The Effect of Internal Control and Total Quality Management on Organizational Performance

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Abstract—The study discovers the effect of internal control and Total Quality Management (TQM) on organizational performance. To achieve the objectives of the study, a theoretical framework was developed and some hypotheses were proposed. Data were collected by the questionnaire instrument. The unit of analysis is state-owned enterprises in Padang city. The study utilized primary data which is obtained through the questionnaire. Total sampling is used in this study. 90 questionnaires were returned as a final sample. Data were analyzed by Multiple Regression Analysis performed by SPSS 23 software. The result shows that Internal Control has a positive and significant effect on organizational performance. Total Quality Management has a positive and significant effect on organizational performance. Based on the findings of the research, the researchers suggest a number of relevant recommendations related to improving awareness about the importance of internal control system components, especially indicators of activity monitoring, while for TQM practices, process improvement is the most important thing that can improve organizational performance.

Keywords—Internal Control, Total Quality Management, Organizational Performance

I. INTRODUCTION

Performance becomes one of the centers of attention in the business world. A lot of research is done related to performance. Performance is a condition that must be known and informed to stakeholders to know the level of achievement of the organization. Organizational performance is based on how effectively to achieve the objective through effective and efficient utilization of resources [5]. Managers must be able to utilize management tools to achieve organizational goals despite limited resources in the organization. Employees with all the competencies (character, knowledge, and ability) are key elements of the organization to achieve good performance. In an effort to solve this very complex problem, the organization must improve its performance through the improvement of its employees' performance.

Companies must improve the performance of their company through internal control [13]. Internal control is intended so that the organization carries out its activities in accordance with the planned strategy. Internal control is also a tool to reduce the use of resources that are not effective and efficient in the company's operations. Internal control plays a role because it provides protection for the organization against which weaknesses are human and to reduce the possibility of errors and actions that are not in accordance with the rules. Internal control can provide only reasonable assurance regarding the achievement of an organization’s objectives. Implementing a proper system will help the organization’s operation become more effective and efficient [14]. Weak internal controls will cause errors and fraud in the company. Conversely, if the company's internal control is strong, then the possibility of errors and fraud can be minimized. Management and application of good internal controls, a company will be easier to achieve its objectives.

Some evidence suggests that TQM does increase performance. The application of TQM allows every member of the organization to improve its quality. Every member of the organization involved in achieving the goals and vision of the company will be able to influence satisfaction with his work and this will affect individual performance and overall organizational performance. The application of TQM is intended for continuous development, maintenance and repairs in all company departments. Quality products are one way to add value to customers. However, TQM is an approach to make organizations more advanced and effective in creating quality products and reducing costs.

There is a lot of literature that examines the relationship between internal control and organizational performance in various countries as well as industries (for example, [2]; [11]; [12]; [6]. They founded internal control have a significant effect on organizational performance. But there is no literature on State-owned firms in Padang city. Hence, this research is important to do.

The theoretical framework was determined by reviewing literature; so that model of [2]; [6]; [11]; [12] for internal control and organizational performance. The model of [1]; [8]; [15] for TQM and organizational performance. According to previous research and the definitions presented above, the following conceptual models are presented to test the effect of internal control and total quality management on organizational performance, as described in Figure 1 below:

Figure 1. The Conceptual Model

![Diagram of the Conceptual Model](Image)
The conceptual model above generates two hypotheses will be tested in the study. therefore, the hypotheses could be formulated as follows:

H₁: Internal Control has significant effect on organizational performance
H₂: Total Quality Management has significant effect on organizational performance

II. METHODS

This study uses quantitative approach. The quantitative approach is explaining phenomena by collecting numerical data that are analyzed using mathematically based methods (in particular statistics) [7]. The quantitative approach is used when one begins with a theory (or hypothesis) and test for confirmation or disconfirmation of that hypothesis [9]. The data used in this study were obtained from a questionnaire method. Respondents of this study all the managers of state-owned enterprises in Padang City. They are financial manager, operation manager, the human resource manager, and marketing manager. The information about companies was obtained from the Statistical Bureau Center of West Sumatera Province, Indonesia. The population of this study consisted of branch state-owned enterprise in Padang city. There were 30 state-owned enterprises (BPS West Sumatera, 2018). The population was selected to be sampled (total sampling). As many 30 units of state-owned enterprises were surveyed. A number of 90 questionnaires were collected from 120 distributed until the end of the survey.

At the present model, internal Control and TQM are exogenous variables. Organizational performance is endogenous variables. The major material to collect data is questionnaire based on which five dimensions for internal control: control environment, risk management, control activities, information and communication, and monitoring activities. Twelve dimensions were used for TQM: executive commitment, adopting philosophy, closer to the customer, closer to supplier, benchmarking, training, open organization, employee empowerment, zero-defects mentality, flexible manufacturing, process improvement, and measurement [10]. Seven dimensions were used to measure organizational performance: effectiveness, efficiency and utilization of resources, productivity, quality, quality of work-life, innovation, profitability and budget compliance [3].

In order to determine the degree with which participants agree with statements, a five answer Likert Scale consisting of 5) Strongly agree 4) Agree 3) Neutral 2) Disagree 1) Strongly disagree were used in the answer section. The survey data was analyzed using SPSS software. The validity instrument tested by Pearson Product Moment Correlation. The instrument has high validity if the correlation value of each indicator to total correlation more than 0.30 or r-value > 0.30 [4]. The instrument was tested for reliability with Cronbach’s Alpha. The reliability criteria if Cronbach’s Alpha > 0.6.

The data analysis used both descriptive statistics analysis and multiple regression analysis. The descriptive statistical analysis aims to describe respondent demographics i.e. age, sex, education, position, and salary. Multiple regression analysis used to predict the value of variable based on the value of two or more other variables.

III. RESULT AND DISCUSSION

Respondents of this research have quite different characteristics. Diversity can be seen from the personal data of respondents including sex, education, position, and salary. The majority of respondent who participated in this study as male gender (64.95%), aged between 40 to 45 years (38.14%), having level education bachelor degree (77.55%), having position within company as a human resource manager (26.81%) and having salary IDR 6,000,001 to 7,000,000 (31.95%).

The average value (mean) of the internal control variable was in high category (4.12), monitoring activities as the highest indicator (4.23), and control environment as the lowest indicator (3.98). Variable TQM implementation variable was in high category (4.24), process improvement as the highest indicator (4.35), and executive commitment as the lowest indicator (3.98). Variable of Organizational performances was in high category (4.13), productivity as the highest indicator (4.25), and effectiveness as the lowest indicator (3.93).

The conceptual model illustrated in figure 1 has two hypothesized relationship among the variables internal control, TQM, and organizational performances. Table 3 and Table 4 display resulting from the multiple regression analysis using SPSS for windows.

| Model | R  | R Square | Adjusted R  | Std. Error of the Estimate |
|-------|----|----------|-------------|---------------------------|
| 1     | .767 | .588    | .576        | 4.777                     |

a. Predictors: (Constant), Internal_Control_X1,TQM_X2
b. Dependent Variable: Organizational_Performance_Y

The results of testing the coefficient of determination show that organizational performance is influenced by internal control variables and total quality management by 57.6%. The rest is influenced by other variables outside the research framework.

| Model | Unstandardized Coefficients | Standardized Coefficients | t   | Sig. |
|-------|-------------------------------|---------------------------|-----|------|
| 1     | (Constant)                   |                           | .426| .671 |
|       | Internal Control_X1          | .848                      | .333| 2.574| .013 |
|       | TQM_X2                       | .439                      | .160| 2.736| .008 |

a. Dependent Variable: Organization_Performance_Y

The results of the multiple regression analysis are also presented in table 2 indicating support for all the hypothesis. Hypothesis 1 stated internal control have significant effect on organizational performance, which is statically significant at prob. 0.013 < 0.05 (t-statistic = 2.574). The statistical significance of hypotheses 1 confirms the
implementation of internal control improves organizational performance. This research similar with [2]; [6]; [11]; [12] that showed the higher the internal control system applicability, the higher the applicability of organization effectiveness. Internal controls help the financial sector in presenting it’s a strong and stable outlook. It helps in monitoring the assets and maintaining the reliability of the company’s account.

Hypothesis 2 stated Total Quality Management (TQM) have significant effect on organizational performance, which is statically significant at prob 0.008 < 0.05 (t-statistic = 2.736). The statistical significance of hypothesis 2 confirms the implementation TQM improve organizational performance. This research similar with [1]; [8]; [15]. This can be interpreted as an increase/decrease in the emphasis on TQM by businesses results in an increase/decrease in their performance. If TQM practices are implemented properly, it produces variety benefits such as understanding customer’s needs, improved customer satisfaction, improved internal communication, better problem solving and fewer errors.

The result shows that organizational performance is more influenced by TQM than internal control. TQM practice from a theoretical perspective, it will enhance organizational performance. This finding lends further support to the frequently suggested management practices and strategies for achieving improved organizational performance in TQM firms. More specifically, our finding provides further empirical support for prior study by [1]; [8].

IV. CONCLUSIONS

The aim of this research discovers the effect of internal control and TQM on organizational performance at state-owned enterprise in Padang city, West Sumatra Province, Indonesia. Internal control and TQM have positive and significant effect toward organizational performance. TQM best explanation in improving organizational performance dimensions such as open organization, employee empowerment, zero-defect mentality, flexible manufacturing, process improvement and measurement.

REFERENCES

[1] Adelfallah, H., & Badizadeh, A. (2014). Effect of Organizational Citizenship Behaviour on Total Quality Management and Organizational Performance (Case study: Dana Insurance Co.). European Online Journal of Natural and Social Sciences, 3(4), 1124.
[2] Bayer, E. (2018). The Influence Of Budget Goal Clarity, Internal Control System, Reporting System, With Organizational Commitment As Moderating Variable On The Performance Accountability Of Government Agencies Of Local Government Serdang Bedagai Regency. International Journal of Public Budgeting, Accounting and Finance, 1(2), 10-10.
[3] Cetindere, A., Duran, C., & Yetisen, M. S. (2015). The effects of total quality management on the business performance: An application in the province of Kütahya. Procedia Economics and Finance, 23, 1376-1382.
[4] Cooper, D. R. and Emory, D. C. W. (2002). Business Research Methods, Fifth Edition, Chicago: Richard D. Irwin Inc
[5] Lassiter, Robert N. (2006). Management Fundamentals: Concept Applications Skill Development. United States: Thompson South-Western
[6] Mahadeen, B., Al-Dmour, R. H., Obeidat, B. Y., & Tarhini, A. (2016). Examining the effect of the Organization’s Internal Control System on Organizational Effectiveness: A Jordanian empirical study. International Journal of Business Administration, 7(6), 22-41.
[7]Muijs, D. (2010). Doing quantitative research in education with SPSS. Sage
[8] Munizu, M. (2013). The Impact of Total Quality Management Practices towards Competitive Advantage and Organizational Performance: Case of Fishery Industry in South Sulawesi Province of Indonesia. Pakistan Journal of Commerce & Social Sciences, 7(1).
[9] Newman, I., & Benz, C. R. (1998). Qualitative-quantitative research methodology: Exploring the interactive continuum. SIU Press.
[10] Powell, T. C. (1995). Total quality management as competitive advantage: a review and empirical study. Strategic management journal, 16(1), 15-37.
[11] Rosman, R. I., Shafie, N. A., Sanusi, Z. M., Johari, R. J., & Omar, N. (2016). The Effect of Internal Control Systems and Budgetary Participation on the Performance Effectiveness of Non-profit Organizations: Evidence from Malaysia. International Journal of Economics and Management, 10(Specialissue2), 523-539.
[12] Sari, M. (2017). The effect of organization culture and internal control on corporate governance and its impact on state-owned enterprises performance in Indonesia. Proceedings of AICS-Social Sciences, 7, 244-251.
[13] Socol A. Internal Banking Control and Audit: a Comparative Approach in the Romanian Banking Sector. Annales Universitatis Apulensis : Series Oeconomica 2011; 13(2): 396-403
[14] Sulaeman, M. Siraj, S. A., Mohamed Ibrahim, S. H. 2008. Internal Control Systems in West Malaysia’s State Mosques. The American Journal of Islamic Social Sciences Association of Muslim Social Scientists and the International Islamic University Malaysia, 25: 1
[15] Taleghani, M., Akhlagh, E. M., & Hoseini, A. (2013). The Effect of Total Quality Management (TQM) on Organization Performance the Mediation of Market Orientation. Interdisciplinary Journal of Contemporary Research in Business, 5(6), 627-239.