

Does Training Lead to the Business Performance Improvement? The Case of Iran

Seyed Abbas Mousavi Tatfi

PhD student at Yerevan State University, Department of Economics, Specialty of Business Administration

ABSTRACT

In today's knowledge based economy training is a significant factor for sustainable success of enterprises. However, in spite of the importance of training in business performance, there are limitations in previous researches concerning the link between training and performance. Therefore, the current paper aims to test the relationship between training and performance from new perspectives. To achieve the goal of the research first, performance indicators have been selected. Second, the questionnaires have been prepared in a way to obtain data on SMEs performance. Further, a survey of 714 Iranian SMEs has been conducted. Finally, the collected data have been analyzed to test the relationship between training and performance.

KEYWORDS: Training, SMEs, Performance.

INTRODUCTION

Does training lead to the business performance improvement? Though during recent decades many researches have tried to answer this question, it still causes controversies among researchers. Some of them argue that training plays significant role in sustainable success of business; others are not certain that training is important. Further, previous researches are limited in terms of statistical data. In addition, they focus on the impact of training only on financial performance. Considering the limitations of the previous researches the goal of the current research paper is to test the relationship between training and performance from three perspectives based on the survey of 714 Iranian SMEs.

The novelty of the current research consists in the fact that it tests the impact of training on the performance from three perspectives: internal-business, customer, and financial. The performance from internal-business and customer perspectives has been left out of researchers' attention, whereas financial performance efficiency is based on them. Internal perspective includes innovative activities of business and customer perspective includes the activities which are aimed to customer satisfaction and loyalty. Hence, inefficient performance from these two perspectives will certainly have negative impact on financial performance.

The data on performance indicators have been collected from the survey of 714 Iranian SMEs. The results of the data analysis have revealed that business performance is highly dependent on training.

LITERATURE REVIEW

The Impact of HR Practices on Firm Performance

Many researches have been conducted in recent years with the attempt to find out whether human resource practices make a positive impact on business performance and if they do so, how the impact is achieved.

According to Huselid (1995), employee skills have positive impact on financial performance, while productivity is influenced by employee motivation¹. Further, Ulrich (1997a) states that human resource practices are supposed to have impact on firm performance². Many survey results have proven the relationship between them. However, this relationship is sometimes complicated as they differ according to the sample size and measures applied. Patterson et al. (1997) points out that training, i.e. acquisition and development of new skills, plays significant role in changes of profitability and productivity³. Later Thompson (1998) after conducting a survey of 623 firms confirms that HR practices have been the main differentiating factors between more or less successful firms⁴. Guest et al (2000b) provides a model indicating that HR practices lead to the improvement of financial performance⁵.

Furthermore, there is a disagreement among researchers that these practices are always successful. Ferris et al. (1999) implies that the relationship between human resource practices and firm performance is that of the "black box"⁶. More concretely the problem is that if there is an impact of human resource practices on firm performance, how this impact occurs, i.e. what are the tools and methods by which these practices influence business performance measures. An attempt to reply these questions has been made by Snell et al. (1996), who states that this impact can be achieved through organizational learning, which becomes a competitive advantage for the organization⁷. Researchers generally agree that organizations learn only through individuals who learn. "Individual learning does not guarantee organizational learning, but without it no organizational learning occurs". Thus, it is suggested to

*Corresponding Author: Seyed Abbas Mousavi Tatfi, PhD student at Yerevan State University Department of Economics, Specialty of Business Administration. Email: aa.mousavi78@yahoo.com

focus on learning which will help achieve organizational goals. According to Snell et al. (1996) employees contribute to organization when they have the knowledge and skills required by the company, and have motivation to make use of them.

Furthermore, organizational learning improves financial performance⁸. The results of an empirical study conducted by Ellinger et al. (2002) suggest a positive relationship between the organizational learning and the firm's financial performance⁹.

Nevertheless, the number of researches on the relationship between training and firm performance seems to be limited. Furthermore, researches are limited in terms of the firm performance measures. Most of them focus on the relationship between financial performance and learning, while performance from customer and internal-business perspectives is not considered.

RESEARCH METHODOLOGY

To achieve the goal of the research, the Balanced Scorecard System has been applied to identify the indicators for measuring five-year performance of the surveyed companies from financial, customer and internal perspectives.

After identifying the corresponding indicators the survey instrument has been prepared in a way to obtain the data about the performance indicators.

The questions were Likert scale type-response questions designed to measure the intensity of the respondents' answers.

The survey has been conducted by in-office interviews. The managers whom we failed to meet have been later connected by the phone. The target population for the current research survey is manufacturing and service SMEs. SMEs for the current research are defined the firms with less than 250 employees. The target sample size was 1500 manufacturing and service SMEs. The actual achieved sample size was 714, i.e. 47.6%.

To understand whether the questions in the questionnaire all reliably measure the same latent variable, a Cronbach's alpha has been run on the data.

The tables below present the results of Cronbach's Alpha.

| Table 1. Reliability Statistics | |
|--|------------|
| Cronbach's Alpha | N of Items |
| .974 | 28 |

| Table 2. Case Processing Summary | | |
|---|----------|-----------|
| | N | % |
| Cases | Valid | 714 100,0 |
| | Excluded | 0 ,0 |
| Total | 714 | 100,0 |

0.7 is an acceptable reliability coefficient. The alpha coefficient of our data is 0.974 which shows that all the variables are perfectly measured.

Finally, the following hypotheses have been formulated and tested by SPSS 16 (Statistical Package for the Social Sciences):

- Hypothesis one: Training has impact on business performance from internal perspective.
- Hypothesis two: Training is related to business performance from customer perspective.
- Hypothesis three: Training has impact on business performance from financial perspective.
- Hypothesis four: Training has relationship with the overall business performance.

The statistical tools applied for testing the hypotheses are linear regression model and Chi-square test of independence.

RESULTS

The Relationship between Training and Performance

To test the relationship between training and performance from internal-business perspective the following hypotheses have been formulated and tested by Chi-square test of independence.

H₀ There is no relationship between training and performance from internal perspective.

H_a There is a relationship between training and performance from internal perspective.

Table 3. Chi-square test results and correlation coefficients of performance indicators from internal-business perspective

| Dependent variables | Pearson's Chi Square Values | Pearson's R | DF | p-value |
|--|-----------------------------|-------------|----|---------|
| Enhanced research to identify customer needs | 549.570 | .762 | 16 | .000 |
| Intensified research to develop new products | 512.308 | .722 | 16 | .000 |
| Improved development process of products | 548.530 | .756 | 16 | .000 |
| Quality improvement of products | 492.869 | .690 | 16 | .000 |
| Sales growth from new products | 393.640 | .691 | 16 | .000 |
| Improved relationship with suppliers | 497.932 | .673 | 16 | .000 |
| Independent variable: Training | | | | |

Significance level: $p=.01$: Reject H_0 if $p - \text{value} \leq .01$

Critical value: $\chi^2 = 32$; Reject H_0 : if $\chi^2 \geq 32$

The results of the analysis indicate that training is related to all of the indicators of the performance from the internal-business perspective. According to the values of correlation coefficients of all indicators (R) it can be concluded that training has rather high positive impact on performance from internal-business perspective.

Further, the influence of training on performance from customer perspective has been evaluated by testing the following hypotheses.

H_0 There is no relationship between training and performance from customer perspective.

H_a There is a relationship between training and performance from customer perspective.

Table 4. Chi-square test results and correlation coefficients of performance indicators from customer perspective

| Dependent variables | Pearson's Chi Square Values | Pearson's R | DF | p-value |
|-----------------------------------|-----------------------------|-------------|----|---------|
| Facilitated online shopping | 477.449 | .665 | 16 | .000 |
| Enhanced post sale service | 604.946 | .719 | 16 | .000 |
| Decrease of customer complaints | 585.874 | .663 | 16 | .000 |
| Increase of customers | 414.463 | .667 | 16 | .000 |
| Increase of customer satisfaction | 518.371 | .736 | 16 | .000 |

Independent variable: Training

Significance level: $p=.01$: Reject H_0 if $p - \text{value} \leq .01$

Critical value: $\chi^2 = 32$; Reject H_0 : if $\chi^2 \geq 32$

The null hypothesis is rejected according to the chi-square values which are more than critical value, and p-values which are equal to .000, i.e. they are less than predetermined significance level. Hence, there is a positive relationship between training and performance from customer perspective as correlation coefficients of all the indicators are high.

Then, the following hypotheses have been tested to estimate the relationship between training and financial performance:

H_0 There is no relationship between training and financial performance.

H_a There is a relationship between training and financial performance.

Table 5. Chi-square test results and correlation coefficients of performance indicators from financial perspective

| Dependent variables | Pearson's Chi Square Values | Pearson's R | DF | p-value |
|----------------------------------|-----------------------------|-------------|----|---------|
| Revenue growth | 336.930 | .633 | 16 | .000 |
| Market share increase | 413.712 | .683 | 16 | .000 |
| Increase of revenue per employee | 592.358 | .799 | 16 | .000 |
| Operating costs decrease | 401.329 | .614 | 16 | .000 |
| Effective use of assets | 461.472 | .655 | 16 | .000 |

Independent variable: Training

Significance level: $p=.01$: Reject H_0 if $p - \text{value} \leq .01$

Critical value: $\chi^2 = 32$; Reject H_0 : if $\chi^2 \geq 32$

Table 5 indicates that H_0 is rejected as the chi-square values of all the indicators are greater than critical chi-square value and p-values are less than .01. According to the resulted correlation coefficients training has positive impact on the financial performance as well.

Finally to test the effect of training on the overall business performance, the following hypotheses have been tested by simple linear regression analysis:

$H_0 b_1=0$

$H_a b_1 \neq 0$

The results indicate that the relationship between training and overall performance is highly positive ($b_1=R=.745$) and that 55.5% ($R^2 = .555$) of the overall performance variation is explained by the relationship between training and performance.

Table 6. Coefficients^a

| Model | Unstandardized Coefficients | | Standardized Coefficients Beta | T-value | p-value |
|-------|-----------------------------|------------|-----------------------------------|---------|---------|
| | B | Std. Error | | | |
| 1 | (Constant) | .297 | .094 | 3.171 | .002 |
| | Training status | .784 | .026 | | |

a. Dependent Variable: Overall performance improvement

Table 7. Model Summary^b

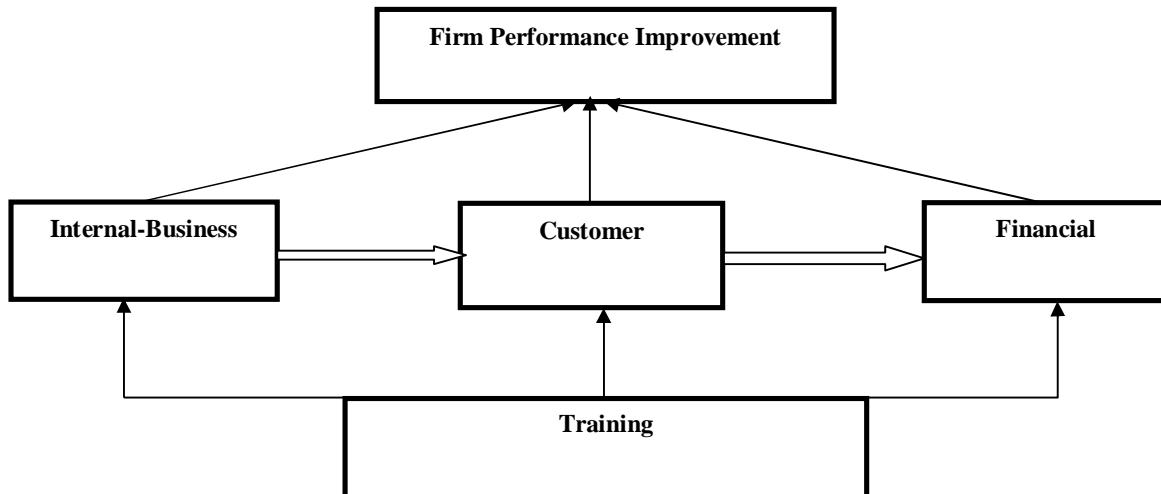
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | ,745 ^a | ,555 | ,554 | ,844 |

a. Predictors: (Constant), Training status
b. Dependent Variable: Overall performance improvement

Considering the total results of the analysis the relationship between training and performance is expressed in the model below:

Figure 1. The relationship between training and business performance

$$y = .297 + .745x + \epsilon$$



Conclusion

The paper tested the relationship between training and business performance. However, unlike previous researches it tested the impact of training on performance from three perspectives. The findings indicated that training is positively related to firm performance not only from financial but also from internal and customer perspectives. It means that if firms invest in human resource training and development they will improve their performance and will enjoy sustainable success and profitability.

The current paper answers the proposed research question and proves that people, their talents, their skills and knowledge are the ultimate foundations of organizational performance. Therefore, the enterprises should increase their intellectual capital by training and development for increasing their financial capital.

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