



## RESEARCH ARTICLE

## Presenting a New Model for Evaluating the Performance of Iranian Stock Exchange Firms by Emphasizing the Localization Approach

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### How to cite this article:

Pirayesh Shirazi, P., Sotudeh, R., Faghani, M. (2022). Presenting a New Model for Evaluating the Performance of Iranian Stock Exchange Firms by Emphasizing the Localization Approach. *Iranian Journal of Accounting, Auditing and Finance*, 6(3), 93-110. doi: 10.22067/ijaaf.2022.41841

URL: [https://ijaaf.um.ac.ir/article\\_41841.html](https://ijaaf.um.ac.ir/article_41841.html)

### ARTICLE INFO

#### Article History

Received: 2022-02-01

Accepted: 2022-04-31

Published online: 2022-06-20

#### Keywords:

Customer, Organizational  
Conscience, Performance  
Evaluation, Value Creation

### Abstract

In this research, we present a new model of a balanced evaluation system in listed firms on the Tehran Stock Exchange. The study's statistical analyses were carried out based on the extracted data from 166 questionnaires of listed firms on the Tehran Stock Exchange during 2020. In this paper, Cochran Formula is used for sampling and since all CEOs and financial managers of listed firms on the Stock Exchange were 688 people, the sample volume is 166 people. A questionnaire is used to collect the required information and evaluate the opinions of the statistical sample. The findings at a 95% of confidence level show that based on the Kolmogorov-Smirnov test, the significance level of all variables of balanced evaluation (customer, internal processes, growth, learning, and finance) was more than 0.05, and the result was normal. The structural equations indicate that it is possible to position the perspective (customer, internal processes, growth, learning, and finance) for designing and implementing the revised model of the balanced evaluation system in listed firms on the Tehran Stock Exchange. According to the study results, we recommend that organisation managers pay more attention to productivity, training programs, and education level enhancement of the employees and try to improve the productivity.

 <https://doi.org/10.22067/ijaaf.2022.41841>



NUMBER OF REFERENCES

54



NUMBER OF FIGURES

2



NUMBER OF TABLES

3

Homepage: <https://ijaaf.um.ac.ir>

E-Issn: 2588-6142

P-Issn: 2717-4131

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## 1. Introduction

Due to the competitive pressure in today's industries, the productivity of these companies is emphasized. Traditionally, performance studies have assumed that inefficiencies are due to mismanagement and occur under the same conditions. However, given the proliferation of international environments, it must be examined why only internal factors should be considered and not the external environment, which is not under control. When the impact of unmanageable variables is not considered, the performance of companies in an external environment can be unfavorable. This may lead to wrong decisions if they are based on the performance of the companies (Tran, Nguyen and Hoang 2021). Maximizing performance is one of the main goals of many public and private companies. In order to achieve this goal and optimize efficiency, organizations strive to make the most of their resources and create the highest efficiency of financial, operational, technological, and human resources (Chin yang et al., 2020). Performance metrics have received more attention in recent years, and such performance measurement systems should include essential performance elements such as customer satisfaction, growth and learning, internal process, and financial viability. Kaplan and Norton also shared this view: "(The amount of) research lacks valid structures for the BSC and focuses too much on planning, measurement, and control (after submission)." Therefore, more research is needed on the design and implementation of BSCs in different types of organizations. BSC is a flexible measurement tool (Hegazy, Hegazy and Eldeeb, 2020).

Kaplan and Norton's 2006 Balanced Scorecard, a performance appraisal and planning system, has been used in various industries worldwide. The experiences of different industries in using this model have been different in other parts of the world. This model has been associated with several successful implementations in the West, especially in North America and continental Europe. However, the Balanced Scorecard model has recorded several failures in some cases. These observations show that the results obtained from the implementation of this model were not random. The ability or inability of managers to understand and use concepts of the balanced evaluation model, such as its socio-cultural dimensions, is one of the reasons for success or failure in designing this model. Accordingly, Demura et al. believe that before designing and implementing such a model, managers should fully understand the basic concepts of the model to achieve their goals by implementing it in companies (De Moura et al., 2020).

It is noteworthy that the Balanced Scorecard model is designed for countries governed by a capitalist system. In the capitalist system, maximising shareholder wealth is the only reason for notable joint-stock companies. In this system, most shareholders ignore other stakeholders who directly impact the success of joint-stock companies (Miria and Xavier, 2020). On the other hand, the balanced valuation system has been designed by countries where maximising shareholder wealth is the only reason for the existence of special joint-stock companies, and because Western societies are different from Iran in various social and cultural aspects, this study needs to be designed and implemented. A new model of a balanced rating system to evaluate the performance of Iranian listed companies is felt to be consistent with the infrastructure of Iranian companies and lead to increased reliability and trust in the results of the implementation of the balanced rating system. We must say that the product of this model is more efficient and effective for Tehran Stock Exchange companies.

Considering the companies listed on the Tehran Stock Exchange, they formulate a strategic plan to achieve their predetermined goals. On the other hand, the selected strategic plan is compatible with the policies and structure. The firm is essential and improves the efficiency and effectiveness of the selected strategic plan, so this research becomes an essential research need. Further, western societies differ from Iran in many aspects such as infrastructure, literacy level, markets, customers,

capital sources and capital structures, government interventions and social and cultural contexts.

For this reason, the traditional model of the balanced measurement system, proposed according to various aspects of the capitalist system, will not have the necessary efficiency and effectiveness to evaluate the performance of companies listed on the Tehran Stock Exchange. One of the innovations of the recent study is implementing a new model of the balanced measurement system to evaluate the performance of Iranian listed companies in terms of the above dimensions, more coordination, compatibility, and compliance with Iranian listed companies. According to the presented materials, the main purpose of this research is to better understand the model of a balanced measurement system, a new perspective is needed to be developed conceptually and which shall be compatible with member companies of the Tehran Stock Exchange. Based on the research, a new model of a balanced measurement system will be developed per Iran's working and business conditions, which includes different perspectives and perspectives.

## 2. Literature Review

There are different theoretical views on corporate performance. Shareholder theory focuses on financial performance metrics to examine how companies maximise their profits to meet the needs of shareholders. Hansen and Schaltegger state that stakeholder theory considers the satisfaction of all stakeholders as an indicator of firm performance (Hansen and Schaltegger, 2017). The scholarly literature shows several determinants of corporate performance. From an agency perspective, corporate performance is affected by agency conflicts because management focuses on personal interests. Therefore, they may lead to ethical risks for shareholders by claiming more resources than they need or underworking to maximise their profitability. Their poor performance is supported by asymmetric information, which points to the advantage of managers' control over shareholders because they participate in companies' day-to-day operations. Therefore, agency conflicts must be minimised by developing effective corporate governance mechanisms to improve corporate performance. However, empirically, strong corporate governance mechanisms are not sufficient to justify corporate performance (Aurora et al., 2016). Instead, other factors, such as the effectiveness of business strategies and management capabilities, determine how companies operate. In addition to agency conflict, companies' working capital strategies also affect their financial performance. Working capital is defined as the difference between current assets and current liabilities. Heavy investment in working capital, called conservative working capital management, enables companies to respond effectively to customer demand and meet customer needs (Chauhan and Banerjee, 2018). Traditionally, companies have only measured performance financially through profits or other related measures. However, companies need to balance financial and non-financial indicators to link performance measures with strategy and competitive advantage (Nugroho and Pangeran, 2021). Numerous frameworks have been developed to create such a balance: performance pyramids and hierarchy (Emmanuel Joel Aikins Abakah et al., 2021), determination of results and framework (Abakah et al., 2020), intangible assets scorecard (Córdova et al., 2019), integrated performance management systems (Liping et al. 2022), and performance charters (Yin Liu et al. 2022).

Kaplan and Norton developed a multidimensional system of indicators known as the Balanced Scorecard (BSC) in the early 1990s to act as a management concept for implementing strategies. BSC is a concept for measuring, documenting, and managing the activities of a company or organisation according to the implementation of its vision and strategy in order to balance the four perspectives of services. BSC is a link between strategy development and implementation. In this sense, the goals of the traditional financial strategy are added to the customer's operational goals, the internal process, and the resource-oriented learning and development perspectives. The whole

value chain in this system of indicators in the direction of cause/effect relationships is presented in four objective areas (perspectives): finance, market and customers, internal business processes/work processes, learning and growth (innovation) / potential (Sanjeev et al. 2020).

The conceptual framework identifies the interrelationships and relationships between the company's activities and other stakeholders and the interrelationships between stakeholders. On the other hand, the conceptual framework shows the organisational interactions and stakeholder relations in different layers of systems. In this conceptual framework, there are four system layers: company level, industry level, community level, and environmental level. In this context, the government, which provides the infrastructure and laws, is also recognised as an important stakeholder (Nair, 2019). Other stakeholders include customers and end consumers, suppliers (who supply raw materials for production), competitors (competition for information), and society (which supplies labour and is often the final consumer). Waste from production and consumption is returned to the natural environment to complete the ecosystem.

It must be considered from different angles (Brown, Kim, and Faerman 2019). In general, five approaches to performance appraisal are introduced: a comparative approach, attribute approach, behavioural approach, results in approach, and quality approach.

The comparative approach uses a comprehensive evaluation of an individual's performance or value to rank individuals in a working group. This approach uses three techniques: ranking forced distribution and pairwise comparison (Hesti et al., 2020).

Individual attributes approach: This approach to performance management emphasizes the development of certain attributes considered desirable for the organization's success (Venilin et al., 2020). Techniques used in this approach consist of behaviours and characteristics, such as initiative, leadership, competitiveness, and evaluation of individuals. The graphical ranking scale, standard mixed scale, forced-choice, and essay methods are used in this approach (Camilleri, 2021).

The behavioural approach tries to define the behaviours that an employee must perform to succeed in his/her work. The techniques used in this approach are recording sensitive events, checklist method, behavioural ranking scale method, behavior observation scale (Hegazy and Eldeeb 2020).

The results approach focuses on managing the goals, measurable results of a job, and workgroups. The two performance management systems included in this approach include management based on goals and the balanced scorecard method (Falcon et al. 2020).

In addition, in this framework, four sources of capital are identified: financial capital obtained from shareholders; capital provided through debt secured by debt investors; human capital derived from labour and natural resources capital derived from the natural environment (Obeng, 2019).

Relationships between different stakeholders can be divided into six perspectives according to their impact on performance appraisal and planning:

The first perspective is culture and organisational relationships. Culture describes the relationships that exist between an organisation and its stakeholders. In this regard, organisational culture has been translated as organisational values, norms or theories that manage people's behavior for organizational improvement (Teymoori et al., 2022). At the organisational level, culture plays an important role in influencing the performance of companies in terms of financial return and other factors (Brown, Kim, and Faerman 2019). Therefore, organisational relationships with different stakeholders are the basis of company success (Nair, 2019). Meng and Berger (2019) states that in order to research organisational performance, special attention should be paid to organisational culture because it plays a vital role within the organisation. Such an intra-organizational context includes broad and relatively stable organisational characteristics such as structure, culture, power, and political characteristics in which organisational activities occur (Meng

and Berger, 2019).

The second perspective is the perspective of stakeholders, which identifies the involvement of different stakeholders in the company's success. The stakeholder perspective indicates that stakeholders' personal contributions to an organization's internal operations are consistent with the understanding of the senior management team (Nguyen et al., 2021). Stakeholders participate in the continuity of an organisation in various ways; for example, the environment provides the raw materials, the trade union provides the manpower needed for production, and ultimately the final consumer of the organisation's products and services is formed (Perminas et al. 2021). Therefore, stakeholder relationships must be managed by balancing the interests of the various participants in the organisation. However, the stakeholder approach and balancing their interests are too focused on maximising shareholder wealth. Thus, the Balanced Scorecard model, which follows a stakeholder focus approach, often ignores many stakeholders on whom the company's activities depend (Langer and König, 2021).

The third perspective is intellectual capital, which connects other sources of capital to achieve the best performance and value. This perspective shows the relationship between intellectual capital characteristics and the company's performance describes the amount of intellectual capital that links all other sources of capital and looks at intellectual capital as a valuable strategic asset that can operate an organization (Rebecca et al., 2021). Vladimir et al. (2020) define intellectual capital as a set of all the knowledge that a company can use to lead the company to create value. Alofan, Chen and Tan (2020) also describe intellectual capital as knowledge-related intangible assets that include intellectual competencies, intellectual equipment, and intellectual resources. Intellectual capital is classified as a primary source. Other traditional reproduction factors such as land, financial capital, and labour are considered secondary sources because they are very easy to obtain, provided the organisation has specialised knowledge (Bahl et al. 2021). The strategic issue of intellectual capital has a significant share of the types of capital in terms of organisational performance, and intellectual capital acts as a catalyst for innovation in value creation processes and activities. Further, intellectual capital now plays an important role in creating value for the economy of organisations and creates value in knowledge-based organisations and, in order to increase their competitive advantage, have more emphasis on scientific assets (Ahmed et al. 2022). Ashour et al. (2018) state that the last component of intellectual capital is the physical or tangible part of the capital, consisting of physical and financial assets.

Intellectual capital has the following characteristics:

- 1- It is invisible;
- 2- It is related to the knowledge and experience of employees or users and the technology used by the organisation;
- 3- It can allow organisations to succeed in the future.

The fourth perspective is value creation, which refers to recognising the activities that play an important role in creating an organisation's overall value. The value creation perspective expresses the important factors that create value in an organisation. It is essential that managers' perspectives in creating value for their organization be evaluated (Terziev and Georgiev, 2020).

Thus, the value creation perspective focuses on affective factors in maximising the wealth or value of the organization (Jell-Ojobor et al., 2022). Value creation shows that those involved in such activities must contribute to the wealth allocation and distribution (organizational conscience) (Solakis, Peña-Vinces and Lopez-Bonilla 2022).

The fifth perspective is the perspective of organisational ethics, which is related to the proper allocation and distribution of organisational wealth among different stakeholders.

This perspective focuses on how the organisation's wealth is allocated and distributed to those



directly or indirectly involved in the value creation process. To fit modern global thinking on business ethics, the conceptual framework of our new model considers business ethics issues, corporate governance, and corporate conscience as part of corporate performance appraisal and planning systems (Urquía-Grande et al., 2021). The perspective of organisational ethics (corporate conscience) shows that the organisational wealth created must be shared equally and correctly among all stakeholders who have played a role in the value creation process. Therefore, each company must follow a fair and ethical approach to sharing the value created or resources with different stakeholders (Haryanti and Pribadi, 2019). Certainly, participation in social responsibility in local communities and protection and strengthening of the environment is where organisations can show their citizenship and organisational conscience (Bujak, 2021). Lewis states that corporate ethics emphasises that the organisational wealth created should be shared fairly among stakeholders who have intervened in the company's value creation processes. Therefore, each business unit must show its conscience by sharing the value created or resources most fairly and ethically (Quezada, 2019).

The five perspectives discussed above are based on a conceptual framework that shows that internal social interactions and internal relationships between an organisation and different stakeholders in an environment and solidarity between members of stakeholder groups are important for an organisation's success. (Acuña-Carvajal et al. 2019).

Fatima and Elbanna (2020) examined a balanced scorecard's performance appraisal in auditing firms. The BSC formulation for performance appraisal includes five key elements: learning and growth, customers, internal business processes, financial resources, and perspectives on corporate ethics auditing. The results showed that the proposed BSC measures' development and application increase audit firms' performance.

Elbanna et al. (2022) stated that despite the importance of BSC and the fact that it has been studied extensively over the last three decades, the concept of causality among BSC perspectives has not been adequately explained and has been remained ambiguous. To investigate the issue, the authors collected data from 175 five- and four-star hotels in the two Gulf Cooperation Council countries (GCC), the United Arab Emirates (UAE) and Qatar and examined the causal links among the overall perspectives of the BSC framework. Results indicated the traditional cause-and-effect relationships in the BSC, segregation of innovation and learning perspectives, and existence of indirect relationships between learning and customer perspectives.

Chao et al. (2021) studied different levels of learning, such as single- and double-loop learning, implementation of BSC in the health and industry organization, as well as barriers to its implementation. The study's findings showed that the learning perspective is more likely to improve the efficiency of the strategic management and strengthen the existing capabilities of the company, but it is not possible for single-loop learning to develop new capabilities.

Sachin et al. (2021) explored the performance measures in humanitarian organizations based on a sustainability balanced scorecard (SBSC). Results revealed that "beneficiaries' and donors' perspectives" are the most significant HSCM performance perspectives.

To aid an organization in responding to its stakeholder expectations, Guix and Font (2020) integrated the Balanced Scorecard as a well-established performance management system with the inclusiveness, materiality and responsiveness principles of the AA1000 Stakeholder Engagement Standard. The framework provided a systemic, structured, and integrated approach and an opportunity for sustainable value creation. They tested the framework using data reported by 20 of the world's largest hotel groups to see if current sustainability reports contain hierarchical cause-and-effect chains and hierarchical effects at their system level. They concluded that charities could improve their managerial supervision concerning the quality, transparency, and consistency in their accountability.

### 3. Research Methodology

The main purpose of this research is that in order better to understand the model of the balanced valuation system, there is a need for a new perspective that shall be conceptually developed and adapted to the companies listed on the Tehran Stock Exchange. Based on the literature, a new model of a balanced assessment system will be developed per Iran's working and business conditions, which includes different perspectives and perspectives.

The statistical population in the qualitative section includes professional experts, including faculty members and teachers of financial management and industrial management in universities and educational institutions, PhD candidates in industrial management and financial management, production managers, financial managers, and management accountants in executive departments organizations. In the qualitative part, this type of research is phenomenological. The present study uses qualitative methods by which the researcher seeks to examine the experiences of the sample around the variables under study. In the quantitative part, the descriptive method is used. In qualitative research, data collection and data analysis are not discrete steps. In this approach, the data analysis process can begin after each data collection so that the researcher can apply the emerging insights into data collection. Therefore, managing the interaction between the researcher and the data source d

First, by collecting the opinions of 30 professional experts, including faculty members and teachers of financial management in universities and educational institutions, PhD candidates in financial management, management accountants, production managers and financial managers in executive departments and organizations' offices. Turns. The dimensions and components are reviewed in parallel books, articles, records, and dissertations. Then, a questionnaire will be developed based on the research literature, and feedback from experts and university professors will be collected. Formal and content validity will be assessed by presenting a questionnaire to some professors and experts, and the questionnaire will be then modified using structural validity analysis. Finally, in order to assess the reliability of the tests, this research is evaluated through Cronbach's alpha. The results of the Delphi technique are presented, and inferential statistics Kolmogorov-Smirnov test are used to show the data distribution. Due to the normality of data distribution, a one-sample t-test was used to evaluate the significance of the research variables. An exploratory factor was used to determine the revised model of the balanced valuation system in the companies listed on the Tehran Stock Exchange and the amount of variance determined by each variable in the form of packaged factors. Finally, the conceptual model and adverse findings of the research are presented.

### 4. Research Variables and Model

#### 4.1. Fuzzy-Delphi

In the Delphi model, questions are asked in two or more rounds, and the previous round/s will be used in each round. Hence, from the second round, the experts and officials are under the influence of the opinions and beliefs of their peers, and it is the obtained results of the previous round that answer the questions. The Delphi Technique is a strong process based on a group-relation structure that analyses the information via a questionnaire. People's opinions and judgments will be collected within a certain area for this purpose. In other words, judgment will be assigned to the experts. The Delphi methods aim to detect innovative and reliable ideas and/or provide appropriate information for decision-making. The method surveys people to assess the perspectives and judgements of people and expert groups and balance between views. The surveys are usually performed via a questionnaire with no obligation for people to gather in a particular place in several steps. At the

end of the conclusion, valuation, and analysis of total views and opinions of people, a basis for setting goals, plan development, and decision-making will be formulated. In this method, omitting the eloquence power of people's opinions and beliefs will be collected and returned to the respondents after the required analyses. Hence, anonymity and opinion feedback are essential elements of the Delphi method. One of the advantages of the method is that when the experts and officials figure out that their opinions have been false due to some convincing reasons, they can restate their opinions without losing their fame. The Delphi method is a strategy for creating a group-relation process. The process allows a group with separate and independent components to deal with complex problems. In the Delphi model, questions are asked in two or more rounds, and the results of the previous round/s will be used in each round. Hence, from the second round, the experts and officials are under the influence of the opinions and beliefs of their peers, and it is the obtained results of the previous round that answer the questions.

The initial questionnaire structure for sending via email is a spreadsheet file that responds smartly to the respondents' presented answers. For each item, an appropriate answer will pop up on display. Moreover, the electronic questionnaire shows error messages in case of not responding to some sections. The present study uses the Delphi method, in which with the aim of indirect circulation of findings and information among the experts, the opinions of the respondents in each round will be given back to them anonymously and generally in the next round to modifying their initial opinions if they confirm them, to be able to reach a more solid consensus about the contributing factors to the model. Further, the first-round questionnaire is designed in a semi-open method to make it possible to give an opinion about the classification of factors and the addition of new factors for respondents.

**Table 1.** The Summary of different steps for questionnaire distribution and the result of each step

Questionnaire	No. of indices	Respondents	No.	The purpose of sending	Result
First	25 items	Scholars	30	Omitting, combining, and modifying the index	Classification, modification, and extraction of factors to 21 factors
Second	21 items	Scholars	30	Modification and prioritization of indices and classifying them	Making partial modifications for some indices
Third	21 items	Scholars	30	Reassessing indices for final confirmation	Developing the questionnaire

The scholars distributed the questionnaire to confirm the model and approved criteria. The third-round questionnaire was delivered via landline (virtually) and Email to 30 panel members and the follow-ups started four days later. For this purpose, each member is called on average 3 times via landline (virtual networks) and once via email. So, 30 questionnaires were received. The third-round questionnaire has two sections. The survey section and revised model indices section of the balanced evaluation system in the Tehran Stock Exchange-listed firms. The first-round participants have been considered the indices of revised model indices of the balanced evaluation system in listed firms on the Tehran Stock Exchange. In this section, the respondent should voice his opinion about the range of effects of each index in the model by selecting one of the existing options. These alternatives are presented in the form of the Likert Spectrum and include “extremely low effect: 1”, “low effect: 2”, “moderate effect: 3”, “high effect: 4”, and “extreme effect: 5”.

Table 2 illustrates the results of the third round of the Delphi method, like the number of



responses of each item, mean responses, standard deviation, Kendall number, significance order of each factor based on mean responses and the percentage of members that determined the order of each factor following the group.

**Table 2.** The results of the third round of the Delphi method about the revised model indices of the balanced evaluation system in listed firms on the Tehran Stock Exchange. Third Delphi round

Factor description	No. of responses	Mean responses	The standard deviation of responses	Kendall	Significance order
<b>1. Customer</b>					
Organizational consciousness	30	4.24	0.616	2.28	3
Organizational culture and relationships	30	4.32	0.529	2.34	4
Intellectual capital	30	4.03	0.574	2.06	1
Beneficiaries	30	4.37	0.442	2.45	5
Value creation	30	4.09	0.616	2.19	2
<b>2. internal process</b>					
Standardization of the organization processes	30	4.14	0.863	2.26	2
Identification of key organization processes	30	4.28	0.625	2.31	3
Systematic thought	30	4.33	0.579	2.37	4
Feedback evaluation	30	4.03	0.916	2.13	1
Operational skill improvement	30	4.39	0.628	2.52	5
<b>3. development and learning</b>					
Training improvement	30	4.19	0.636	2.16	5
Knowledge management	30	4.06	0.745	2.09	2
Participation	30	4.25	0.696	2.19	6
Knowledge creation	30	4.03	0.729	2.03	1
Self-learning	30	4.14	0.795	2.14	4
Encouragement	30	4.11	0.641	2.11	3
<b>4. finance</b>					
Financial resources enhancement	30	4.06	0.742	2.19	2
Supervision and budgeting	30	4.15	0.691	2.34	5
Supervision and budgeting system	30	4.03	0.638	2.16	1
Correct estimation of expenditures	30	4.11	0.823	2.22	3
Financial transparency	30	4.09	0.766	2.28	4

As seen in the Table, the results of the second and third rounds of Delphi are similar, and there is no need for performing a new round.

#### 4.2. Evaluating the normality of items

Normality test (Kolmogorov Smirnov)

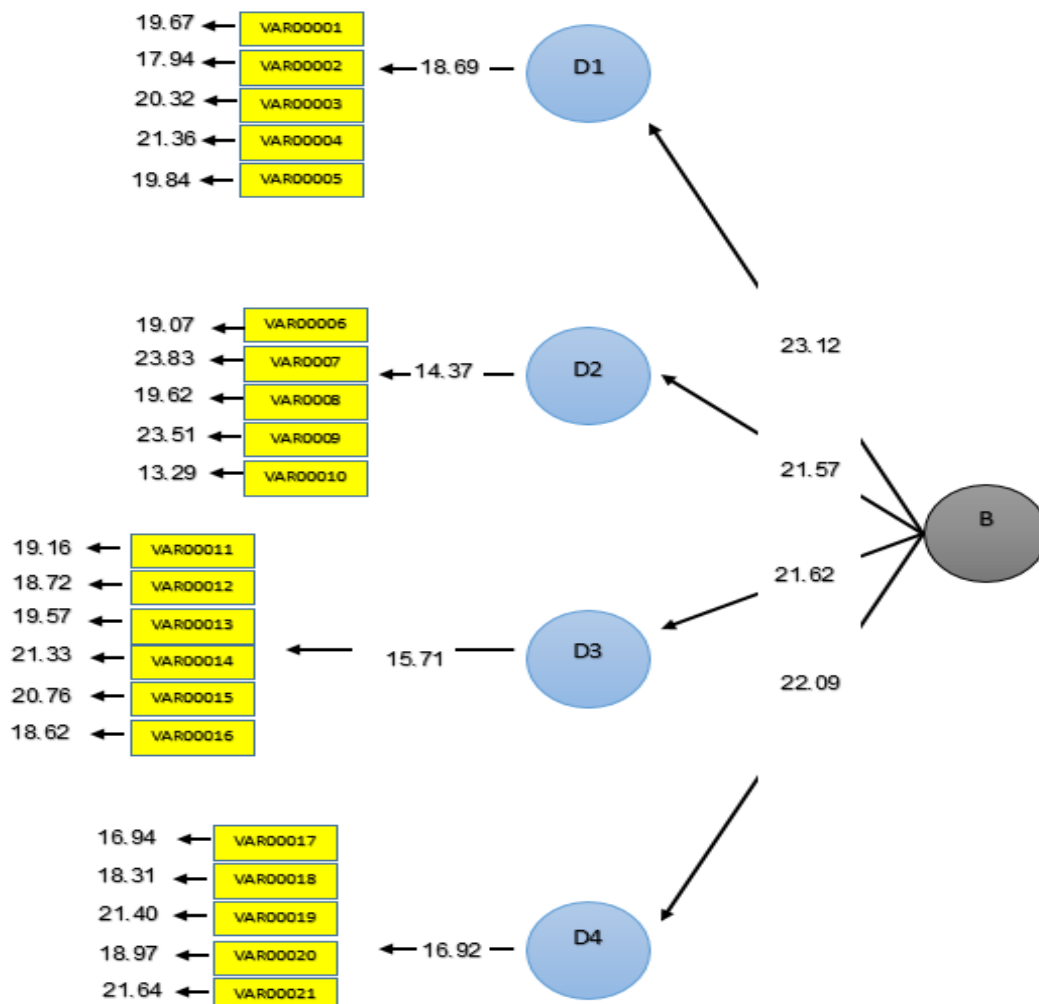
Since the value of the significance level of components is larger than the error value (0.05), the null hypothesis is concluded that the identified components are normal.

**Table 3.** The results of the Kolmogorov Smirnov test

Variable	Significance level	Error value	Hypothesis confirmation	Result
Customer	0.362	0.05	H0	Normal
Finance	0.149	0.05	H0	Normal
Internal process	0.295	0.05	H0	Normal
Development and learning	0.388	0.05	H0	Normal

**4.3. Structural Equation Modeling and the design of the final model**

Structural Equation Modeling is a strong tool in multivariate statistical analyses. The method, referred to as SEM, uses, in a particular mode, those methods present in the multivariate analysis and present some appropriate models for data related to the qualitative studies. The SEM test extracts the effect of indices and components in the final model. In this section, the outputs of the run model by the LISREL Software are illustrated, including the obtained weights for the final model of the study that determines to what extent the residual indices in the research can influence the balanced evaluation system in listed firms on the Tehran Stock Exchange.



**Figure 1.** The Structural Equation Modeling of the balanced evaluation system in listed firms on the Tehran Stock Exchange

The obtained factor load by the diagram for indices and components is measured by the LISREL Software that shows the significant coefficients or, in other words, the factor loads from the criterion in proportion to the desired factors. The circular model is summarised as follows:

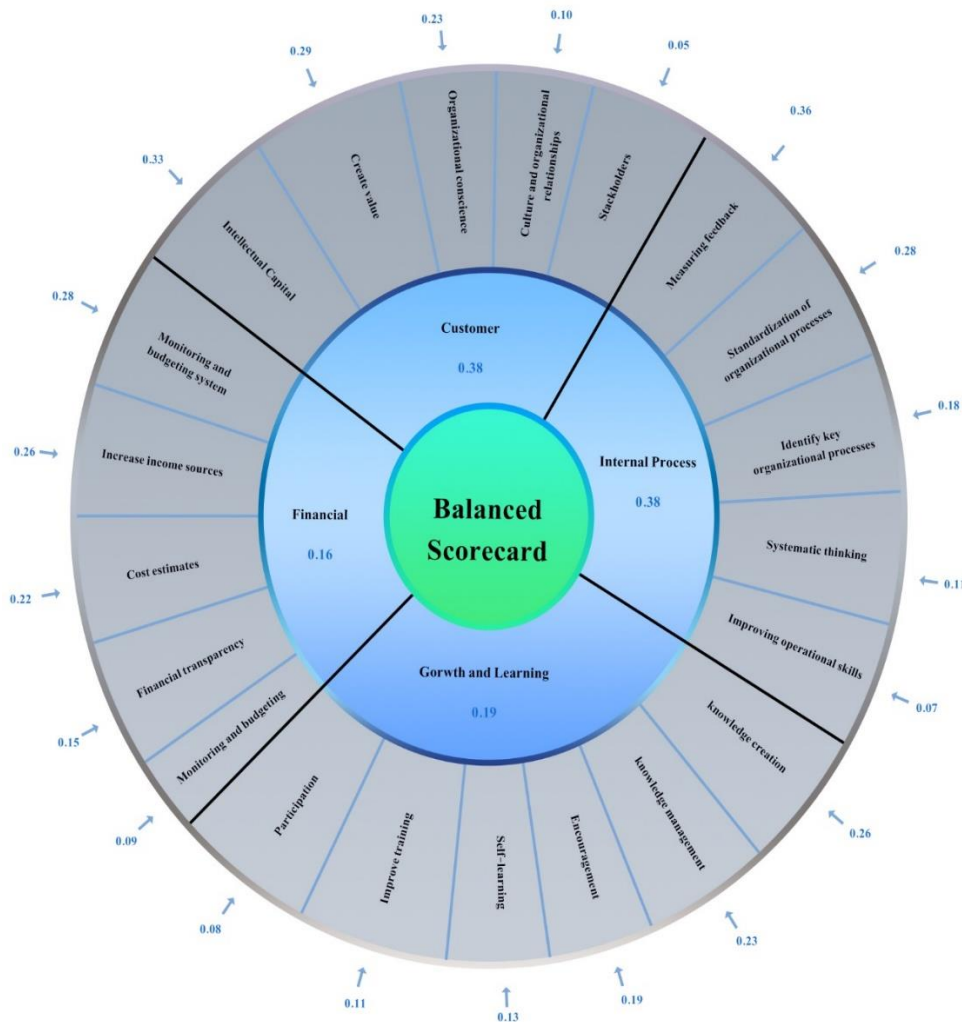


Figure 2. The final research Model

### 5. Conclusion

The present study analysed a new design of one of the performance measurement models called the balanced measurement model for localization and compatibility with different infrastructures of Iranian stock exchange companies. Based on experts’ opinions and three Delphi rounds, the client’s perspective variables have been identified, including organizational conscience, organizational culture and relationships, intellectual capital, stakeholders, and value creation. The ranking also showed that the client’s perspective is first. A performance measurement system determines how an organization achieves predetermined goals by measuring indicators. Most organizations plan their operations somehow, but what has caught the attention of experts in the field in recent years is what needs to be measured, in other words, the debate about the right size. In this regard, many managers have noticed that their performance measurement system is not working properly. This is because

they have not identified their performance indicators or, if they have, they have not identified them correctly. Throughout history, there have been systems for measuring the performance of financial business units, but financial metrics are insufficient to guide and evaluate the organization's paths in a competitive environment. In the balanced scorecard model, besides financial indicators, considered function indicators, conductor and performance indicators are also considered. This approach covers all financial and non-financial aspects of organizational performance and balances past performance outputs with future performance drivers. It is a balanced military scorecard for performance management. The Balanced Scorecard aims to provide key business success factors for managers and align the organization's overall performance and strategy. The Balanced Scorecard also gives managers the tools to lead the organization to be competitive. Over time the idea has evolved, so much so that a performance measurement tool has become a strategic management system. In this regard, [Ghasemi \(2020\)](#) also showed a positive and significant effect on company performance from a client's perspective. [Yeh et al. \(2021\)](#) showed a positive and significant relationship between intangible assets and organizational performance and a balanced scorecard. Further, the correlation test results showed that all components of intangible assets or organizational performance have a positive and significant relationship, and human capital has the greatest impact on the organizational performance of companies.

Based on experts' opinions and three Delphi rounds, the variables of the internal process perspective have been identified. Internal process perspectives have included standardizing, identifying key organizational processes, systems thinking, measuring feedback, improving operational skills, and creating value. In this regard, [Khan Mohammadi et al. \(2019\)](#) also showed that it is acceptable and very good in the organization under study from internal processes.

Growth and learning landscape variables have been identified based on expert opinion and three Delphi rounds. Growth and learning perspectives have included improving education, knowledge management, participation, knowledge creation, self-learning, encouragement, and persuasion. In this regard, in evaluating the performance of Mammoth Company,

Based on the opinion of experts and three Delphi rounds, financial landscape variables have been identified. The financial perspective included increasing revenue sources, oversight and budgeting, oversight and budgeting system, accurate cost estimation, and financial transparency. The available data show that many companies have dramatically changed their management and performance measurement systems over the past decade. This transformation has been significant in accepting the strategic performance measurement system. In confirmation of this common process, it is claimed that the strategic performance measurement system has very beneficial effects on performance and that this effect is achieved through the participation of the strategic performance measurement system in the successful strategic implementation of the desired (Such as better communication, better execution, and more effective support) ([Gamma et al., 2021](#)). Financial measurements are good indicators for reflecting on past events. Still, showing the real factors and drivers of value creation in today's organizations, i.e., intangible assets such as employees' knowledge and ability, information networks and customer relations, are insufficient and inefficient. This valuation method emphasizes financial-non-financial aspects, short-term-long-term strategies, and external business measurements. In this regard, [Quezada \(2019\)](#) and [Fatima and Elbanna \(2020\)](#) also showed that it has a positive and significant effect on the company's performance from a financial perspective. [Shao \(2019\)](#) showed that the perspectives of "sustainability" and "learning and growth" are key elements that can greatly improve performance. The proposed framework could help authorities promote the competitiveness of sustainable development decisions. [Pei et al. \(2018\)](#) showed that performance appraisal might affect all aspects of employee perception and reaction to performance appraisal; ultimately, performance appraisal directly impacts the

organization because a company's performance is the performance of its employees. Mark (2019) showed that measuring organizational performance is a complex process. Performance is a multifaceted phenomenon whose component elements may be distinct from managerial priorities or even mutually contradictory. Hansen and Schaltegger (2017) showed that companies need practical tools to evaluate the performance of the board and the proposed method is a suitable tool for measurement. The results also show that the relative importance of performance criteria is different among the three samples.

Performance appraisal and management play a crucial role in a competitive environment characterized by resource scarcity. Performance measurement systems have always been recommended to facilitate the implementation of the strategy and improve organizational performance. Today, contemporary performance measurement involves using financial and non-financial performance metrics related to the organization's business strategy. In the present century, the issue of performance appraisal is of particular importance to organizations and managers, given the challenges faced by the Twenty-first is facing it, trying to use the abilities and talents at their disposal to face the minor damage in the face of the unexpected changes that occur, and to make the most profit.

### Suggestions

According to the results of this research, some suggestions are presented:

- 1-The managers of the organization are suggested to pay attention to organizational research and development in order to improve organizational performance.
- 2-Organizational managers are suggested to institutionalize office automation to improve organizational performance.
- 3-In order to improve organizational performance, it is recommended to attract new customers.
- 4-Organizational managers are suggested to pay much attention to identifying key customers.
- 5-organizational managers are suggested to pay much attention to the mutual benefits between the organization and customers.
- 6-Managers are suggested to make investments that bring good returns to the organization.
- 7-The managers are suggested to use appropriate strategies in debt and liquidity management.
- 8-The managers of the organization are suggested to use appropriate strategies and investment policies to increase the return on equity and improve the company's performance.
- 9-Managers of the organization should pay more attention to employee productivity and improve productivity.
- 10-Managers of the organization should pay more attention to employees' training programs to ultimately improve organizational performance.
- 11-organizational managers try to provide conditions for improving the level of education of employees.

### Further to the study

Finally, practical suggestions are provided for those who are interested:

- 1-Identifying and ranking the factors affecting the improvement of organizational performance using multi-criteria decision-making methods
- 2-Examining the company's investment strategies in improving the company's performance
- 3-Examining the strategic management of the organization and organizational performance
- 4-Examining the customer relationship management system and organizational performance
- 5-It is suggested that the role of variables as mediators and moderators (such as gender - work experience, age, etc.) be addressed in future research.



6-Since it may not be possible to provide a specific model for evaluating all firms with different activities, it is suggested that such a design be done separately in each specific category and production area.

### Research limitations

Researchers are always faced with limitations in their research, some of which manifest themselves even initially. This research, like other research based on the scientific method, has a series of limitations which are mentioned below:

1-Limiting the statistical community to industrial managers, management accountants and financial managers of companies listed on the Tehran Stock Exchange to collect more accurate and common information

2-Problems of determining the composition and converting qualitative categories into quantitative values

3-Basically, conducting numerous researches and distributing questionnaires with many questions has caused the completion of questionnaires not to be done with reflection and accuracy and to affect the results.

4-Respondents do not have much faith in applying the research results in the implementation phase, so they do not pay much attention to the answers.

5-Lack of cooperation of some employees due to lack of time and boredom.

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