

The Feasibility of Implementing the Balanced Scorecard (Case Study: Nationwide Provincial Telecom Companies)

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Abstract

The purpose of this study was to evaluate the feasibility of using “balanced scorecard technique” in assessing the performance of provincial telecommunications companies throughout the country. Balanced Scorecard is one of the management accounting techniques that first presented in 1992 by Robert Kaplan and David Norton. This technique evaluates the organization from four perspectives including financial, customer, internal processes, and learning and growth. The main aims of this research is to identify the role of balance scorecard (BSC) represent in better performance of organizations and to shed light on the impacts of balance scorecard on organizational performance. Furthermore, currently there is lack of published research on BSC within telecommunication companies, so it has motivated us to highlight gaps in this research and to outline some ideas for future research. In this study, four perspectives of the balanced scorecard as a main hypothesis and four secondary hypotheses were investigated. The results of this research suggested that the possibility of indexing in all four perspectives of the balanced scorecard for the provincial telecommunication companies were present. But so far, the pre-needs and aspirations for the implementation of this technique in these companies have not been provided. Also from respondents prospective, customer perspective was ranked the most important factor and prospective of internal processes, finance, growth and learning, were placed in next rankings respectively.

Keywords: balanced scorecard, performance evaluation, management accounting, provincial telecommunications companies

1. Introduction

Due to the increasing change in the environment and factors affecting organizations, traditional performance evaluation models are not responsive to these changes, no longer. This is because the mere use of financial measures to assess performance. The simultaneous use of financial measures and non-financial criteria to assess the performance using the balanced Scorecard technique have been adopted by many companies. Almost 60 percent of the thousands of companies listed in the Fortune in America, accepted the concept of the balanced scorecard or are familiar with it (Silk, 1998, p. 283). The balanced scorecard changes the basic strategy and objective of the company to organized goals and criteria in four aspects including financial, customer, internal processes and learning and growth (Kaplan & Atkinson, 2005, p. 368). Translating strategy into operation item, aligning the organization units to the strategy, communicating strategy to employee and providing feedback and learning (wasaton chutibhinyo, 2012). BSC as Kaplan and Norton stated propose an answer to the following four questions: (Fawzi et al., 2011).

- 1) How do customers see us?
- 2) What must excel at?
- 3) Can we continue to improve and create value?
- 4) How do we look to shareholder?

Provincial telecommunications companies as one of the largest telecommunications service provider in country, which, despite having a large number of non-financial criteria, only use criteria derived from the financial prospective to evaluate their performance. Given the weaknesses of the current evaluation system, the need to design and implement a more comprehensive system to evaluate the performance using financial measures and non-financial criteria are felt. New method that companies have used for successful implementation of the

strategies, is the balanced scorecard (Penny, 2001, p. 58).

2. Research Literature

The balanced scorecard was introduced for the first time in 1990 as a performance management tool By Kaplan and Norton. In fact, the balanced scorecard presented a performance measurement system further and more comprehensive than other measures of financial systems. This idea has developed and evolved over time, in a way that as a tool of performance measurement, now has become a strategic management system. The balanced scorecard uses coherent system of financial and non-financial criteria to determine the position of the organization (Michaleska, 2005, p. 752). These criteria smooth the track of staff participation to achieve the final goals of the organization (Niven, 2002). So, the more strategic objectives are designed, the nature and number of relevant performance indicators will also increase (Sean Chen et al., 2006). In the balanced scorecard, in addition to financial indicators, the organization situation will be assessed in terms of indicators, including the perspective of customers, processes, growth and learning. Financial performance is dependent on the satisfaction or non-satisfaction of the clients. Customer satisfaction or dissatisfaction is the result of the effectiveness, efficiency and performance of internal processes of the organization. How to process the quality also depends on human resources, incentives for action and also on information systems (Zendedel, 2006, p. 11).

2.1 The Necessity of Balanced Scorecard

Today, with the globalization of business, it is necessary that organizations pay more attention to prospective operating procedures as well as the performance of their supply chain and on the other hand, and to align these processes with organization strategic objectives (Fernandes, 2006, p. 623). Generally, the balanced scorecard is necessary for the following reasons (Kirby et al., 2003, p. 7).

- Converting strategy into action;
- Participation of all staff in the definition and strategy providing;
- Management of intangible assets;
- Changes in functions without changes in business structure;
- Measurement of the results;
- Management of daily operations;
- Understanding the cause and effect relationship between the capabilities of processes and strategy;
- Prioritize and allocate resources;
- Proper and continuous feedback to set the priorities;
- Access to a set of measurement indicators.

Many organizations have realized the importance of continuous and constant operations, including the use of different performance evaluation systems for several years.

2.2 Four Perspectives of the Balanced Scorecard

As shown in Figure 1, the balanced scorecard, changes the organization main objective and strategy into objectives and organized measures in four aspects of financial, customer, internal processes and learning and growth (Kaplan & Atkinson, 2007, pp. 368-369).

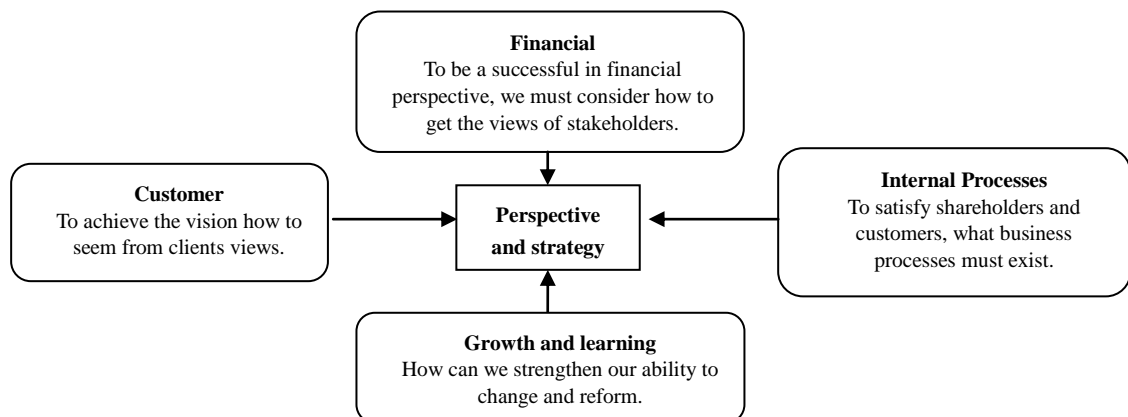


Figure 1. Framework of balanced scorecard (Kaplan & Norton, 1996, p. 11)

According to Figure 2, it must always be a balance between the internal and external organizational perspective. Of the four mentioned aspects, inter organizational processes, learning and growth are internal perspectives, and the customer and financial perspectives are related to external organizational perspectives.

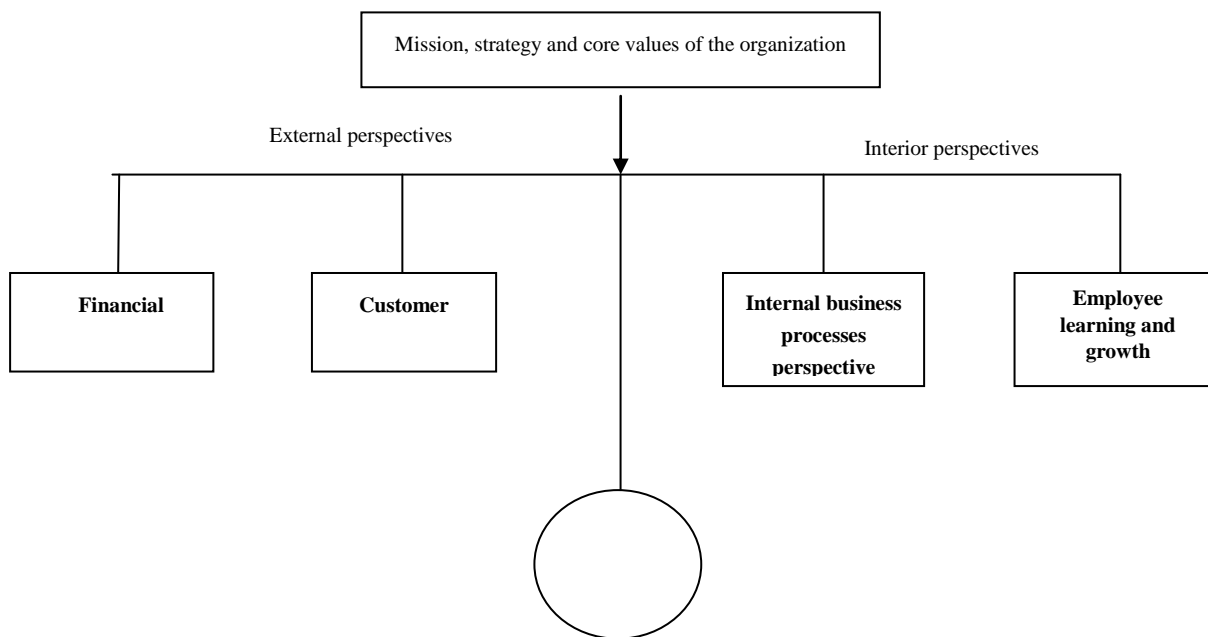


Figure 2. The balance between internal and external perspectives (R. Paul Neon, 2007)

2.2.1 Financial Perspective

This perspective considers of maximizing shareholders wealth as the ultimate goal of an enterprise. All efforts to improve customer satisfaction, improve the quality and reduce delivery time of products and services, if not lead to tangible financial results, will have no value (Smith, 2006). Financial goals often use to measure the company's viability. For example, operating profit, return on investment, rapid growth in sales, future cash flows and the recent creation of economic added value are of financial measures (Kaplan & Atkinson, 2007, p. 368).

2.2.2 Customer Perspective

In this perspective, the strategy of differentiated value provided to the customer is considered as a target. Companies by implementing a unique strategy and using available resources, have created the most value in their in target markets for customers, maintain them and attract new customers. There are several factors affecting customer satisfaction, including the following factors, the quality of services provided to customers, employee productivity and organizational knowledge. Major customers' complaints stem from staff interactions with customers (Smith, 2006). In this perspective, from the balanced scorecard, key performance metrics, include customer satisfaction, customer retention, new customer acquisition, customer profitability and market share (Kaplan & Atkinson, 2007, p. 369).

2.2.3 Internal Business Process Perspective

Value is created by internal business processes. Organizations manage their internal processes to differentiate provided value to the customer. Achieving each of the goals of the customer perspective, needs series of operational processes efficiently and effectively, these processes should be set in terms of internal processes and appropriate measures to control the progress should develop (Smith, 2006). The perspective of internal processes remind the necessary prerequisites to perform the work in question guided by the ultimate objectives, and to achieve financial objectives and customer needs (Nir, 2004, pp. 49-50).

2.2.4 Learning and Growth Perspective

The organization's ability to innovate, improve and learn, ties directly to its value as an organization. Kaplan knows the context of learning, growth, and innovation as the enterprise infrastructure. The main point is that learning to improve organizational processes is essential, improving internal processes to improve customer

satisfaction is necessary and improving customer satisfaction to improve the financial results is essential (Garrison et al., 2003, p. 696). Any business or organization has its own balanced assessment criteria to reflect its objectives and strategies. For example, ARPU and ASR indexes are certain telecom companies. But perhaps some of the criteria in all units or a subset are public. Other criteria can be specific to each business unit (Kaplan & Norton, 1996, p. 44). Standards must meet the following characteristics:

- To be relevance: should be related to the company's strategic goals;
- Control: the criteria in this way are affected;
- In terms of leadership activities should guide: the pioneering initiatives are effective;
- Simple: its calculation rules should be easy and understandable;
- Making sure: cannot be manipulated;
- Generality: at different levels of the organization can be interpreted;
- Measurable: without spending money can be found in the form of numbers (Mychaleska, 2005, p. 754).

More researches on the subject of the survey are presented as follows. Kaplan and Norton (1993) examined the use of balanced scorecard in three companies including Rock Water, Apple computer and a manufacturer of small and sophisticated equipment. According to their findings, the balanced scorecard has the most successful when is consistent with the changing process. Also, different parts of business units and business units by using the balanced scorecard, can have proper understanding of the strategy related to them. If the balanced scorecard, has a clear prospective toward business unit strategy, the used information and criteria, will be valuable the important data and information to competitors. Boleyn (2006) by investigating on the reliability and validity of the Balanced Scorecard framework and related criteria to it concluded that the balanced scorecard was a reliable and valid performance evaluation model. Kaplan and Norton (2001) examined application of Balanced Scorecard in companies of Alcatel, Motorola and Sears, documental. They concluded that the implementation of the balanced scorecard with regard to the goals and mission of the companies have effect on the implementation and impact of their activities. The implementation of the balanced scorecard is as a new solution for strategic information in the organization. Chen et al. (2006) based on their research concluded that the participation of chief financial officer, office managers, top management support and organization size are of the factors that are important in the process of implementing the balanced scorecard. Kamali Shahri (2005) conducted a research on the feasibility of implementing a balanced assessment of active home appliances companies in the Tehran Stock Exchange, and concluded that the possibility of implementing the balanced scorecard in these companies exist. Also, the possibilities of indexing in terms of financial, customer, internal processes and learning and growth in home appliances companies exist. Ameli (2007) in a research entitled 'the case of the balanced scorecard implementation challenges with a prospective to its impact on the realization of the Iranian organizations strategy concluded that implementation of the balanced scorecard and designing strategy map, help organizations in strengthening teamwork and aligning organizational capital, and human intelligence with the organizations' strategy. Khajavi and Sarvari (2012) in a study entitled "the feasibility of implementation of balanced assessment, Case study: Southern Petrochemical Companies" concluded that indexing all four perspectives of the balanced assessment, southern petrochemical companies south of the country are possible, but so far the prerequisites and ideas for implementing this technique in southern petrochemical companies have not been well established. Also, customer prospective were the most important factor and opinions of internal processes, financial, learning and growth were in place in next rankings, respectively.

2.3 Balanced Scorecard for Telecommunications Companies

The field of technology and communication has always been associated with significant changes that has caused the telecommunications industry to have a growing trend distinct from other industries. In response to ongoing changes in the operating environment of this industry, managers of telecom companies to stay in the competition and offering their services at acceptable levels, benefit from new techniques of management in their organizations. The balanced scorecard as a performance evaluation system and strategic management is one of the communication tools that has been accepted by the most telecom companies' managers. However, so far, no coherent study of using the balanced scorecard to assess the performance of telecommunication companies has done. In line with the implementation of the general policies of Article 44 of the constitution of the Islamic Republic of Iran, in November 2009 with the transfer of 50% plus one stock of stocks of Telecommunication Company of Iran, privatization of this huge company was actually achieved. Telecommunication Company of Iran, as the dominant operator in the country, dedicated about 99% of fixed phone and 62% of the country's mobile subscribers in Iran's telecommunication network which is unrivaled in the Middle East region. According

to the official website of Iran Telecommunication Company, the company's strategy and its strategic plans has focused on seven axes including optimization of costs and benefits, transformation services, strategic partnership with key stakeholders, optimization of network infrastructure, maintaining maximum market share and expanding sales and marketing, organization development, maintenance and development of human resources. Implementation of Iran Telecom company's strategic programs in the area of the creation, operation, development and maintenance of fixed telephone networks and data on non-mother telecom networks and implementation of other obligations of Iran Telecommunication Company in cases such as maintenance and expansion in telecom networks and mobile communications to provincial Telecommunication companies have misplaced. Usefulness of the balanced scorecard for telecom companies is like the other profit and non-profit organizations. Balanced scorecard can benefited identifying and developing strategies to increase consensus of opinion about strategy, linking strategy across the company, aligning people and units objectives with the strategy, the implementation of strategic objectives with long-term goals and annual budgets, periodic performance prospective and providing organizational feedback of a company (Kaplan & Norton, 1996, p. 19). Regarding the mentioned prospective, the main hypothesis of this study were to determine the possibility of implementing the balanced scorecard in the provincial telecommunication companies, to determine the possibility of indexing in financial perspectives of the balanced scorecard in the provincial telecommunication companies, the possibility of indexing in customer perspective of the balanced scorecard in the provincial telecommunication companies, the possibility of indexing in internal processes prospective of the balanced scorecard in the provincial telecommunications companies, and the possibility of indexing in learning and growth perspectives of the balanced scorecard in the provincial telecommunication companies.

3. The Objectives of the Study

The main aim of this study is to recognize the influence of applying the balance scorecard methodologies on organizational performance, so we shared those following objectives.

- 1) To identify challenges in implementing the BSC on Nationwide Provincial Telecom Companies in Iran as one of developing countries.
- 2) To study the concept of BSC, And to create an increasing awareness in organization regarding effective balanced scorecard.
- 3) Contribute to the future development and provide a basis for future research in Iran and other developing countries.

4. Importance of the Study

This study stems its importance from the following reasons:

- 1) The study will break new ground in balance scorecard field especially for nationwide Provincial Telecom companies in Iran as there is scarcity of research in this field.
- 2) It examines the use and implementation of balance scorecard in nationwide provincial telecom companies.
- 3) The findings of this study will be valuable for other private firms specially telecommunication companies that wish to use the balance scorecard model to measure their performance, and to create a better understanding for balance scorecard.
- 4) The outcome of the study will be valuable academicians; they can gain insights and ideas for future research.

5. Research Hypotheses

So as to reach the objectives intended for this study, the subsequent research hypotheses are stated based on the revelation in the review of literature relating to the balance scorecard and organizational performance.

5.1 Main Hypotheses

- Possibility of implementing the balance scorecard in the provincial telecommunication companies existed.

5.2 Sub-Hypotheses

- 1) Possibility of indexing from the financial perspective, in the provincial telecommunication companies existed.
- 2) Possibility of indexing from the customer perspective, in the provincial telecommunication companies existed.
- 3) Possibility of indexing from the internal processes perspective, in the provincial telecommunication

companies existed.

4) Possibility of indexing from the learning & growth perspective, in the provincial telecommunication companies existed.

6. Materials and Methods

6.1 Sample

The current research was an applied study and in terms of data collection was done by descriptive method and was a case study, too. The sample size of this study, were all managers and financial heads of provincial telecommunication companies, that their numbers were 62 people and were working at 31 provincial telecommunications companies. To reduce sampling errors, increase the test ability, novelty of the balanced scorecard technique in Iran, as well as the limited number of provincial telecommunications companies, the total population of all managers and financial heads of provincial telecommunication companies across the country have been analyzed.

6.2 Data Collection

The 62 questionnaires distributed, 58 questionnaires were collected, that were useable for research. The measuring tool for this research was questionnaire, so the required information to test research hypotheses have been collected through a researcher pre-designed documented questionnaire. The research questionnaire has been designed based on Likert 5 options and scores given to each question was in the spectral range of +1 to +5. So, the average range or average point of research hypotheses was the number of 3, and can measure and evaluate the average mean of the research components in comparison to assumed mean of 3. If the mean responses were statistically significantly higher than 3, would indicate the hypothesis confirmation and if the mean responses were statistically significantly lower than 3, suggests the rejection of research hypothesis. In some cases the questionnaires were collected by calling on and in some cases via e-mail or fax were sent and collected. One of the authors of the current research that is the financial Supervisors of a provincial telecommunications companies and according to the working relationship with managers and financial heads of provincial telecommunications companies, by calling and sending emails and faxes distributed and collected the questionnaires.

6.3 Research Philosophy and Methods

The research questionnaire had 60 questions. Questions 1 to 24 were related to the prerequisites and required thinking to implement the balanced scorecard. Questions such as the used system to evaluate performance, strategies and prospects, promotion and reward systems and indicators used to evaluate the performance of provincial telecommunication companies were included in this sector. Questions of 25 to 31 were related to the first sub-research hypothesis, the possibility of indexing in financial perspective. Questions such as how to efficient use of assets, policies related to reduce the cost of services providing, strategies related to attract new income sources, were of the questions related to this hypothesis. Questions of 32 to 39 were related to the second sub-research hypothesis, the possibility of indexing in the customer perspective. Questions such as how to communicate with customers (subscribers) and companies' managers, how to handle the complaints of customers (subscribers) and a variety of services provided for this hypothesis have been designed. Questions of 40 to 50 were related to the third sub-hypothesis, the possibility of indexing in internal business processes perspective. Questions such strategies and measures to support new applications, innovation and services development, and special strategies to reduce the administrative procedures for customers for this hypothesis were designed. Finally, questions of 51 to 60 to explored the fourth sub-hypothesis of the research, possibility of indexing in learning and growth perspective. Of the questions related to this hypothesis were information systems and advanced technology in the company, rewards and staff training programs, job training, and innovation in services providing and how to deliver it. Also, to analyze the data, SPSS version 21, using non-parametric tests of Qp (median test) at 95% confidence level and 5% errors, research hypotheses have been tested. To determine the significance relationship between basic questions of the questionnaire and research hypotheses, Friedman and H test (Kruskal - Wallis) were used.

7. Results

7.1 Running the Hypothesis Test Based on Main Hypothesis

The main hypothesis of the research was analyzed from two aspects. In this regard, questions of 1 to 60 of the study as the feasibility of implementation of the balanced scorecard were evaluated and then questions of 1 to 24 as the intellectual and administrative prerequisites necessary to implement the balanced scorecard were studied and tested.

7.1.1 Running the Hypothesis Testing Based on Questions of 1 to 60 of the Research

Table 1. Results of the test related to the main hypothesis

Ranking	no.	Observed P(%)	P of test	p-value
Lesser or equal to median	21	0.36	0.5	0.004
greater than the median	37	0.64		
Total	58	1.00		

As can be seen in Table 1, 37 out of 58 cases (64%) were located greater than the median. Therefore, it is expected that the null hypothesis to be rejected. Regarding the P-value obtained were equivalent to 0.004, at the level of 5%, the main hypothesis (questions of 1 to 60) were confirmed. Thus, according to the results it can be concluded that the possibility of implementing the balanced scorecard in the provincial telecommunication companies existed.

7.1.2 Running the Hypothesis Test Based on Questions of 1 to 24 of the Research

Table 2. Results of the test related to test of the main hypothesis (prerequisites)

Ranking	no.	Observed P(%)	P of test	p-value
lesser or equal to median	23	0.40	0.5	0.062
greater than the median	35	0.60		
Total	58	1.00		

As can be seen in Table 2, in 23 of 58 cases (%) were located lesser or equal to the median, so, it is expected that the null hypothesis was not rejected. Regarding the P values obtained that was 0.062, at the level of 5%, the null hypothesis was not rejected. Therefore, it can conclude that the prerequisites and needed ideas for implementing the balanced scorecard in the provincial telecommunications companies have not been well established. The first sub-hypothesis explored the possibility of indexing in the financial perspective of balanced Scorecard.

7.2 Running the Hypothesis Test Based on Sub- Hypothesis

7.2.1 The Test Related to the First Sub- Hypothesis

Table 3. Results of test related to the first sub-hypothesis

Ranking	no.	Observed P(%)	P of test	p-value
lesser or equal to median	17	0.30	0.5	0.001
greater than the median	41	0.70		
Total	58	1.00		

In Table 3, the results of the questions of first sub-hypothesis (questions of 25 to 31) have been shown. According to the results, it can be concluded that the possibility of indexing from the financial prospective, in provincial telecommunications companies existed.

7.2.2 The Test Related to the Second Sub-Hypothesis

The second sub-hypothesis explored the possibility of indexing in customer perspective (shared) of the balanced scorecard.

Table 4. Results of the test related to the second sub-hypothesis

Ranking	no.	Observed P(%)	P of test	p-value
lesser or equal to median	12	0.20	0.5	0.000
greater than the median	46	0.80		
Total	58	1.00		

As can be seen in Table 4, according to the results of the second sub-hypothesis questions (questions 32 to 39), it can be concluded that the possibility of indexing from customer perspective (shared) in provincial telecommunication companies existed.

7.2.3 The Test Related to the Third Sub-Hypothesis

The third sub-hypothesis was about the possibility of indexing from internal processes perspective of the balanced scorecard.

Table 5. Results of test related to the third sub-hypothesis

Ranking	no.	Observed P(%)	P of test	p-value
lesser or equal to median	18	0.31	0.5	0.000
greater than the median	40	0.69		
Total	58	1.00		

According to the obtained results (Table 5) of the questions of the third sub-hypothesis (questions of 40 to 50), it can be concluded that the possibility of indexing from internal processes perspective of the balanced scorecard in the provincial telecommunication companies existed.

7.2.4 The Test Related to the Fourth Sub-Hypothesis

The fourth sub-hypothesis explored the possibility of indexing from learning and growth perspectives of the balanced scorecard.

Table 5. Results of test related to the fourth sub-hypothesis

Ranking	no.	Observed P(%)	P of test	p-value
lesser or equal to median	22	0.38	0.5	0.024
greater than the median	36	0.62		
Total	58	1.00		

According to the results (Table 6) obtained from the fourth sub-hypothesis questions (questions of 51 to 60), it can be concluded that the possibility of indexing from learning and growth perspectives of the balanced scorecard in the provincial telecommunication companies existed. Generally, regarding the results of test of the main hypothesis and four sub-hypothesis, it can be concluded that the possibility of implementing and indexing in each four perspectives of the balanced scorecard in the provincial telecommunication companies existed.

7.3 Comparison of Mean Ranking between Factors Using Friedman Test

By using Friedman test, can compare the ranking and the degree of strengthen of the hypotheses. Tables 7 and 8, show the test results.

Table 7. The results of comparison test of ranking mean of hypotheses using Friedman's test

Ranking mean	Comparable factors	Ranking
3.79	Second hypothesis	1
3.31	Third hypothesis	2
2.99	First hypothesis	3
2.54	Fourth hypothesis	4

Table 8. Z-test and the significance level of Friedman test to compare the hypotheses ranking

Significant level	degrees of freedom	Chi-square	no.
0.000	4	55.633	58

As can be seen, the significant levels in the above test were less than 5%, so it can be concluded that the mean ranking of the hypotheses were not the same. Thus, according to the obtained results, it clears that the respondents count the highest possible indexing from the customer perspective and the lowest of indexing possibility from the perspective of growth and learning.

7.4 The Effect of Any General Questions of the Questionnaire on the Research Hypothesis

In this section the results of the presence or absence of a significant relationship between the general questions of the questionnaire, including gender, age, education level, work experience and the organizational post were examined and determined with the research hypotheses using non-parametric tests of U- Mann-Whitney test and H-Kruskal Wallis:

- Gender variable had impact on the answers to the first and fourth hypotheses, but did not effect on the answers of the second and third hypotheses.
- Age variable had impact on the answers to the second and fourth hypotheses, but did not effect on the answers of the first and third hypotheses.
- Work experience variable had impact on the answers to the second, third and fourth hypotheses, but did not effect on the answers of the first hypotheses.
- Organizational post variable had significant effect on answers related to all hypotheses.

8. Discussion and Conclusion

The results of this study showed that it was possible to implement the balanced scorecard in the provincial telecommunications companies. Also, indexing in financial, customer, internal processes, learning and growth prospective were possible, but the prerequisites and ideas needed for implementing this technique has still not well established. On the other hand, according to the Friedman test, the customer perspective of the balanced scorecard as the most important factor and internal processes, financial, growth and learning perspectives were placed in the next priorities, respectively. According to the obtained results, it can be said that provincial telecommunications companies have realized to the importance of non-financial measures to evaluate the performance assessment, but due to limitations of the prerequisites did not use the balanced scorecard for performance evaluation. Of other reasons for not use of the Balanced Scorecard technique by provincial telecommunications companies can mention the following items:

- 1) The relatively high cost of implementing the balanced scorecard technique.
- 2) The telecommunications industry in country is not competitive and there was no proper ranking for evaluation of provincial telecommunications companies.
- 3) Balanced Scorecard technique was novel for country, and some managers and even some accountants were not familiar with this technique.
- 4) Balanced Scorecard technique implementation and operationalization is difficult.

Regarding the items mentioned above, it was suggested to Iran telecommunication stock company managers, that by considering potential benefits of balanced scorecard, perform to improve limitations and provide required prerequisites, and create the possibility of implementing balanced scorecard technique at the level of telecommunications companies. As well, indexing in each perspectives of balanced scorecard should be done and evaluation of the performance of telecommunications companies in all four provincial perspective should be conducted.

9. Limitation and Direction for Future Research

Although there are encouraged result, this research still have un inescapable limitation, the most obvious limitation of the present study is the generalize ability of the study, this study has been carried out in private telecommunication companies and the researchers believed that in Iran each organization BSC is unique, so care must be taken in generalizing our finding. Also, The lack of familiarity of some respondents with balanced scorecard technique was of the limitation of the survey.

The finding of this study point out to several avenues for future research in this area and according to above research processes some suggestions are state for future research and they are summed up as follow:

- 1) A future research in this field could be carried out to examine the link between strategic planning, communication of strategy, and effective use of BSC in provincial telecommunications companies.

- 2) As this research work carried out in provincial telecommunications companies, an empirical research could be carried out to explore the feasibility of the BSC on public telecommunications companies.
- 3) Since this study depends only on questionnaire as means of data collecting and the questions contained in questionnaire are plentiful this study recommend that future researchers should be carried out using the questionnaire and interview face to face to get an immediately explanations from interviewees when it is necessary.

References

- Ameli, F. (2007). *Case Study of balanced scorecard implementation challenges with a prospective to its impact on the realization of the Iranian organizations strategy*. Industrial Management thesis, Faculty of Humanities, International University of Imam Khomeini, Iran.
- Fawazi, A., David, H., & Manzurul, A. (2011). Balanced scorecard Implementation in Jordan: An initial analysis. *International Journal of Electronic Business Management*, 9(3), 196-210.
- Fernandes, K. J., Venesh, R., & Whalley, A. (2006). Lessons from implementing the balanced scorecard in a small and medium size manufacturing organization. *Techno Vation*, 26, 623-634. <http://dx.doi.org/10.1016/j.technovation.2005.03.006>
- Garrison, R. H., Noreen, E. W., & Seal, W. (2003). *Management accounting*. Mc Graw- Hill: Berkshire.
- Kamali, S. E. (2005). *The feasibility of implementing a balanced assessment in the household appliances industries in the Tehran stock exchange* (Master Thesis). Faculty of Social Sciences and Economics, University of Al Zahra, Tehran, Iran.
- Kaplan, R. S., & Atkinson, A. A. (2007). *Advanced management accounting* (3rd ed., pp. 367-441). Prentice-Hall of India Private Limited, New Delhi- 1110001.
- Kaplan, R. S., & Norton, D. P. (1993). Putting the balanced scorecard to work. *Harvard Business Retrospective*, 71(5), 134-142.
- Kaplan, R. S., & Norton, D. P. (1996). *The balanced scorecard: Translating strategy to action* (pp. 75-85). Boston: Harvard Business prospective, Jan- Feb.
- Kaplan, R. S., & Norton, D. P. (1996). *Using balanced scorecard as a strategic management system* (pp. 115-137). Harvard Business prospective.
- Kaplan, R. S., & Norton, D. P. (2001). *Express delivery* (pp. 26-29). Financial Management, February.
- Kaplan, R. S., & Norton, D. P. (2001). *The strategy focused organization*. Boston: Harvard Business School Press.
- Kaplan, R. S., & Norton, D. P. (2006). *Alignment: Using the balanced scorecard to create corporate synergies*. Boston: Harvard Business School Press.
- Khajavi, S., & Sarvari, Y. (2012). The feasibility of implementing a balanced assessment (Case Study: Southern Petrochemical Company). *Management Accounting Quarterly*, V(XII).
- Kirby, J. P., & Smiesing, S. (2003). *Balanced scorecards as strategic Navigational charts: How to implement rapid sustainable change*. Paper presented at Visum Partners meeting based on Hackett Group data base. Bloomington, Mn.
- Michalska, J. (2005). The usage of the balanced scorecard for the estimation of enterprise effectiveness. *Journal of Materials Processing Technology*, (162-163), 751-758. <http://dx.doi.org/10.1016/j.jmatprotec.2005.02.227>
- Nair, M. (2004). *Essential of balanced scorecard* (1st ed.). John Wiley & Sons. Inc. <http://dx.doi.org/10.1002/9781118386774>
- Neon, P. (2007). *Balanced assessment-step by step*. Translated by Parviz Bakhtiyari and colleagues, Tehran publishing industrial management organization.
- Niven, P. R. (2002). *Balanced Scorecard Step-by-Step: Maximizing performance and maintaining result*. New York: John Wiley & Sons. Inc.
- Niven, P. R. (2003). *Balanced scorecard for government and nonprofit agencies*. New Jersey: John Wiley and Sons.
- Penny, N. (2001). Measuring business performance: A new framework prospective. *Quarterly Journal of ACCA*,

3, 58.

Sean, C. et al. (2006). BSc in higher education. *TQM magazine*, 8(2), 190-205.

Silk, S. (1998). Automating the balanced scorecard. *Management Accounting*, 38-40, 42-44.

Smith, R. (2006). *Process management and balanced scorecard*. Translated by Masood Aslani fard and Mehrdad Sherafat, School of Management, Tehran University.

Wasatarn, S. (2012). Balance score card practices and determination in Thailand. *Global Conference on Business and Financial Proceeding*, 7(1).

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