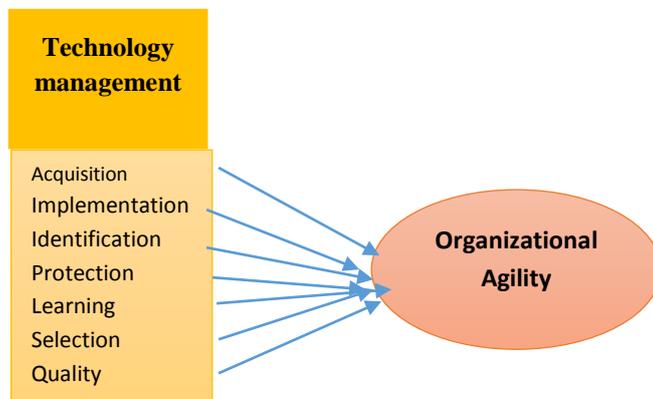
Research model:

Figure 1: Conceptual Model of Research (Source: Wang et. al., 2014)

Methodology of research:

The research is descriptive in terms of the purpose of the research. It is a correlation study in nature which applies survey to collect data. Research population –i.e. all the subjects belonging to a defined group (Jafar Nazhad & shhabi, 2007). consisted of all 500 managers and employees of Refah chain stores in Tehran in 2018-2019. In this study, Krejcy and Morgan table was used to estimate the sample size. Based on the number of the statistical population, the sample size was 217. Through cluster sampling, followed by convenience sampling, 180 questionnaires were answered and returned (about 37 questionnaires were incomplete or defective). The steps taken to increase the validity of the questionnaire, are summarized below:

Initially, extensive literature review was conducted to help the researcher fully understand the concepts and variables discussed in previous studies as well as the scales used to measure them. Then the standard questionnaire was translated and provided to the six senior experts in Refah stores to be amended and approved. Once the questionnaire was approved, it was again distributed among several university professors and senior staffs of the store, and, and according to their comments, final corrections were made. The final questionnaire was distributed among 40 employees (samples) as a pre-test. In this research, Cronbach's alpha test was used to measure the reliability. To do so, 30 people participated in a pretest. Using SPSS software, the Cronbach's alpha value was found to be 0.88. Samples were calculated in the pre-test.

Table 1: presents Cronbach's alpha values related to the reliability of the questionnaire:

Variable	Cronbach's alpha
Acquisition	0.85
Use	0.84
Identification	0.86
Protect	0.87
Learning	0.94
Selection	0.74
Quality	0.75
Organizational Agility	0.85
Whole questionnaire	0.88

Findings:

Once data were collected and analyzed, the following findings were obtained:

Descriptive Analysis:

Of the 180 respondents, 118 were male and 62 were female with frequencies of 65% and 35% respectively.

Marital status was measured in terms of being married or single. The ratio of former to the latter were about 90%.

More In addition, it was found out that more than 43% of the participants were in the age range of 41-50.

The distribution of respondents based on their level of education revealed that more than 56 percent had undergraduate degrees. Finally, 44% of the respondents had a professional experience of 6-10 years.

Inferential analysis:

In this research, a basic hypothesis and seven sub-hypotheses are presented as follows:

Mean and standard deviations of research variables:

Table 2 shows the mean and standard deviation of the variables of the research.

Table 2: Mean and standard deviation of research variables:

Row	Variable	Standard deviation	Average
1	Acquisition	3.11	18.85
2	Use	3.24	12.13
3	Identification	3.43	15.23
4	Protect	4.56	18.34
5	Learning	4.41	18.72
6	Selection	4.21	17.60
7	Quality	3.78	16.84
8	Organizational Agility	7.92	26.80

As shown in Table 2, among the technology management elements, the highest mean belongs to the acquisition component and the lowest value belongs to the exploitation component

Kolmogorov-Smirnov test to check the normal variables:

The statistical assumptions for normal distribution are presented below:

- H0:** Data distribution is normal.
- H1:** Data distribution is not normal.

Table 3: Normal test of research variables

In this research, Smirnov's sig in all variables was above 0.05. Therefore, the distribution is normal.

Variables	Significance Factor
Acquisition	0.118
Use	0.055
Identification	0.080
Protect	0.201
Learning	0.066
Selection	0.115
Quality	0.140
Organizational Agility	0.045

Investigating the correlation model of independent research variables:

Fig. 2 shows the correlation model of the independent variables of the research in the standard estimation mode. Factor loadings in the standard estimation mode show the impact of each of the variables or items in explaining the variance of the variables or main factors to shed more light, factor loading represents the correlation between each observed variable (Questionnaire items) and the latent variable (factors). For example, the factor loading of the second question in the acquisition component is 0.95. In other words, this question explains about 91% of the acquisition component variance. The value of 0.09 is the error value (the amount of variance that cannot be explained by the second question). Also, the factor loading of the third question in the utilization component is 0.94. In other words, this question explains about 88% of the variance in exploitation. The error value is 12% is (It is obvious that the lower the error rate, the higher the coefficients and the greater the correlation between the question and the relevant factor. The value of the numerical coefficient is between 0 and 1, with better explanations of the variance as it approaches.

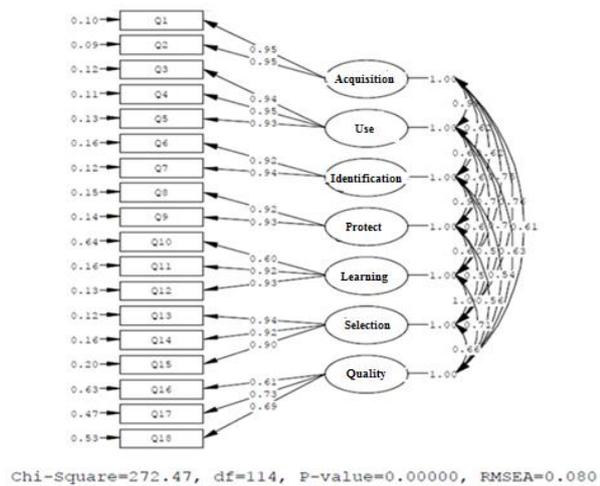


Figure 2: Correlation model of independent variables of research in standard estimation mod The next output (model in meaningful mode) shows the significance of the coefficients and parameters obtained by the correlation model of the independent variables of the research, with all the coefficients meaningful. Test values above 1.96 or below 1.96 represent statistically meaningful relationships.

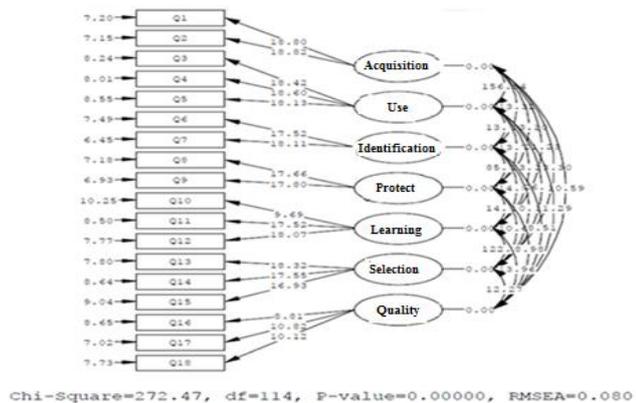


Figure 3: Correlation model of independent variables of research in meaningful mode

The estimated results (lower part) indicate the relative suitability of the indices. According to the lisrel output, the calculated X^2 is equal to 47.272, which is below 3 relative to the 114 degree of freedom. The RMSEA value is 0.08 (the highest value permitted). The GFI, AGFI and NFI indices are all above 0.9, indicating a very high fit.

Investigation of correlation model for the dependent variable of the research:

Figure (4) shows the correlation model of the dependent variable in the standard estimation mode. Model factor loadings in the standard estimation mode indicate the impact of each of the variables or items in explaining the variance of the variables or main factors. In other words, factor loading represents the correlation between each observed variable (Questionnaire item) and the factors. Factor loadings of each research question.is presented in figures 4-8. For example, the factor loading of the first question (the organizational agility of the employees) is 0.48. In other words, this question explains approximately 23% of the variable of organizational agility of the employees, with an error value of 0.77).

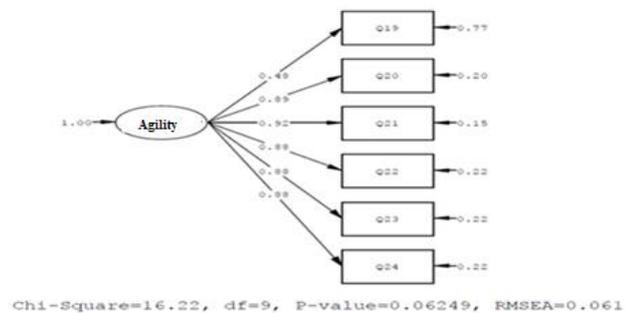


Figure 4) Correlation model of dependent variable of research in standard estimation mode. The next output (model in a meaningful state) shows the significance of the coefficients and the obtained parameters. The correlation model of the dependent variables of the research shows that all the coefficients obtained are significant. The test values greater than 1.96 or smaller than 1.96 represent the significance of the relationships.

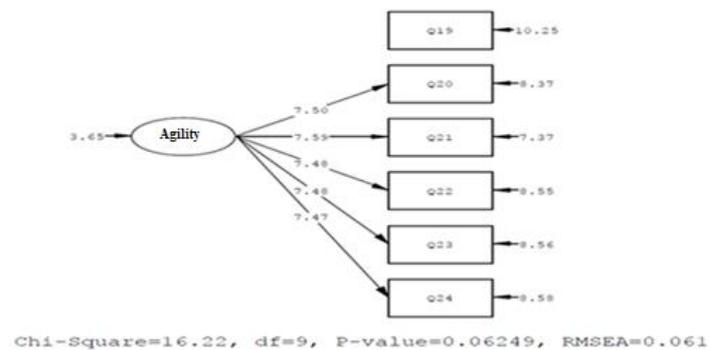


Figure 5: Correlation model of the dependent variable of the research in a significant number state

The estimated results (lower part) indicate the relative suitability of the indices. According to the Laser output, the calculated X^2 is equal to 16.22, which is below 3 relative to the degree of freedom of 9. The RMSEA value is 0.61. The RMSEA is 0.08. The GFI, AGFI and NFI indices are all above 0.9, indicating a very high fit.

Testing the main hypothesis of the research by structural equation modeling:

One of the strongest and most appropriate methods of analysis in behavioral science research is multivariate analysis. Because the nature of these issues is multivariable and cannot be solved by a two-variable method (in which only one independent variable is studied with associated dependent variable at a time). Hence, in this research, structural equation modeling and especially path analysis have been used to confirm or disprove the hypotheses. Path analysis (structural model) is a technique that shows the relationships between research variables (independent, intermediary, and dependent) simultaneously. The purpose of path analysis is to identify the causality (impact) between the variables of the conceptual model. In

the structural model of the present study, the influence of technology management elements on organizational agility is shown. Figures 6 and 7 represent a structural model in standard estimation and significant coefficient mode, where the impact of technology management elements on organizational agility is estimated to be 0.78. Confirmation or rejection of assumptions is determined in the meaningful mode. In other words, if the number-value is above or below 1.96, the hypothesis is confirmed.

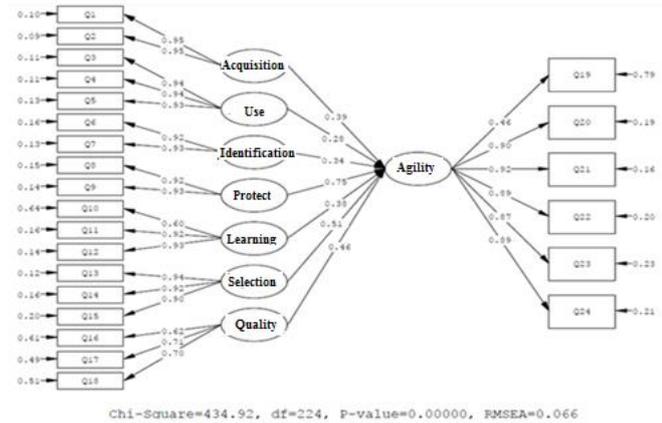


Figure 6: Model in the mode of standard estimation coefficients

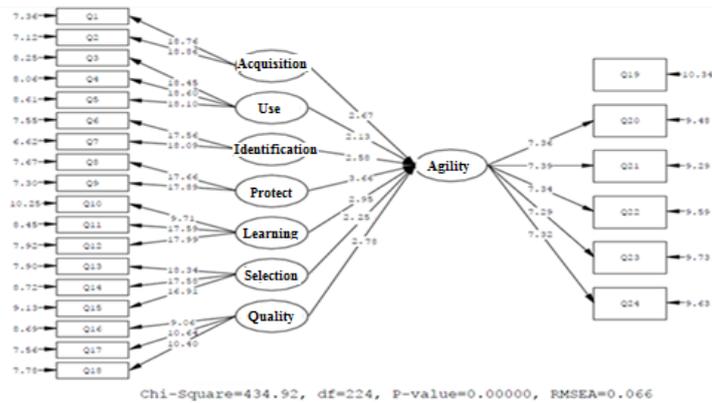


Figure 7: Model in the mode of meaningful coefficients

The outputs demonstrated appropriate fit of the structural model for testing the hypotheses ($\frac{\chi^2}{df} < 3$). The value of RMSEA (0.066) indicates that the fit of the structural model is appropriate. The amount of χ^2 is twice as high as 434.92, which indicates good fit.

The results of research hypotheses:

Table 2: The results of assumptions testing

Test Result	Hypothesis
Confirmed	Acquisition of technology affects organizational agility.
Confirmed	Technology exploitation affects organizational agility.

Confirmed	Identifying technology affects organizational agility.
Confirmed	Technology protection affects organizational agility.
Confirmed	Learning technology affects organizational agility.
Confirmed	The choice of technology affects organizational agility.
Confirmed	The quality of technology affects organizational agility.

Ranking of Technology Management Elements Based on Fuzzy AHP Model:

Since the introduction of the fuzzy AHP method by Saaty in the 1970s, many models of fuzzy AHP have been presented by various researchers (Wang & Lee, 2009). In these methods, fuzzy and hierarchical concepts are used in combination. Given the fact that making judgments verbally makes it easier for decision makers to provide a definitive answer, the use of fuzzy concepts in decision making is of great importance (Kelemenis & Askounis, 2010).

The ranking steps based on the Fuzzy AHP method are as follows:

Step 1: Determining the weights of criteria and alternatives relative to the criteria;

For each row of pairwise comparisons matrix, the value of S_k , which itself is a triangular fuzzy number, is calculated as Formula 1 (Baykasoglu et al., 2007)

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

(Formula 1)

Where k denotes the row number, i and j represent the alternatives and criteria, respectively. In the method, after calculating S_k , their degree of magnitude has to be obtained relative to each other. In general, if M_1 and M_2 are two triangular fuzzy numbers, the magnitude M_1 on M_2 , which is represented by $V(M_1 \geq M_2)$, is defined as formula 2:

$$\begin{cases} V(M_1 \geq M_2) = 1 & \text{if : } m_1 \geq m_2 \\ V(M_1 \geq M_2) = \text{hgt}(M_1 \cap M_2) & \text{Otherwise} \end{cases}$$

(Formula 2)

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

(Formula 3)

The magnitude of a triangular fuzzy number of k is obtained from formula 4.

$$V(M_1 \geq M_2, \dots, M_k) = \text{Min}[V(M_1 \geq M_2), \dots, V(M_1 \geq M_k)]$$

(Formula 4)

In the developmental analysis method, we use the following formula to calculate the weight of the indices in the matrix of pairwise comparisons:

$$W'(x_i) = \text{Min}\{V(S_i \geq S_k)\}, \quad k = 1, 2, \dots, n, \quad k \neq i$$

(Formula 5)

Therefore, the index weight vector will be in the form of formula 6, which is the fuzzy AHP abnormal coefficient vector.

$$W' = [W'(c_1), W'(c_2), \dots, W'(c_n)]^T$$

(Formula 6)

Step Two: Determining the weight of the decision makers:

As stated, for any pairwise comparison, a confidence level is assigned by the decision maker. Then, all confidence levels provided by that decision maker are combined to obtain a general confidence level and are considered as the decision-maker's weight.

If W^k represents the weight of the decision maker K, then it can be determined in the following steps. First, any level of verbal appreciation becomes numerical. If a_{xyk} is the numerical confidence level of decision maker K for the paired comparison of the x criterion to the y criterion, then:

$$\begin{cases} 1 & \text{High Confidence} \\ 0.5 & \text{Average Confidence} \\ 0 & \text{Low Confidence} \end{cases}$$

Then a_{xyk} is grouped in distinct matrices $a_{xyk} = A_{ck}$ similar to the grouping of paired comparisons of hierarchical analysis. In the next step, the maximum value of the A_{ck} matrix displayed as λ_{ck} is computed. Then, the value of W^k is obtained by the combination all λ_{ck} s. Also, for the calculation of the Eigen value, relations 7, 8 and 9 can be used: (Saremi et al., 2009)

$$|A - \lambda I| = 0 \Rightarrow \begin{vmatrix} a_{11} - \lambda & a_{12} & \dots & a_{1n} \\ a_{21} & a_{22} - \lambda & \dots & a_{2n} \\ \dots & \dots & \dots & \dots \\ a_{n1} & a_{n2} & \dots & a_{nn} - \lambda \end{vmatrix}$$

(Formula 7)

$$b_n \lambda^n + b_{n-1} \lambda^{n-1} + \dots + b_0 = 0 \Rightarrow \begin{cases} \lambda_1 \\ \lambda_2 \\ \vdots \\ \lambda_n \end{cases}$$

(Formula8)

$$\lambda_{ck} = \text{Max} \{ \lambda_1, \lambda_2, \dots, \lambda_n \}$$

(Formula9)

Given that λ_{ck} varies according to the size of the Formula10

$$\lambda'_{ck} = \frac{\lambda_{ck} - \lambda_{ck}^{\min}}{\lambda_{ck}^{\max} - \lambda_{ck}^{\min}} ; \lambda_{ck}^{\max} = \text{size of } A_{ck}, \lambda_{ck}^{\min} = 1$$

(Formula10)

Now λ_{ck} is normalized according to the formula 11

$$\lambda_{ck}'' = \frac{\lambda_{ck}'}{\sum_{j=1}^r \lambda_{ck}'} \quad (Formula 11)$$

Thus, with the combination of all λ_{ck} s, the values of W_k are computed thus, with the combination of all λ_{ck} s, the values of W^k are computed.

Step 3: Combining the first and second steps to get the final weights.

Using the a_{mk} (W)s obtained in the first step and the W s obtained in the second step for each of the matrices provided by the decision makers, the final weights are determined using the weighted geometric mean in formulas 12.

$$a_m = \prod_{k=1}^r (a_{mk})^{W^k} \quad (Formula 12)$$

Step Four Ranking Options

At this stage, using the hierarchical analysis technique and the result of the multiplication of the weights of the indexes and the weight of the alternatives in relation to the indices, the final ranking of the alternatives is done.

Final selection:

Decision matrices for each alternative against each indicator and the matrix of paired comparisons between the indicators are made (Kelemenis & Askounis, 2010). Then, using the relationships in the fuzzy hierarchy analysis method, weights are set for each decision maker (Baykasoglu et al., 2007). Subsequently, using the weighted geometric mean, the final weights of criteria and ultimate weights of the alternatives are obtained (Tables 1 and 2), respectively. The final weights of the alternatives are presented in Table 3.

Table 3 Final Weights of Criteria

Criteria	Weight
C1	0.05333
C2	0.05546
C3	0.06878
C4	0.05707
C5	0.06003
C6	0.07505
C7	0.05698
C8	0.06377
C9	0.05848
C10	0.04729
C11	0.07958
C12	0.08342
C13	0.07627
C14	0.05760
C15	0.06737
C16	0.05643
C17	0.07436
C18	0.07801

Table 4 the final weights of the items relative to the components

Weight of items relative to components	Acquisition	Protect	Use	Learning	Selection	Quality	Identification
C1	0.1910	0.0934	0.1965	0.1910	0.1363	0.2093	0.2056
C2	0.1588	0.0897	0.1798	0.1930	0.1853	0.1719	0.1731
C3	0.1722	0.0698	0.1829	0.2102	0.0727	0.2264	0.6652
C4	0.2063	0.1669	0.1907	0.2252	0.0934	0.2157	0.2358
C5	0.2117	0.1654	0.1834	0.2168	0.0897	0.2191	0.2710
C6	0.1965	0.2087	0.1803	0.2271	0.0698	0.2365	0.2624
C7	0.2133	0.1966	0.1498	0.1945	0.1729	0.2116	0.1550
C8	0.2218	0.02032	0.1753	0.2063	0.1407	0.2100	0.1690
C9	0.1905	0.2150	0.1683	0.2117	0.1110	0.2223	0.2167
C10	0.2203	0.2541	0.1576	0.1969	0.1588	0.2096	0.2391
C11	0.2832	0.1729	0.1612	0.1654	0.1322	0.2065	0.1289
C12	0.2150	0.2184	0.1934	0.2087	0.1121	0.2032	0.2536
C13	0.2203	0.2093	0.1673	0.1963	0.1357	0.2150	0.2258
C14	0.2168	0.1719	0.1532	0.2053	0.0986	0.2541	0.2039
C15	0.2071	0.2264	0.1383	0.1672	0.0289	0.1729	0.1032
C16	0.1745	0.2157	0.1801	0.1985	0.1212	0.2180	0.2365
C17	0.2063	0.2491	0.1409	0.2134	0.0875	0.1987	0.1834
C18	0.1853	0.1457	0.1693	0.2218	0.0743	0.1987	0.2308

Table 5 Final weights

option	Acquisition	Protect	Use	Learning	Selection	Quality	Identification
The Final Weight	0.1787	0.1801	0.1973	0.2163	0.2281	0.2290	0.2306

According to the results of Table 5, identification and acquisition have the highest and lowest significance based on the participants' views. Other components are also shown in the table above

Practical and theoretical implications:

1) Suggestions based on the first sub-hypothesis:

Based on the results, technology identification affects organizational agility of refah chain stores, so according to research literature, which states that speed is one of the components of agility and perhaps this component is one of the most important assets in the present era and The age of information is considered to lead to the survival and promotion of organizations, and with regard to the service-oriented nature of the activities of stores of welfare, which meet the customer's needs while also having more flexibility as a result of a higher competitive advantage. And, according to the research literature, virtual organizations are a good example of agile organizations, the conclusion and suggestion are that the technologies and infrastructures required by virtual stores are identified and listed for the creation of virtual branches of welfare stores.

Another suggestion is that welfare shop managers by visiting sophisticated chain stores such as Carrefour, Tesco and more, and examining and finally benchmarking operational and strategic practices and other options related to the technologies used in the above stores, The technologies needed for the new generation of welfare stores Identify and list them and identify the company's most important and needed technologies to achieve organizational agility and ultimately a higher competitive advantage

2) Suggestions based on the second sub-hypothesis:

Based on the results obtained, the technology selection element influences the organizational agility of the employees. Therefore, after identifying the technology that lists the technology required by the organization, it is proposed to manage the technology of the company Welfare, R & D management with other resources. To increase their ability and ability to choose the most needed technologies that are most in line with the current state of the welfare stores for the new generation, and add to the agility of the company as it grows more to market share. □. Of course, it is necessary to highlight the fact that technology transfer choices are outdated or outdated technologies or technologies that are at the last stage of their life cycle. This mistake once more shows that the gap in knowledge between suppliers and technology applicants would have existed.

3) Suggestions based on the third sub-hypothesis:

Based on the results obtained, the technology acquisition component is influential on the organizational agility of the welfare chain stores, and also according to the research literature, the acquisition of technology in companies that are inclined to innovate is an important process and this element creates and improves Competitive advantage in a market where costs, speeds and complexity are constantly increasing, as well as the acquisition of technology, will enhance the level of technology of a country and ultimately move towards sustainable development, therefore, it is suggested that considering this element in Maintaining the organizational agility of well-being stores is very effective The necessary measures for the development of technology acquisition by using one of the methods involved in the acquisition of technology, manufacturing technology and convenience stores is done buying technology.

4) Suggestions based on the fourth sub-hypothesis:

Based on the results obtained, the technology learning element influences the organizational agility of the employees. Therefore, it is suggested that: 1. After the necessary routines have been selected for technology acquisition, the technology transfer method has been selected, its technical knowledge for technology learning Transferring technology without transferring technical knowledge is in vain. 2. It is suggested to the senior managers of the welfare chain stores to enhance the learning of the staff of the training courses related to the technologies used in these stores planning and organizing to enhance the level of learning the staff of Ray makes the organization more agile. 3. R & D unit activation for research and development of personnel training and technology.

5) Benefits based on the fifth hypothesis:

Based on the results obtained, the technology exploitation element affects the organization's agility of the refah chain stores, so it is recommended that the company exploit the new and emerging technologies that are required by the organization to produce or upgrade new

services. And with the proper exploitation of selected and acquired technologies, it will generate wealth and enhance technology-driven competitiveness for the company.

6) Suggestions based on the sixth sub-hypothesis

Based on the results obtained, the technology protection element influences the organizational agility of the employees. Therefore, it is suggested to the refah shop managers to protect the secrets and competitive advantages of the organization that lies in the technology to prevent the unwanted transfer of technology to competitive outer space on the agenda. According to research literature, in traditional ways, in order to protect technology, legal practices such as royalties or exploitation rights were considered in the traditional research, but in the new proposed models, the processes required these safeguards whose subjects include technological development, Acquisition and product design activities.

7) Suggestions based on the seventh hypothesis:

Finally, the quality of technology influences the organizational agility of the employees. Therefore, it is suggested to the managers of the company to use modern technologies and their update technologies and management to remove parts of past inefficient structures in order to reduce human error, speed Providing services, in the interests of fidelity and accountability, provides the ground for increasing the quality of technology and will further enhance the agility of the organization's welfare stores.

Future research:

- 1) Exploring solutions and strategies to cope with the problems associated with each of the technology management elements as a separate stream of research.
- 2) Investigating the obstacles to implement technology management in organizations.
- 3) Studying the factors that influence organizational agility of the employees.
- 4) Probing into the interactions between managerial demands, contingencies and tasks on one hand and other Organizational.
- 5) Conducting this research in other chain stores in order to add to the generalizability of the Findings.

Research limitations:

- 1) The findings of this research are based on the data obtained from the managers and employees in the headquarters of refah chain store, which means they may not be ready generalizable to other contexts
- 2) This research applied the survey method i.e. Questioner. As such some of the participants might have intentionally avoided express their real viewpoints.
- 3) In these studies the data are generally cross-sectional in nature. Use of longitudinal into the subject being explored.

References

- Alfat, Liaia and Zanjirchi, Seyyed Mahmood. (2017), *A model for organizational agility in Iran's electronics industry*. Journal of Management Science of Iran, Sixth Year, No. 28. pp. 79-90.
- Jafar Nejad, Ahmad and Shahabi, Behnam (2007). *An Introduction to Organizational Agility and Agility Production*. First Printing, Tehran, Mehraban Publishing.
- Hosseini, Reza; Mostafavi, Mohammad (2013), *Assessment and Measurement of Agility in the Supply Chain*, Journal of Management Executive, ninth year, pp. 121-111.
- Karimi Dastjerdi, Davood, Mokhtarzadeh, Nima, Yazdani, Hamid Reza (2010), *Investigating the Effect of Technology Transfer on the Competitive Performance of the Firm: Case Study; Iranian Component Organizations Producing Tonder Parts*, Industrial Management, Faculty of Management, University of Tehran, Volume 2, Number 4 , Spring and Summer, pp. 111 to 124.
- Baykasoglu, A., Dereli, T., & Das, S. (2007). "Project team selection using fuzzy optimization approach". *Cybernetics and Systems*, 38, 155–185.
- Fletto, E.; L.K. Wilson, A.S. Roberts & Sh.I. Benrimoj (2011). "Measuring Organizational Flexibility in Community Pharmacy: Building the Capacity to Implement Cognitive Pharmaceutical Services". *Research in Social and Administrative Pharmacy*, 7(3): 312-325.
- Kelemenis, A. & Askounis, D. (2010). "A new TOPSIS-based multi-criteria approach to personnel selection". *Expert Systems with Applications*, 37, 4999–5008.
- Saremi, M., Mousavi, S.F., & Sanayei, A. (2009). "TQM consultant selection in SMEs with TOPSIS under fuzzy environment". *Expert Systems with Applications*, 36, 2742–2749.
- Sherehiy, B., Waldmar, k. and Layer, J.k. (2012), "A review of enterprise agility: Concepts, framework, and attributes", *International Journal of industrial Ergonomics*, 37, 445-460.
- Mohammad Reza (2009), Identification of effective factors in evaluating and selecting the optimal method of technology transfer in Tehran Gas Company, *Industrial Management Magazine*, Faculty of Humanities, Islamic Azad University, Sanandaj, Fourth, No 7, Spring 88.
- Wang, H. Hong, Y. (2017), "China: technology development and management in the context of economic reform and opening", *Journal of Technology Management in China*, 4, Iss: 1, 4-25.
- Wang, T.C., & Lee, H.D. (2009). "Developing a fuzzy TOPSIS approach based on subjective weights and objective weights". *Expert Systems with Applications*, 36, 8980–8985.
- Zain, M., Che Rose, R., Abdullah, I., Masrom, M. (2015). "The relationship between information technology acceptance and organizational agility in Malaysia", *Information & Management*, 42, 829–839.